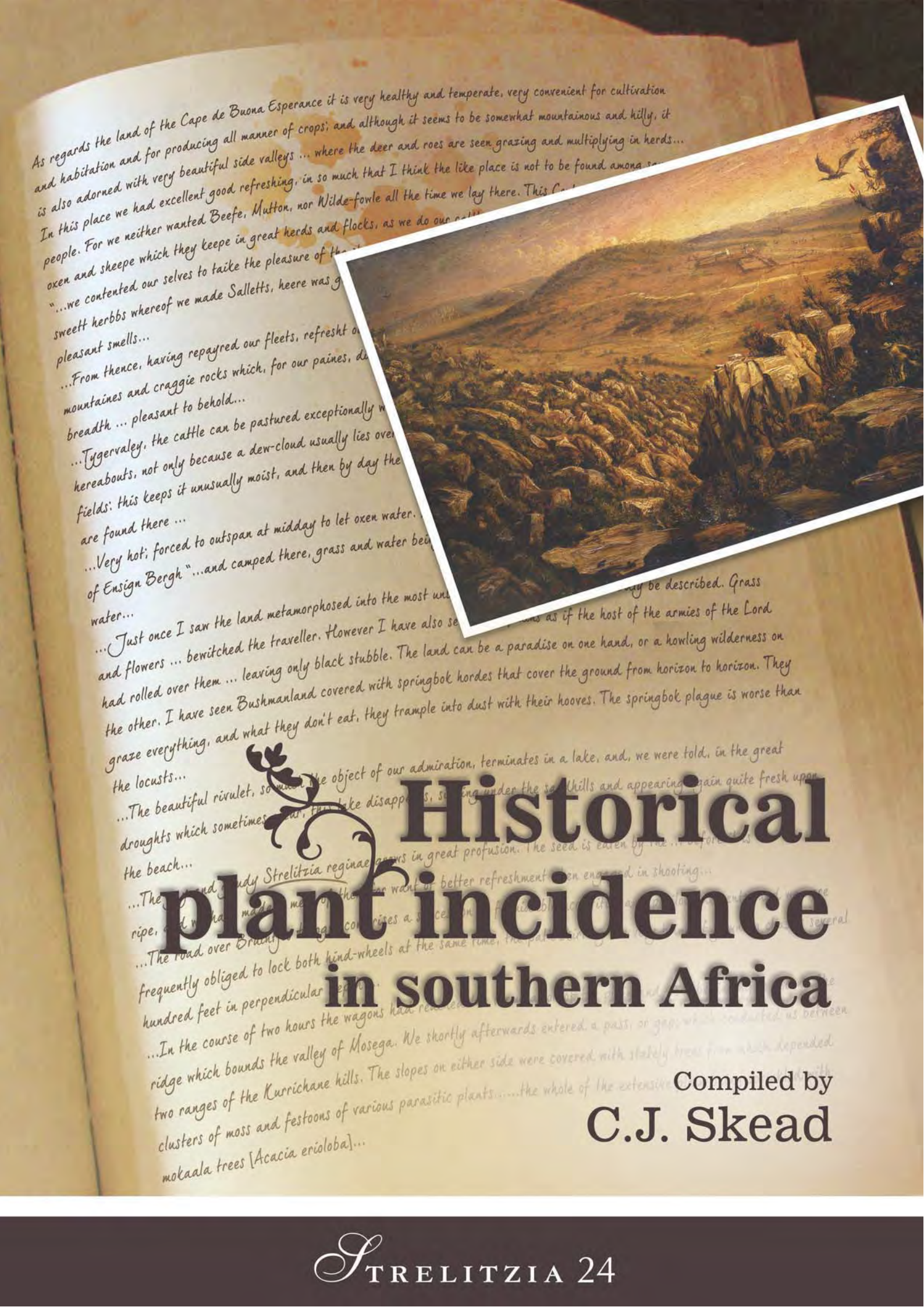


Historical plant incidence in southern Africa

Compiled by

C.J. Skead

STRELITZIA 24



The 20 regions covered by this review of the records of early southern African travellers.

LEGEND

1 Cape Peninsula
2 West Coast and Boland
3 Namaqualand and Bushmanland
4 Bokkeveld and Roggeveld
5 Great Karoo and Upper Karoo
6 Little Karoo
7 Overberg
8 Knysna Forests
9 Langkloof
10 Albany
11 Eastern Cape
12 Wild Coast
13 Highveld
14 Gordonia
15 Lesotho
16 Northern Provinces
17 KwaZulu-Natal
18 Botswana and Zimbabwe
19 Namibia
20 Cape Offshore Islands

STRELITZIA 24

Historical plant incidence in southern Africa

A collection of early travel records in southern Africa

Compiled by C.J. Skead

and edited by J.C. Manning & N.C. Anthony

SOUTH AFRICAN national biodiversity institute
SANBI

Pretoria

2009

STRELITZIA

This series has replaced *Memoirs of the Botanical Survey of South Africa* and *Annals of the Kirstenbosch Botanic Gardens* which SANBI inherited from its predecessor organisations.

The plant genus *Strelitzia* occurs naturally in the eastern parts of southern Africa. It comprises three arborescent species, known as wild bananas, and two acaulescent species, known as crane flowers or bird-of-paradise flowers. The logo of the South African National Biodiversity Institute is based on the striking inflorescence of *Strelitzia reginae*, a native of the Eastern Cape and KwaZulu-Natal that has become a garden favourite worldwide. It symbolises the commitment of the Institute to champion the exploration, conservation, sustainable use, appreciation and enjoyment of South Africa's exceptionally rich biodiversity for all people.

TECHNICAL EDITORS:	Otto Leistner and Emsie du Plessis
DESIGN & LAYOUT:	Elizma Fouché
COVER DESIGN:	Elizma Fouché

Citing this publication

SKEAD, C.J. (compiler) 2009. Historical plant incidence in southern Africa. *Strelitzia* 24. South African National Biodiversity Institute, Pretoria.

ISBN: 978-1-919976-53-2

© Published by: South African National Biodiversity Institute.
Obtainable from: SANBI Bookshop, Private Bag X101, Pretoria, 0001 South Africa. Tel.: +27 12 843-5000. Fax: +27 12 804-3211. E-mail: bookshop@sanbi.org. Website: www.sanbi.org. Printed by Bathopele Marketing (Pty) Ltd, P.O. Box 72585, Lynnwood Ridge, 0040 South Africa.

CONTENTS

Foreword iv

Introduction vi

Acknowledgements vii

Editorial notes viii

Early travel records in southern Africa

1 Cape Peninsula 1
2 West Coast and Boland 27
3 Namaqualand and Bushmanland 53
4 Bokkeveld and Roggeveld 69
5 Great Karoo and Upper Karoo 77
6 Little Karoo 110
7 Overberg 115
8 Knysna Forests 136
9 Langkloof 151
10 Albany 172
11 Eastern Cape 218
12 Wild Coast 243
13 Highveld 250
14 Gordonia 257
15 Lesotho 279
16 Northern Provinces 280
17 KwaZulu-Natal 286
18 Botswana and Zimbabwe 301
19 Namibia 328
20 Cape Offshore Islands 339

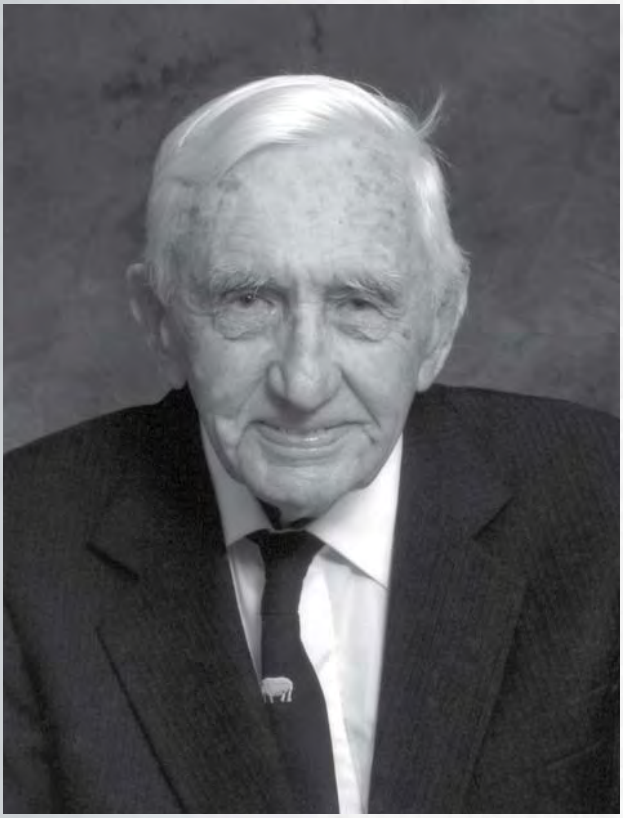
Appendices

A. Firing of veld 347
B. Locusts 354
C. Elephants 358
D. Early incidence of prickly-pear (*Opuntia* spp.) 360

Bibliography 362

Index of plant names 366

FOREWORD



Cuthbert John (Jack) Skead (Skeado to his friends) was born in Port Elizabeth in his beloved Eastern Cape in April 1912 and passed away there peacefully in May 2006. In his 94 years on this earth, his insatiable curiosity about nature and people yielded 25 books and other major works, chock-a-block with remarkable and useful insights. Sadly, only nine of these works have been published, the better known among them being the two volumes on historical mammal incidence in South Africa and the book on sunbirds of southern Africa. Still languishing in manuscript form are books that record Jack's careful and informative observations on the life histories of Eastern Cape birds, accounts of the peopling of the Albany Suurveld, and of the derivation and meaning of Khoekhoe place names, a survey of the botanical exploration of the eastern frontier, and collections of charming stories about nature, places and people.

So it is with great relief and joy that I write a foreword for one of Jack's books that has been rescued from oblivion, and quite rightly so. Skead's *Historical plant incidence in southern Africa* is an extraordinary book, meticulously documenting the observations—region-by-region—of the numerous European travellers and explorers who traversed southern Africa in the early colonial period. There is no doubt that the book will be of significant use to plant taxonomists, geographers, ecologists, environmental historians and students of climate change.

Like many other esteemed South African naturalists, Jack did not attend university. He was educated at Grey High School in Port Elizabeth and St Andrew's College in Grahamstown. He started out in 1933 as a farmer at Highlands near Grahamstown, joining a community of landowners renowned for their hardiness and respect for nature. He married Christine Maasdorp in 1936. During World War II he served in the South African Artillery, returning to the farm and civic service as member and secretary of the Board of Trustees of the Albany Museum.

When Nature—in the form of a five-year drought—got the better of his farming enterprise, he accepted the directorship of the Kaffrarian (now Amathole) Museum in King William's Town in 1950. There he remained until 1961, greatly bolstering the museum while serving on numerous advisory committees. In that year, Cecily Niven—knowing first hand, as she did, of Jack's formidable ornithological skills—persuaded him to join the Percy FitzPatrick Institute of Ornithology, Cape Town, as a field officer for the eastern reaches of the then Cape Province. For five years Jack travelled the beautiful and varied countryside of this region, amassing insights into every conceivable feature of nature. What a pleasure for a person of Jack's disposition (today, professional naturalists spend only a fraction of their time in the field and most are computer-bound, desperately coping with the digital overload). These must have been rewarding times for him. He returned to the Kaffrarian Museum as a biologist in 1966, devoting every morning to field work. There he remained until his somewhat early retirement to Grahamstown in 1972. In his own words, "I needed the time for myself"—to reflect on and consolidate all those observations he had made on the nature, people and places of the Eastern Cape.

It was in these "retirement years" (Jack says he "loafed") that he was at his most productive. Free of the bureaucratic shackles of the civil service, his imagination and creativity thrived. He wrote 23 books! I met him in 1981 while identifying plants in the Albany Museum Herbarium. We struck a chord immediately. I remember Jack unpacking suitcases full of manuscripts, notes and photographs, telling me of decades-long observations of the flowering rhythms of individual boerboon trees. It is imperative that these priceless records, all meticulously archived, are safely stored for the benefit of future generations of South African naturalists.

After Christine passed away in 1986, Jack moved to Port Elizabeth. His daughter, Margaret "Peggy" Collins, had begun the enormous task of editing and digitally recording Jack's manuscripts. She travelled regularly from her home in Grahamstown to collect and deliver manuscripts, and joined Jack in Port Elizabeth in 2001 where her indispensable work continued in earnest. Thank you Peggy! It was here in Port Elizabeth that Jack teamed up

for field trips with botanical artist Helen Vanderplank—an erstwhile employee of the Albany Museum—who produced two excellent guides to the flora of the Port Elizabeth area. Being with Helen exposed Jack to the extraordinary world of botanical exploration in South Africa: *Historical plant incidence in southern Africa* was born.

Jack received many awards during his lifetime: honorary doctorates from Rhodes University and the University of Port Elizabeth; gold medals from the Zoological Society, the Names Society, and the Wildlife and Environment Society; and the Eastern Cape Premier's Arts, Culture and Heritage Award. While these well-deserved awards are important milestones for an extraordinary career, what Jack wanted most of all was to have his works disseminated so that they could inspire others and be useful. The publication of this book is a step in that direction: thanks to Elizabeth Parker and the South African National Biodiversity Institute (SANBI) for generous sponsorship. And huge thanks to SANBI's John Manning who immediately appreciated the value of Jack's book and—with the assistance of Nicola Anthony—undertook the painstaking task of ensuring nomenclatural consistency as well as other editorial work. Without their dedication, this book would not have been published.

I can recall many (but too few!) encounters with Jack, sitting on the sunny porch of his modest cottage in Port Elizabeth's Summerstrand suburb, chatting about this and that—plants, ruins, the mysterious amaGqunukhwebe, the impacts of elephants on aloes, and so on. Jack's breadth and depth of knowledge always astonished me. Much of that knowledge resides in the many unpublished books that Peggy is safeguarding. So, there is still much to do. But at least *Historical plant incidence in southern Africa* is published, and Jack's legacy grows. Go well *Boet,* we'll get the other ones out too.

Richard Cowling
Nelson Mandela Metropolitan University
May 2007

INTRODUCTION

"... if we believe that nothing was created in vain, what an ample and delightful field for reflection does a journey through a country like this afford." (Moodie 1835)

The purpose behind this collection of remarks by early southern African travellers was to present a picture of the vegetation as they saw it, painted by the pens of the earliest European visitors to the Cape and by those who, coming after, penetrated the subcontinent, dark as its botany then was.

The extracts were taken from many diverse works, as and when they came to hand: they were not sought deliberately within a planned project. The authors were seldom botanists *per se* but many were interested in plants for one reason or another, some even commercially when searching for medicinal and herbal properties exploitable by researchers and gardeners in Europe. Missionaries numbered among those who recorded their impressions, often with remarkable accuracy. As well-educated men they were able to produce highly articulate reports on the plants they saw and even collected. Professional plant collectors also contributed markedly when searching for specimens needed by European herbaria and universities. Men were either sent out specifically for that purpose, as by the Royal Botanic Gardens at Kew in London and similar institutions, or were paid so much for each specimen collected.

As an incidental sidelight, this preparation supports, in part, my two other efforts at collecting historical bird and mammal records, many of which came from the pens of authors quoted in this plant record. The bird extracts are housed in manuscript at the Percy FitzPatrick Institute for Ornithological Research in Africa at the University of Cape Town; the mammal extracts have been published in two volumes covering both the Western and Eastern Cape under the title of *Historical mammal incidence*. Volume One for the Western Cape was published in 1980 and Volume Two for the Eastern Cape in 1987. Animal life cannot be divorced from plant life, terrestrially at all events: for that reason, if for no other, it seemed logical to produce a companion work depicting, as far as possible, the near-pristine veld conditions in which mammals and birds found themselves in the early days of agriculture.

Regrettably, the hope of creating a reasonably adequate picture of early veld conditions has not been realised as fully as might have been expected, any more than my bird and mammal records were able to do, but the partial picture given here should go some way towards helping ecologists and botanists to visualise early conditions and, at the same time, save themselves the chore of searching through many volumes for what might be no more than a minor item.

This review covers the Republic of South Africa with additional notes on the contiguous states of Namibia (formerly South-West Africa), Botswana (formerly the Bechuanaland Protectorate), Lesotho (formerly Basutoland) and Zimbabwe (formerly Southern Rhodesia). Of the South African section, the former Cape Province [now primarily Western and Eastern Cape Provinces] has been the most rewarding because the earliest plant explorations were made there.

Although several early records pre-date Van Riebeeck's arrival in 1652, it was not until the 1830s that the former Orange Free State [Free State] and Transvaal [Gauteng, Limpopo, Mpumalanga and North West Provinces, collectively known here as the Northern Provinces] could produce significant results. That fact means that some 200 years separated the earliest Cape records from those to the north. Without doubt, much needs to be done to expand the scope of this type of investigation. More books and documents need to be consulted in the hope of finding useful material.

C.J. Skead

ACKNOWLEDGEMENTS

Although extracts have been taken straight from printed sources without reliance on much outside help, a few words of gratitude must be directed to those who were kind enough to give the benefit of their time and experience:

I offer sincere thanks to the Librarians at the Albany Museum, Grahamstown; at the Cory Library for Historical Research, Rhodes University, Grahamstown; at the King William's Town Public Library; at the Kaffrarian Museum, King William's Town; and at St Andrew's College, Grahamstown.

Grateful thanks are due to the Officer-in-Charge, Botanical Research Unit, Albany Museum Herbarium (now the Schonland Herbarium), Grahamstown (Mrs Estelle Brink) and her staff members, the late Dr Amy Jacot-Guillarmod and the late Miss Grace Britten. Each in turn helped in solving difficult problems.

Dr Brian La Trobe kindly lent his two volumes of the Reverend C.I. La Trobe's books, a gesture his forebear of 1815 would surely have commended.

Mr Peter Lloyd of the former Cape Nature Conservation Department, Stellenbosch, arranged for the photocopying of my original manuscript lodged at Jonkershoek Library.

Mr D.F. Bower, Warden, Tsitsikamma Coastal National Park (1981).

ACKNOWLEDGEMENTS–LINE DRAWINGS

Back cover ..... *Ficus ingens*, M.E. Connell

1 Cape Peninsula ..... *Protea aristata*, C. Letty
2 West Coast and Boland ..... *Mimetes palustris*, S. Gower
3 Namaqualand and Bushmanland ..... *Dregeochloa pumila*, G. Condy
4 Bokkeveld and Roggeveld ..... *Jordaaniella* sp., G. Condy
5 Great Karoo and Upper Karoo ..... *Acacia karroo*, M.E. Connell
6 Little Karoo ..... *Dioscorea elephantipes*, M. Steyn
7 Overberg ..... *Protea subvestita*, R. Holcroft
8 Knysna Forests ..... *Podocarpus latifolius,* R. Holcroft
9 Langkloof ..... *Justicia orchioides*, G. Condy
10 Albany ..... *Erythrina acanthocarpa*, M. Steyn
11 Eastern Cape ..... *Ledebouria socialis*, M. Steyn
12 Wild Coast ..... *Scaevola plumieri*, G. Condy
13 Highveld ..... *Alloteropsis semialata*, C. Letty
14 Gordonia ..... *Sesamothamnus lugardii*, G. Condy
15 Lesotho ..... *Erica cerinthoides*, R. Holcroft
16 Northern Provinces ..... *Harpephyllum caffrum*, C. Letty
17 KwaZulu-Natal ..... *Plectranthus fruticosus*, V. Tellinek
18 Botswana and Zimbabwe ..... *Harpagophytum procumbens*, K. Lansdell
19 Namibia ..... *Citrullus ecirrhosus,* G. Condy
20 Cape Offshore Islands ..... *Bryum argenteum*, H. Ochyra

Appendix A. Firing of veld ..... Scene, M. Ralfe
Appendix B. Locusts ..... Locust, G. Condy
Appendix C. Elephants ..... *Adansonia digitata*, G. Condy
Appendix D. Early incidence of prickly-pear (*Opuntia* spp.) .... *Opuntia ficus-indica*, W. Roux

EDITORIAL NOTES

Editorial Decisions

C.J. Skead compiled the manuscript during the years 1966 to 1994, arranging the text into "33 arbitrary zones". These have now been consolidated into 20 regions which better reflect current eco-geographical ideas (see inside front cover). The more precise locations of localities were largely provided by Skead.

Exhaustive checking of the manuscript has been precluded by time constraints and by the difficulties inherent in accessing the old texts. In addition, facsimile editions available to the editors were not always the same as those used by the author.

Current botanical convention in the use of capitals and italics has been followed throughout. Synonymy for the plant and animal names has been provided by the editors, using the following sources:

Names of flowering plants and ferns follow G. Germishuizen, & N.L. Meyer (eds) (2003, Plants of southern Africa: an annotated checklist. *Strelitzia* 14. National Botanical Institute, Pretoria).

Names of mosses follow *Flora of southern Africa* (Bryophyta, published in three fascicles in 1981, 1987 and 1998 by the Botanical Research Institute and the National Botanical Institute, Pretoria).

Names of mammals follow R.H.N. Smithers (1986, *Land mammals of southern Africa: a field guide*. Macmillan, Johannesburg).

Names of birds follow I. Sinclair (1984, *Field guide to the birds of southern Africa*. Struik, Cape Town).

These historical extracts were selected to record the vegetation of southern Africa prior to mechanised agriculture. Several are also of cultural interest in documenting traditional names and usages of plants. As documents of their time, they adopt contemporary terminology, particularly for the indigenous peoples of the region, that is today offensive but which in those days was largely free of the derogatory or racist implication that renders them unacceptable today. We have retained these terms as an accurate record of the terminology in use at the time when these records were written, but in no way share or condone any negative implications that they bear today.

Layout of the Text

The extracts in the text are arranged firstly in chronological sequence of the year and month in which the author visited the area, and thereafter alphabetically by author. Direct quotation from primary sources is within inverted commas, and summaries of the text outside of them. Square brackets are used for Skead's comments and geographical notes on localities, for the current synonymy and, at the end of each extract, for the pagination within the original text.

Acknowledgements

We thank the Compton Herbarium and Harry Molteno Libraries at the South African National Biodiversity Institute for access to their collections. Dr John Rourke kindly lent material from his private library.

We are grateful to Dr Otto Leistner for his careful editing of the text and for sharing his knowledge of the Kalahari flora.

Wieke van Delen, Curator of Domestic and Family Life at Iziko Museums of Cape Town, generously allowed us to reproduce artworks from the Iziko William Fehr Collection.

The publication of this work was made possible by the generous sponsorship of the Parker family of Elandsberg Nature Reserve, to whom we are indebted for their ongoing support of botanical publications in South Africa.

Nelson Mandela Metropolitan University, via Richard Cowling, provided partial funding for Nicola Anthony.

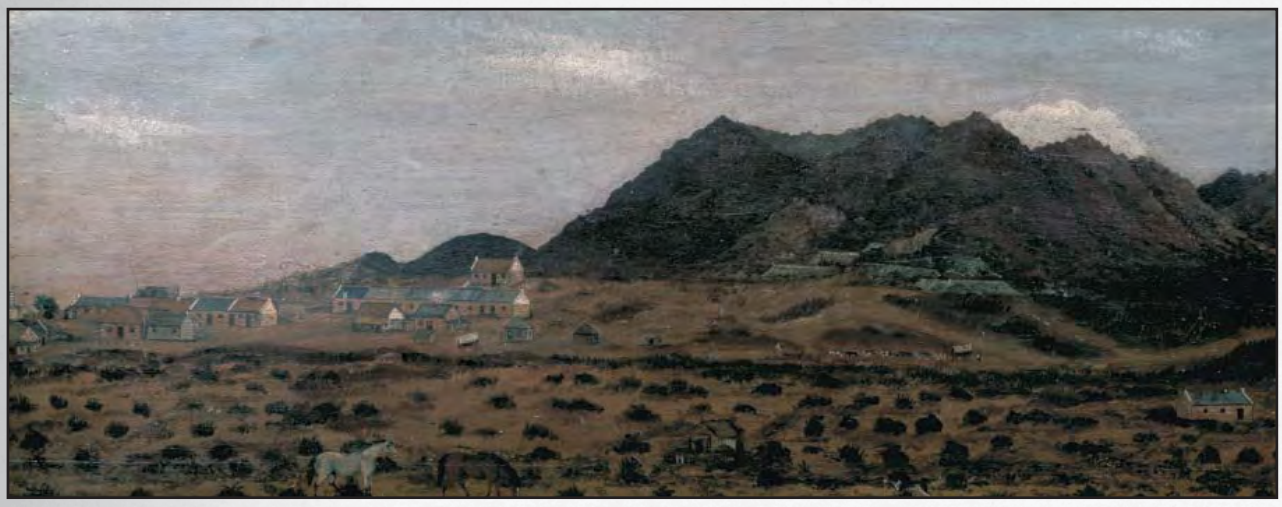
John Manning and Nicola Anthony



On the Umnonoti [Mdloti] River, Natal, 1849. Artist: G.F. Angas. Reproduced with kind permission of the Iziko William Fehr Collection.



Durban from the Berea, 1849. Artist: G.F. Angas. Reproduced with kind permission of the Iziko William Fehr Collection.



Namaqualand. Artist: unknown. Reproduced with kind permission of the Iziko William Fehr Collection.



Victoria Falls opposite Garden Island, 1862. Artist: T. Baines. Reproduced with kind permission of the Iziko William Fehr Collection.



The Twelve Apostles, 1889. Artist: A. de Smidt. Reproduced with kind permission of the Iziko William Fehr Collection.



Woodbury on the Bushman's River between Algoa Bay [Port Elizabeth] and Grahamstown, 1849. Artist: T. Baines. Reproduced with kind permission of the Iziko William Fehr Collection.



Bloemfontein, 1851. Artist: T. Baines. Reproduced with kind permission of the Iziko William Fehr Collection.

Early travel records in southern Africa

1 CAPE PENINSULA

1601 **Van Spilbergen, J. in Raven-Hart (1967)**

Cape Peninsula:

"As regards the land of the Cape de Buona Esperance it is very healthy and temperate, very convenient for cultivation and habitation and for producing all manner of crops; and although it seems to be somewhat mountainous and hilly, it is also adorned with very beautiful side valleys ... where the deer and roes are seen grazing and multiplying in herds.

"Furthermore it is well favoured with good water from the hills ... as also with animals such as oxen and sheep ..." [p. 27]

1605 **Michelbourne, E. in Raven-Hart (1967)**

April Cape Peninsula:

"In this place we had excellent good refreshing, in so much that I think the like place is not to be found among savage people. For we neither wanted Beefe, Mutton, nor Wildefowle all the time we lay there. This Contrey is very full of oxen and sheepe which they keepe in great herds and flocks, as we do our cattle in England.

"Moreover it doth abound with store of wild beasts and Fowles, as wild Deere in great abundance, Antelops, Babions, Foxes, and Hares, Ostriches, Cranes, Pelicans, Herons, Geese, Duckes, Phesants, Partridges and divers other sorts of most excellent Fowles. It is also pleasantly watered with wholesome springs.

"Also there is a kind of Trees, not much unlike to Bay Trees, but of far harder substance, that growe close by the Sea side [milkwood, *Sideroxylon inerme*, *fide* Raven-Hart (1967)]." [p. 32]

1610 **Downton, N. in Raven-Hart (1967)**

July Cape Peninsula:

"One morning by my instigation, my general (Middleton) and I accompanied by 23 men more, whereof four were with small shot went to see if we could find a place where we might cut wood, and being gone some 3 miles and finding none but small greene wood ... my General, desirous to gett refreshing for our weak sick men, desired to walk about the Table to see if we could see anye cattle that we might by anye means buy for our reliefs. All daye we kept the Table on our right hand and the marsh on our left hand ... it is moist ground, and seemeth to be good pasture for cattle, in divers places scatterlinglye we see some trees of small stature, somewhat broad topped, bearing a fruite in bigness and proportion like a pineapple, but the husk not so broad and spungye, the seed whereof were devoured by the birds, and the husk remaining on the trees, the leaves whereof were in form of our houslick [houseleek, *Sempervivum tectorum*] in England, but not thick [almost certainly *Protea nitida*].

"At this time was there spring, both trees and all herbes blowing over the earth." [p. 49]

1612 **Best, T. in Raven-Hart (1967)**

6–7 June Cape Peninsula:

"... we contented our selves to taike the pleasure of the shoare where we had excellent good watter and many good and sweett herbbs whereof we made Salletts, heere was grass aboundance, and herbes which gave unto us many sweete and pleasant smells. [p. 57]

"The countrey is mixed, Mountaines, Plaines, Medowes, Streames, the woods as if they were artificially planted for order." [p. 59]

Thos. Aldworth's account: "I went two leagues inland with four or five others, and I assure your worship that I have never seen a better land in my life. Although it was midwinter the grass came up to our knees; it is full of woods and lovely rivers of fresh water, with much deer, fish and birds, and the abundance of cows and ewes is astonishing." [p. 61]

1614 **Farewell, C. in Raven-Hart (1967)**

June Cape Peninsula:

"From thence, having repayred our fleets, refresht ourselves, and stretcht our limbes to the verie tops of the highest mountaines and craggie rocks which, for our paines, discovered unto us a goodly country extending farre in length and breadth ... pleasant to behold ..." [p. 66]

1614 **Milward, J. in Raven-Hart (1967)**

October Cape Peninsula:

"Our men presently recovering, some desperately sick, they of the Scurvy using a red Berry as big as a Goose-berry [possibly *Lycium ferocissimum*. Smith (1966) records that the scarlet, juicy berries are eaten by birds and children]." [p. 70]

1615 **Roe, T. in Raven-Hart (1967)**

Cape Peninsula:

"The land is fructfull, bearing short thicke grasse ..." [p. 77]

1616 **Terry, E. in Raven-Hart (1967)**

June Cape Peninsula:

"On this shore there likewise are found, excellent good, though small roots for sallads, which the soil brings forth without husbanding." [p. 82]

1620 **De Beaulieu, A. in Raven-Hart (1967)**

March Cape Peninsula:

"At the foot of the mountains towards the West they found forests of tall trees, as thick as apple-trees without any fruit on them and of a very hard wood [?yellow-wood *fide* Raven-Hart (1967)]. Fine pasture lands were seen with some cattle on them ...

"This report made me inquisitive to see the country, and on the next day I took a walk behind Table Mountain, and went about three leagues into the country. I noticed that the soil was very good, and saw that a little stream of fresh water wanders through the open plain (Liesbeek River) and enters the sea at the head of the bay, at a place where there is a confluence of waters which we call the River (Salt River), though previously we had believed that no fresh water entered there... I observed also that this stream formed various swamps extending northwards along the sand-dunes which are the cul-de-sac of this Bay ... [p. 99]

"Having walked until midday in this country which is covered with grass and lovely flowers, I took my way so as to return along the mountains, and came to the foot of the Table where it faces south. There I found a great many trees, including some from which planks a foot wide and eighteen to twenty foot tall could be cut. Their trunks were straight, in shape like pear trees, the leaves small and whitish, the bark about two inches thick and reddish in colour, the sap abundant, the wood of the tree twisted, and the heart white and hard [possibly yellowwood, *Podocarpus latifolius*] ..."

The Hottentots "... eat certain roots which are their chief food, about the size of small chestnuts and white, with a stalk like that of a leak but narrower and not dentated, and bearing a white flower [possibly *Moraea fugax*]; they are pretty tasty." [p. 100]

1627 **De Vries, D.P. in Raven-Hart (1967)**

August Cape Peninsula:

"The Cabo de Bon-Esperanse is a fine place of refresh, and we brought 73 sick on land into the tents who all came aboard again fit after 3 weeks, from the greenstuff found

here, clover and sorrel [applied to various salad greens, including *Tetragonia*] which at this season is abundant there ..." [p. 125]

1627 **Herbert, T. in Raven-Hart (1967)**

July Cape Peninsula:

"The soil here is exceeding good, the earth being at all times covered with grass, and diapered with flowers and herbs in great variety... I also observed the store of agrimony, betony, mint, calamint, sorrell, scabious, thime, carduus, benedictus and coloquintida ..." [p. 118]

[A subsequent version (Herbert 1638) was somewhat elaborated: "The Earth abounds with roots, herbes, grasse aromatique, redolent and beneficial; such as I took notice of, I may dare to name: agrimony, mynt, calamint, betony, plaintain, ribwort, spinage, sorell, scabious, holy thistle, and (of which beware) colonquintida; all the year long Nature robing the fruitful Earth with her choicest tapistry, floral seeming to dress herselfe with artlesse garlands ..."]

1639 **Von Mandelslo, J.A. in Raven-Hart (1967)**

May Cape Peninsula:

"The land ... is grown very finely and abundantly with all sorts of sweetsmelling herbs, flowers, and vegetables, which are said to have been sown there by the Portuguese and Dutch ..." [p. 151]

1640 **De Graaf, N. in Raven-Hart (1967)**

Cape Peninsula:

"We found here a wild land, waste and uninhabited, with nothing but bare rocks, heaven-high hills, dangerous clefts and wide valleys, overgrown here and there with trees, scrub, marram and grass; but no fruit-trees, crops or wheat, nothing but a few roots which the natives eat ..." [p. 154]

1649 **Janssen, L. and Proot, N. in Raven-Hart (1967)**

Cape Peninsula:

"Behind and on the slopes of Table Mountain there is [fire] wood enough available ..." [p. 177]

1652 **Van Riebeeck, J. (1952)**

10 April Cape Peninsula:

"The said skipper Coninck returned with four bags of beautiful mustard leaves and sorrel ..." [p. 30]

21 April Up to base of Table Mountain from the camp:

"... proceeded a good way up the kloof of the Table Mountain (Footnote: The kloof between Table Mountain and Lion's Head.) above 2 miles, where we found everywhere the finest flat clay ground and other beautiful broad fertile soil - as fine as one could find anywhere in the world. With the small number of men we have, however, not one hundredth part of it could be ploughed or cultivated. It would therefore be suitable if some industrious Chinese were to come here for that purpose with all kinds of seeds and plants, for much better fruits could be expected here than could be ever be hoped for at Ilha Formosa [Taiwan], as the soil here is much richer and there are several marshy places. [p. 33]

27 April "... went along the downs behind the rump of the Lion Mountain where we found between the mountain and the downs the most beautiful land for sowing and for grazing cattle that one could desire, several miles long and about one mile wide. Crossing the Lion Mountain on the seaward side of the head, found the slopes on the other side dry and stony. Down into Table Valley once again, found the finest clay soil in the world, watered by several rivulets during the rainy season. These are now quite dry, and the earth—because of the dry season—is rather hard ...

28 April "... went ... some distance over the ridge towards the south side of the Table Mountain. We found, from our little fort at the Salt River and also on the slopes of the mountain,

the most beautiful wide and level ground consisting of exceedingly fine garden soil and clay lands.

"Likewise further south behind the said mountain [the present suburbs of Rondebosch, Claremont, etc.] so much flat country, stretching right across from one mountain to the other and from the shore of Table Bay to the seashore below the small Table lying behind the large Table Mountain, that it would take a whole day to cover it by foot." Notes its great fertility. [p. 35]

16 May — "They had crossed the kloof between Table Mountain and the Lion Mountain and walked right round the back of Table Mountain about 6 miles inland. There they found a fine large forest of very tall, straight-growing trees. [p. 37]

19 June — "Whilst digging the soil our gardeners found fine specimens of asparagus. Upon further investigation they were found all over in abundance, growing wild, having very good flavour and of the same shape as in the Fatherland, so that we had them transplanted and cultivated in order, if possible, to make them grow ever better and more luxuriantly.

"Besides the clover sorrel [*Oxalis pes-caprae*] commonly found here, have found another kind of sorrel [possibly *Tetragonia* sp.] in fair abundance, very similar to the Dutch sorrel and much better and healthier than the clover sorrel.

"Apparently the rain has made many herbs appear ... [p. 46]

18 September — "To-day the senior merchant Riebeeck and the carpenter went inland behind the Table Mountain to find out whether there were any other forests nearby apart from those found before, as the timber brought from the Fatherland has been mostly cut up. It is also rather light for the construction of permanent dwellings... So, as already stated, went to look for heavier timber.

"About one and a half miles from the fort, on the slopes on the other side of Table Mt., and in some of the kloofs, we found splendid forests with thousands of fine, thick, fairly tall and straight trees. It is of a kind almost like beech and ash, rather heavy and difficult to transport but obtainable in case of need. Brought two fine pieces along, and two feet in circumference, to be made into pins on which to place the sentry boxes.

"About a quarter hour further on and a little higher up the mountain we found hundreds of such groups of trees, and even larger clumps, where so many fine, large, tall and upright trees were growing that one could get thousands of complete masts for ships from them—although it would be difficult to remove them—as well as from the forests as found previously, about 2 miles further on. In the former forest found on a few trees the dates 1604, 1620 and 1622, so that they had already been found at that time, but by whom we could not determine. [Footnote by the editor: To Van Riebeeck and his men it must have come as a complete surprise to see these dates on the trees and to realise that other Europeans had been there so long before them. It is difficult to say with certainty who had carved the dates, but there are several possibilities: in 1604, for instance, Steven van der Hagen was in the Cape waters with a large fleet; in 1620 the English navigators, Andrew Shillinge and Humphrey Fitzherbert arrived in Table Bay and came across a large number of Dutch vessels here (some of the masters of the vessels also declared that they had reconnoitred the land in the vicinity); and in 1622 another Englishman, Captain Johnson, visited Table Bay.]

"All of this makes us greatly wonder why many experienced East India voyagers have always maintained that no wood is to be had here, as, besides the large forests, there are numerous thickets of short crooked trees near the watering place where the fort now stands, most suitable for fire-wood, producing coals as fine as the best charcoal in the Fatherland. They have to be brought from the slopes of Table Mountain about a quarter of an hour away ..." Mention is then made of the fine fertile soil with many rivulets. [p. 59]

October — Hout Bay:

"Shortly after our arrival here the assistants went behind the Table Mountain to the other side of the land and found there ... a beautifully closed-in bay with many fine forests. We have decided to explore it further." A party was sent and it reported a well-sheltered bay. "Our men also found there, about five and a half thousand paces from the beach, many beautiful forests with trees taller, thicker, and straighter, and even more suitable than we have ever found before, and a satisfactory path for conveying the wood to the seaside in carts or wagons. *Item*: a very fine fresh river flowing to the sea, wide and deep enough for rowing boats. It narrows and becomes overgrown half a mile up, but they think it flows from the depth of a forest so that if one wished to convey the wood by water it could be floated down the river. [p. 65]

19 October — "... went about one and a half miles from here beside the Table Mountain to see how the mustard [possibly the introduced *Rorippa nasturtium-aquaticum*] was growing. Found it doing excellently and blossoming abundantly, and running to seed, and from all appear-

ances we shall be able to reap a good half dozen small barrels full. We intend sowing this nearby in the vicinity of the fort, it being most suitable for refreshment of the crews of the Company's ships calling here. *Item*: The Cape sorrel [possibly *Oxalis pes-caprae*] grows here in great profusion, and we are collecting its seed for the same purpose; likewise the leek or small onion [*Tulbaghia alliacea* and/or *T. capensis*], more of which is daily discovered growing wild and is of as good flavour and quality as those in Holland." [p. 74]

1653 **Merklein, J.J. in Raven-Hart (1971)**

March

Cape Peninsula:

"There is sweet water enough which rushes out between the rocks and hills, and waters the land. Inland are fine woods and much game, but by the border of the sea few trees are found because of the terrible storms which at times blow there ..." [1: 8]

1653 **Van Riebeeck, J. (1952)**

14 January

"Then there is in any case the 8 to 10 miles of fertile and beautiful land, tolerably flat, adjoining the Table Mountain. Its qualities need not be merely presumed from appearance alone but can be positively asserted from the great number of sheep and cattle—easily 20,000—which the Saldanhars have since November brought to pasture in the Table Valley within a space of 7 or 8 miles."

29 July

"Early in the morning Van Riebeeck in person with 12 armed soldiers left for Hout Bay overland, getting a heavy shower of rain on the way so that he was quite wet when he arrived in the evening in the said bay on board the galiot where he spent the night.

"The large forests all around had been thoroughly inspected but found to be about one and a half miles from the beach, and the passages so stony, hilly, mountainous and marshy that it was impossible to get the timber from there to the beach.

"The forests were the finest in the world, however, and contained timber as long, thick and straight as one could wish. We think however that there are reasonable opportunities of obtaining more wood at a place that we noticed on the way out - about half an hour further from the fort than the place where the wood is being obtained behind the Table Valley... It is amazing that there are such fine forests in the vicinity of the mountains ...

"Also found everywhere are the finest flat meadows in the world, most suitable for planting and cultivating, full of game ... [p. 165]

5 August

"This is the right time of the year to refresh the ships abundantly, since besides our garden the land everywhere is at present covered with greens such as sorrel, mustard leaves, etc. ..." [p. 167]

1654 **Nieuhof, J. in Raven-Hart (1971)**

February

Cape Peninsula:

"The soil at the Cape is mostly clay so that everything will grow there, although in some places it is stony, shelly, or sandy.

"There are many trees all around, although only scrub growth, good for burning. Inland very unusually large trees are to be seen ...

"The flat fields and valleys are overgrown with grass and sweet-smelling herbs and flowers ...

"A certain little root grows in the earth which the Hottentots roast in winter and use it in place of bread. Some grind these roots to meal. The taste of some [including *Moraea fugax*] is like that of earth-nuts (aert-ekelen) or chestnuts, although others taste like aniseed, and sweetish. [1: 13]

"But their principal and daily food is a certain kind of roots, the size of earth-nuts, dug out by the women from the rivers and elsewhere, boiled or roasted and eaten very greedily." [1: 17]

Table Mountain:

"On the seaward side it is barren with no greenery or trees; but on the landward side on the slopes ... there stand very dense and lovely woods with straight and erect trees useful for all sorts of timber to be had in great quantity.

"Somewhat lower, at the foot of the hill, there stand many lower and smaller trees, but their fruits are bitter in taste, and, according to the Hottentots or natives, have some poisonous quality about them so that they do not serve for eating.

"Many wild pineapple trees [*Protea* spp., including *P. nitida* and *P. repens*] are there, although they do not grow very high, but their fruits are hollow within. [1: 23]

"The principal rivers at the Cape are two, the Fresh River and the Salt River. In addition there is also a brook called the Liesbeek since it is thickly grown with *lies* [in Dutch text, float-grass, probably sedges or other aquatic graminoids]. The Liesbeek has its source near a wooded hill and flows into the Salt River. It is not more than 12 or 14 feet wide, and in some places even less, but on the other hand it is very deep.

"Also, near the Boscheuvel, or a little further, another brook has its source in a marsh or low weedy (*liesige* [with plants resembling *lies*, a Dutch grass, probably sedges or other aquatic graminoids]) area lying behind the Hout Bay (Hout Bay River). It flows south-east and flows through low sand-dunes (which extend to the Cabo Falso) into the sea." [1: 26]

1654 **Van Riebeeck, J. (1952)**

Slopes of Table Mountain:

The extent to which Van Riebeeck was obliged to plunder the forests and thickets on the face of Table Mountain emerges from a plea contained in the journal for 16 November 1652 which said: "It is to be wished that we had a few more horses than the two we have at present, both of which are being used for brick-making. We should then be able to get from the forest everything we need, both timber and firewood, as the roads are quite suitable for wagons. We shall soon be without any firewood here when it will of necessity have to be brought from the forest about two and a half to three miles away; this is not really practicable without horses and wagons." [p. 272]

1655 **Heeck, G. in Raven-Hart (1971)**

11 April Table Mountain:

"The further we went up, the steeper and more impassable we found the path, overgrown with many low milkwood-trees [apparently milkwood, *Sideroxylon inerme*, although this is strictly coastal] and other thorny and hooked bushes, and between these with much long rushy grass [actually Restionaceae or even *Bobartia indica*] like float-grass (*lies*) almost like marram-grass on the dunes in Holland, and with other sharp and prickly scrub."

The rough ground and thirst caused some to turn back. They licked wet rocks to alleviate their thirst. [1: 40]

"Here this mountain is divided again into three parts, each pretty high. We first climbed up the east side to seek fresh water, but in vain: then on the west side where we found it abundantly in shallow groves and other hollows of the rocks. In these were also many irregular and snow-white little stones which seemed to grow there... We did not go to the south since nothing was to be seen there except a quantity of unknown shrubs, and many entirely barren areas...

"... we perceived very few birds here because of the terrible height, and no living creature except a few lizards and a very small frog...

"The mountain is equally steep and inaccessible on all sides except by the gorge [Platteklip] by which we ascended ...

"... on top the mountain is quite level and flat ... since in many places there are nothing but bare stony flats devoid of any shrub growth. From here we could see over many forests and hills inland ..."

During the descent "... the grass (*liesagtig gras* [=grass resembling *lies*, a Dutch grass name]), [probably Restionaceae or *Bobartia indica*] was so smooth under our feet that it was impossible to stand firmly." [1: 41]

1655 **Van Riebeeck, J. (1952)**

19 June Cape Peninsula:

Part of the fort had collapsed as a result of heavy rains. "We now intend to rebuild it with laths, interwoven with rushes, two or three feet high... The wood required has to be taken from the forest three miles away, and 700 or 800 poles will be needed, besides all the rushes which are essential for lasting work." [pp. 318, 319]

1656 **Van Riebeeck, J. (1958)**

4 February — Cape Flats:

"After a thorough investigation he found that the Sweet River [Liesbeek] which together with the Salt River flows into Table Bay runs like a snake for quite 3 or 4 miles right across the isthmus. At many places it appears to come to a stop, forming small lakes. Between them there lies low, flat, sandy ground to within about a mile of some high sand hills of False Bay.

"Here the stream becomes broader and broader forming a river and then again gradually, a number of smaller streams of fresh water. Further on these flow into quite a large lake [Seekoeivlei], as broad as the River Maas and about 2 hours walk in circumference with deep and brackish water, full of hippopotami and sea-horses.

"This lake is fed from the dunes of the Cape False [False Bay] though apparently there is no opening, and the water seems to percolate through the sands. The lake is at least one and a half hours by foot from the seashore, the dunes being a mile wide and as high as real hills in 10 or 12 successive ranges, while from there to the shore is another half-hour's walk away. It would therefore be quite impossible to cut through them. In addition there would be a number of lakelets on the flats, some a quarter and some half a mile broad, to be cut through in order to let one run into another. This would also be very difficult because of the stony nature of the ground in many places ..." [p. 9]

19 July — Cape Peninsula:

Flood uprooting trees on the mountain. [p. 51]

1658 **Schouten, W. in Raven-Hart (1971)**

Cape Peninsula:

"... since although the high hills reach into the clouds and are very rocky and steep, yet the Valleys give many lovely large grassy flats, meadows, and pastures, yet with green herbs and well-smelling flowers, as also here and there with very large forests and whole jungles."

March — Schouten and his men climbed Lion Hill. "Along our way, as also above on the hill, we found it set with pleasant herbs, long grass and many sweet-smelling flowers, but with few trees. We went towards the topmost peak...but could not reach the top because of the rocky steeps... After this in the green valley [Kloof Nek] sloping down between the Lion and the Table Hills ..." watched buck jumping and saw a lion "... coming into sight from behind stones and rocks, at once hid itself in the undergrowth and scrub." [1: 49]

1660 **Van Riebeeck, J. (1958)**

12 July — The Almond Hedge, Kirstenbosch:

"The Commander went out and gave orders for the planting of the bitter almond [*Brabejum stellatifolium*] and other trees along the surveyed line of the proposed defensive hedge to enclose the Company's declared area and to set up a barrier to prevent the Hottentots from driving our cattle away." [p. 244]

1661 **Van Riebeeck, J. (1958)**

13 May — Van Riebeeck's Hedge, Kirstenbosch:

"The Commander was occupied in marking out the hedge of wild bitter almonds [*Brabejum stellatifolium*] which we began to plant last year, and he found it growing well. It promises to grow into an exceptionally fine thick hedge in five or six year's time.

"This hedge is now being extended to include both the Bosheuvel and Baers [possible the Vars (= Liesbeek)] Rivers. During the heavy rain season the latter flows into False Bay as well as this Table Bay. This river had been enclosed because the pasturage and the hay, which are to be had on both sides, are necessary for cattle and horses." [p. 388]

1652–1662 **Goodwin, A.J.H. (1952)**

The Cape:

"We must force ourselves to envisage the Peninsula as a very different countryside from that we know today. There were no stone pines, or Norfolk Island pines, no oaks, chestnuts, or corktrees, no blue gums, or red flowering eucalyptus, no elms and poplars, no

Port Jackson wattles, and no camphor; none of the trees that dominate the scene today in such perverse abundance were known to van Riebeeck's Colony.

"Imagine Tamboer's Kloof and Kloof Nek thickly covered in forest trees proper to our winter-rainfall area; yellowwood and a hundred others.

"Picture similar conditions on both sides of Constantia Nek and down Orange Kloof towards Hout Bay where tall trees, capable of efficiently replacing a mast, were in vast abundance.

"Along the shores on both sides of the Peninsula were thickets of *melkbos* [?*melkhoutboom*, *Sideroxylon inerme*], providing favourable windfree camping sites for the natives.

"The Cape Flats were similarly fringed but were covered with reeds, dry scrub, scant grass thickening towards the various vleis or meres, with *Acacia* [*Acacia karroo*] towards the clayey soil of the mountains."

1665 **Schouten, W. in Raven-Hart (1971)**

March

Cape Peninsula:

"... although the high hills ... are very rocky and steep, yet the valleys give many lovely large grassy flats, meadows, and pastures set with green herbs and well-smelling flowers, as also here and there with very large forests and whole jungles." [1: 82]

Platteklip Gorge:

"This narrow gorge was enjoyably set with sweet-smelling flowers and herbs, as also with pleasant grass ..." [1: 86]

Table Mountain:

Water: "... this we soon found in the hollows of some flat rocks with which this hill is floored, which water seemed to have gathered from the abundant dew of the thick clouds (which so often cover the whole upper surface of the mountain) in the said hollow rocks. We found it quite sweet ... [1: 87]

"We found this mountain ornamented up here with a lovely landscape, which pleasing field was set with long grass and a few small trees; and the grass and undergrowth were not beaten down by the strong winds here as down below but stood upright with lovely sweet-smelling flowers and herbs, and pretty high, from which we were compelled to believe that the winds here do not blow so violently as below... Such water as is found up on Table Mountain is only in the pools lying in the hollows of flat rocks with which this mountain in some places seems to be floored and this gathers here from the dews of the clouds driving around here, and not we believe, from rain; and in it there is no fish or other life." [1: 90]

1666

Cape Peninsula
(quoting Theal, Governor van Quaelberg)

"One of the difficulties which the workmen complained of was the scarcity of timber such as they needed for a variety of purposes at the quarries as well as at the walls.

The forests which Mr van Riebeeck had found in the kloofs of the mountainside above Rondebosch were already exhausted, so that no timber was obtainable closer at hand than Wynberg." [p. 148]

1668 **Schreyer, J. in Raven-Hart (1971)**

Cape Peninsula:

"The *Aloe* [*Agave americana* is meant here], which is considered a rarity among us and is cultivated in the gardens with great pains, is there so common that whole hills are covered with it ...

"We also found an unusual and marvellous flower there. It grows on the streets where one walks, like ox-eye daisies, and by day has no scent; but as soon as the sun sinks behind the hills, it begins to smell so strongly that one thinks to find all the loveliest scents combined in this one flower [possibly *Hesperantha* spp. are meant]." [1: 139]

1691 **Dampier, W. in Raven-Hart (1971)**

Cape Peninsula:

"The soil of this country is of a brown colour; not deep, yet indifferently productive of grass, herbs and trees. The grass is short like that which grows on our Wiltshire or Dorsetshire Downs. The trees hereabouts are but small and few; the country also farther from the sea does not much abound in trees, as I have been informed.

"The mould or soil also is much like that near the harbour, which, though it cannot be said to be very fat or rich land, yet it is very fit for cultivation ..." [2: 380]

Early 1700s Valentyn, F. (1726; reprint 1971)

Hout Bay:

"... Hout Bay, where also some farms have been set up and where more could be established if this had not been left undone in order to preserve the timber of this forest which is greatly needed here.

"There are also various other cattle pastures of the Hon. Company beyond the Steenbergen in a region called by the Portuguese *Os picos fragosos*, or the Broken Hills but which later was called Noorwegen by the Dutch, especially where the hills lie to the South because they well resemble certain hills in Norway. Here the Hon. Company previously used to keep its cattle for slaughtering ...". This must have been good grazing land if cattle could be fattened there. [p. 73]

Table Mountain:

Climbers "... must hold fast to the coarse grass or to some tuft of bent-grass and thus climb up the steep slope ...

"In the old days it was usually said that on top of this hill was a large lake, but on closer examination this was found to be fable since there was nothing there but some crevices and shallow pits in the large rocks with which this mountain is as everywhere paved, in which some water stood whether from rain or dew, very clear and delectable... Here and there however much long grass [probably Restionaceae] is to be found, as also other hollows or marshes, barely a foot or a foot and a half deep in which some grey frogs live not perceived by day but clearly heard by night.

"Further, on top and along the sides, there are here and there some springs yielding lovely and clear water, which waters various of the lands around: this flows both East and West of the Company's garden as also through the same, and in addition, streamlets are seen to the East flowing beside the Rondebosch and the new vegetable-garden of which one flows into a tributary of the Salt River and others into the seas or the Bay ...

"Up here one finds a uniform flat for the most part, though with here and there a little hillock or shallow valley in which as a rule are found scrub, grass, and a few trees. One can walk for fully a mile [Dutch Mile = 5.5 km] over this fine flat beyond which one comes to a shallow valley to the East where many wonderful rocks are to be seen, as if piled up by hand, while in the valley there is only rough, coarse grass and a little bent-grass ... [p. 57]

"This Table Mountain seems from the sea to be barren and without vegetation since no foliage or grass is to be seen; but on top it is very green. Also in the gorge there are many roots, high trees, and brushwood which I have repeatedly seen on fire, and various lovely flowers and plants are found on the summit." [p. 65]

Cape Peninsula:

"Another great inconvenience is that there is little firewood here, since although there are indeed lovely and large forests such as at Paradys, the forest near Hout Bay, that along the Berg River near Drakenstein, and that in Hottentots Holland and still higher up in Stellenbosch, that near the Olifants River, and elsewhere, all these are either too far off, or are reserved by the Company for itself: and although there are some forests where the Burghers can cut timber with written permission from the Governor, nevertheless most of the firewood consists of poor undergrowth and of stumps and knots which we (in Holland) would not look at, and costs so much that a householder will spend fully 5 or 6 guilder a week on wood if he must buy it.

"To avoid this everyone has his slaves gather, on his land or elsewhere, as much bush and undergrowth as possible." [p. 217]

1702 Bogaert, A. in Raven-Hart (1971)

Platteklip Gorge:

On the way up saw "... valleys beset with thick jungles ... when at last we came to the topmost gorge, finding it richly grown with grass [and/or Restionaceae] ... but now the path became even worse ..." Reached the top about noon. "... our first task, to which overpowering thirst pressed us, was to seek for the large lake, rich in fish, which we had been assured we should find. But we found nothing of the sort, only pools in the flat rocks which this area is floored, and in them clear water which we found unusually pleasant of taste, whether because this was truly the case or because the mighty thirst

suffered us to think so. It is in my opinion not far from the truth to suppose that this water comes from the abundant moisture of the thick clouds which so often cover this hill.

"After taking a frugal but pleasant midday meal in the grass at the top of the hill we walked round the flat, which we found unusually level, and grown almost everywhere with long grass and plants unknown to us. We found nothing except the aforementioned pools of water, except, not far from the path by which we had come up, a bare rock on which some letters were engraved." Looked down on Lion Hill and the Castle. [2: 477, 478]

The Cape:

"The soil around the Cape in the flats, and further inland, is in many places exceptionally good for cultivation and the growing of all sorts of crops... A considerable quantity of bush is found, but hard and knotty, good for nothing but firewood. Far inland the forests produce good timber of which Governor Willem Adriaan van der Stel made wonderful use in the building of his magnificent farm called Vergelegen ...

"In the valleys and flats, as also on the hills, there grow of themselves an endless quantity of rare plants and herbs." [2: 481]

1714 **Valentyn, F. (1726; reprint 1971)**

Cape Peninsula:

"There is nothing more amazing than to see whole fields of flowers growing wild here, of which the colours are so unusually bright and fine that it is pity that they cannot be drawn from life by a skilled artist.

"I saw a Herbarins [Herbarius] Vivus of them, which Heer Henrik [Hendrik] Bernard Oldenland had collected, a good botanist whom I knew here as Overseer of the Company's Garden, composing fully 13 or 14 volumes in folio, with a very fine description in Latin of each plant. I saw this work in 1714 after his death, and often read in it with great pleasure. There were some Englishmen who took a great interest in it but the owner, Monsr. Donker, his heir, asked too much for it in their opinion. The specimens were unusually lovely, exceptionally well dried, and still so living in colour, that it was a pleasure to see them.

"We give here a short extract from this Herbary: There follow twelve and a half pages listing the plants; the text being in Latin." [p. 117]

1772 **Sparrman, A. (1786)**

Table Mountain and Lion Mountain:

"The above mentioned hills are in a great measure bare, and that part of Table Mountain that looks towards the town is pretty steep. The bushes and trees (if they may so be called) which here and there grow wild, are stunted partly by their own nature, and partly by the South-east and North-west winds. Hence they, for the most part look dried up, with pale blighted leaves, and, upon the whole, have a miserable appearance. Some of them, sheltered by the cliffs, and at the same time watered by the rills that run down the sides of the mountain, may perhaps be more healthy and vigorous; but they are universally deficient in that verdure which adorns the oaks, vines, myrtles, laurels, lemon-trees etc. planted at the bottom near the town."

April Cape Peninsula:

Collected duplicate and triplicate specimens of plants. "I have therefore neglected no opportunity of sending to Sir Charles Linnaeus duplicates of everything I found, together with my remarks upon them. Unfortunately this great man's illness, declining years, and intervening death, have prevented us long from seeing them in spring, in a *Mantissa tertia*." [1: 17, 18]

False Bay:

"Among the vegetables that I found in Bay-Falso, the *Cunonia capensis* was amongst the largest tree there, though barely twice or three times the height of a man. It grows near the water."

Mentions *Sophora capensis* [*Virgilia oroboides*], which contained "... a new sort of *Viscum* in great abundance"; *Antholyza aethiopica* [*Chasmanthe aethiopica*]; *Antholyza maura* [*Witsenia maura*]; *Staminibys monadelphis* [should be staminibus = with stamens united; probably Asteraceae]; *Calla aethiopica* [*Zantedeschia aethiopica*]; proteas, ericas, cornuses [identity unknown], gnaphaliums [*Edmondia*, *Helichrysum* and *Syncarpha*], echias [*Lobostemon*], phyllicas, brunias, periplocas [*Cynanchum*], two va-

rieties of *Myrica cereifera* [*Morella* spp., probably *M. quercifolia* and *M. cordifolia*]; cliffortias, thesias [*Thesium*], polygalas, hermannias, asters [*Felicia*].

"Quartered on the bare sand among these, some restios were seen, together with divers mesembryanthemums." *Hyobanche* (*parasitis*) [*Hyobanche sanguinea*], *Osteospermum*, arctotides [*Arctotis*], calendulas [*Dimorphotheca*] and othonnas "... throve chiefly in the sandy places.

"On the mountain besides proteas, brunias, diosmas, ericas and the stilbe, we found indigoferas, erinuses [*Zaluzianskya*], selagos, manuleas, chironias... Towards spring divers sorts of ixias, gladioluses, moreas, oxalises, mesembryanthemums, antirrhinums [*Nemesia*], irises [*Moraea*] ..." [1: 27]

Notes plants at Alphen, Constantia. [1: 31]

With the approach of summer many flowers start to bloom. Notes that the silver tree [*Leucadendron argenteum*] grows better and larger at Constantia than on the mountain. He never found it on the Hottentots Holland though he looked for it. [1: 32]

Wood for domestic use: "It is chiefly from the level ground near the shore that the company at present fetches its wood which consists chiefly of two small and crooked sorts of *Protea* [including *kreupelhout*, *Leucospermum conocarpodendron*]." [1: 33]

Contrasts the verdant plains at the base of Table Mountain with the bleak heath (the Cape Flats) beyond them. [1: 35]

Summer

Hout Bay:

"... *palmites* (a kind of *Acorus* [*Prionium serratum*]) grow in abundance and block the streams. On the other hand this same Hout Bay has very little title to the name it bears ... there seems ever to have been a great deficiency of timber and brushwood at that place." [1: 42]

1772 Thunberg, C.P. (1793)

Cape Town:

Notes that European tree species have been introduced and do well; they are deciduous as in Europe "... whereas the African trees do not part with their's [their leaves]." [1: 104]

Notes the trees in the Company's Garden. [1: 114]

April

"The seed vessels of the silver tree, *Protea argentea* [*Leucadendron argenteum*] serve for fuel; the *Restio dichotomus* (*besem-riet* [*Thamnochortus fruticosus*]) for brooms.

"*Kukumakranka* (*Gethyllis* [especially *Gethyllis afra*]) is the name given to the legumen or pod of a plant that grew at the time among the sand-hills near the town, without either flowers or leaves. The pod was of the length of one's finger ... had a pleasant smell ... resembled that of strawberries, and filled the whole room." [1: 116]

At the Cape:

"The leaves of *Calla aethiopica* [*Zantedeschia aethiopica*], a plant which even grew in the ditches about the gardens near the Cape, were said to serve for food for the *yzervarken* or porcupines.

"The root of the *Arctopus echinatus*, which grew both near the Cape and in other places, was of a soft texture and contained a very white and pure gum which was used in the form of a decoction, as an excellent purifier of the blood, and likewise as a remedy in the Gonorrhoea.

"The root of the *Bryonia africana* [*Kedrostis africana*] served the country people for an emetic; infused in wine or brandy it proves an excellent purge, especially if a piece of bread be eaten after it.

"The *Geranium cucullatum* [*Pelargonium cucullatum*], a fragrant plant, was used as an emollient enclosed in small bags.

"Of the leaves of *Borbonia cordata* [*Rafnia triflora*] the country people make tea.

"The *Montinia acris* [*Montinia caryophyllacea*], though of a very acrid nature, was said to be eaten by the sheep.

"The Hottentots eat the fruit of the *Brabeium stellatum* [*Brabejum stellatifolium*], a large shrub that grows near brooks and rivulets, called *wilde castanien* (wild chestnut), and sometimes used by the country people instead of coffee: the outside rind is taken off, the fruit is steeped in water to deprive it of its bitterness; it is then boiled, roasted, and ground into coffee ...

"The fields were by no means so thick covered with grass here as they are in Europe ... but the grass grew very thin, showing the bare sand between the blades so that one could not with any pleasure lie down on it to rest one's self." [1: 128]

30 June — Rondebosch side of Table Mountain:

"On this eastern side, along Table Mountain, the south east wind does not blow so hard as at the Cape for which reason also both trees and shrubs grow here. Among other trees, the pine (*Pinus sylvestris* [probably actually *Pinus pinea*]) was conspicuous by its elegant crown. Wild vines (*wilde driyven*, *Vitis vitiginea* [*Rhoicissus digitata*]) made a distinguished figure at this time with their red berries, which resembled cherries, and were eatable." [1: 134]

1773 Thunberg, C.P. (1793)

January — Table Mountain:

Climbed Table Mountain and found many rare plants, especially orchids. "Among these the *Orchis grandiflora* or *Disa uniflora* (Bergii *Plantae Capensis*) was conspicuous by its beautiful flowers". He found one specimen of *Serapias tabularis* [*Eulophia tabularis*]; *Serapias melaleuca* [*Disa bivalvata*] had black and white flowers; saw blue disa, *Disa longicornis* [*Disa longicornu*]. [1: 220]

Cape Town:

"The olive-shrub [*Olea europaea* subsp. *africana*] was common on the hills near the town, as well as in other places. The leaves are narrower than in the European olive; and the fruit seldom comes to maturity. For this reason it is not used for pressing oil out of it. In other respects, this shrub so nearly resembles the European that it cannot possibly be of a different species. [1: 232]

"As there are no forests in the vicinity of the town except a few small ones that stand high up in the clefts of the mountains, wood, which is used in the kitchen only, is both dear and scarce. Almost all the fuel used here is brought in by the slaves who obtain it by digging up the roots of Proteae, and lopping off the branches of the underwood." [1: 233]

"The *Arctopus echinatus* (*ziekte-troost*), a low umbelliferous plant without stalk and even with the surface of the ground, grew in common near the town, on the clay hills below the mountains." The prickles on leaves and seeds caused discomfort to the barefooted slaves. [1: 234]

"Round the hills near the Cape grew the *Cliffortia ruscifolia*, and the *Borbonia lanceolata* [*Aspalathus angustifolia*], much resembling juniper trees, and like the *Polygala heisteria* [*Muraltia heisteria*] with their sharp leaves pricking the foot passengers; while the *Asparagus capensis*, with its recurved thorns, tore their clothes and retarded their passage for which reason it has received from the inhabitants the name *wakt en beetje*, Stop [wait] a bit.

"The *Tulbaghia alliacea* (*wilde knoflook*, or wild garlic) which grew both in the sands near the Cape and in other places in the country, was used in hectic fevers, either boiled in water or in some kind of soup. [1: 243]

"The American aloe, *Agave americana*, imported from the botanic gardens of Europe, was now common on the hills near the town, and blossomed finely every year without attracting such a great concourse of spectators as it does at Amsterdam." [1: 283]

Mentions that the baboons plunder the gardens and "...feed also upon the pulpous bulbs of several plants which, after digging up, they peel and eat. Heaps of these parings were frequently seen left after them... The *Gladiolus plicatus* [*Babiana* spp.] appears to be the most favourite plant with those that live near the Cape, for which reason also this plant is known by the name of Baboon. The root of this is sometimes boiled and eaten by the colonists." [1: 285]

The Great Sand Mole-rat "...feeds on several sorts of bulbous roots that grow in these sandy plains in abundance, especially gladioluses, ixias, antholyzas [*Babiana*], and irises [*Moraea*] ...

"The *Moraea undulata* [*Ferraria crispa*] never opens before 1 o'clock in the morning, and before sunset, at four in the afternoon, it closes again.

"The *Ixia cinnamomea* (*avondbloem*, *canelbloem*) [*Hesperantha falcata* and/or *H. spicata*] opens every evening at four, and exhales its agreeable odours throughout the whole night.

"The approach of rain is announced by the flowers of the various bulbous plants such as the ixias, moraeas, irises [*Moraea*], galaxias [*Moraea* section *Galaxia*], the tender flowers of which do not open in the morning, if rain is to be expected soon; and if a shower

is to fall in the afternoon, they close sometime before." Notes the fragrance of "…*Gladiolus tristis* [this name was widely applied and may refer here to any of several species] and *recurvus* [this name was misapplied to *Gladiolus carinatus* and this is the species that is probably meant here], the *Ixia pilosa* [*Hesperantha pilosa*], *falcata* [*H. falcata*], and *cinnamomea* [*H. spicata*]."

The earth-rose, *aardroos*, *Hyobanche sanguinea* "... grows in winter and spring in the low sandy plains... The *Antholyza ringens* [*Babiana ringens*] ... and the every-varying *Gladiolus plicatus* [*Babiana* spp.] which decorate these sandy plains in abundance have their pulpous bulbs deep down in the sand ... [1: 285]

"The *Gardenia thunbergia*, with respect to its bloom, is one of the finest trees in the world. This little tree had been brought a few years before from the forests of the country where it is scarce, and grows very slowly, the wood being at the same time so hard, that on this account it is used for clubs ...

"The wood that is used for dressing their victuals in the kitchen is nothing but brushwood, being got with no less pains than expense from the smaller trees and bushes. On making some enquiry concerning this matter, I found that the following were employed for this purpose; viz. the stems and roots of the *Protea grandiflora* [*Protea nitida*], *conocarpa* [*Leucadendron conocarpodendron*], *speciosa* [*Protea speciosa*], *hirta* [*Mimetes hirta*], *mellifera* [*Protea repens*], and *argentea* [*Leucadendron argenteum*], a few species of *Erica*, and some sorts of *Brunia*." [1: 288]

Then lists plants used for medicinal purposes. "Many gerania [*Pelargonium* section *Horaea*, including *P. triste*] with their red and pulpous roots, grew in the sandy plains near the town ..."

Bryonia africana [*Kedrostis africana*] ... emetic and purge.

Asclepias undulata (*bitter-wortel*) and *crispa* ... dropsy.

Eriocephalus ... dropsy.

Haemanthus coccineus and *Scilla maritima* [*Drimia capensis*] (very common on the hills below the mountains and called Mountain Squill) ... dropsies and asthmas.

Polygonum barbatum [*Persicaria lapathifolia*] which grows in the ditches ... swollen legs.

Crotalaria perfoliata [*Rafnia amplexicaulis*] ... diuretic.

Piper capense ... used as a stomachic instead of common pepper.

Fagara capensis (*wilde cardamom*) [*Zanthoxylum capense*] ... flatulent colic and the palsy.

Mesembryanthemum edule [*Carpobrotus edulis*] ... internally for the dysentery and the thrush and externally for burns.

Osmites camphorina, called *Bellis* ... "The genuine species, or the *Osmites camphorina* [*Osmitopsis dentata*], which is the very best, I found growing on the top of Table Mountain only, and as it was obtainable by only a few, the *Osmites asteriscoides* [*Osmitopsis asteriscoides*] was used instead" ... of great merit in numerous ills.

Protea grandiflora [*Protea nitida*]...diarrhoea.

Adonis capensis [*Knowltonia capensis*] and *Atragene vesicatoria* (*brandblad*) [*K. vesicatoria*] ... sciatica and rheumatism.

Adiantum aethiopicum, *vrouwehaar*, a species of maiden-hair, grew chiefly on the sides of Devil's Mountain ... cold and chest infections.

Protea mellifera [*Protea repens*] ... chest.

Salicornia fruticosa (*zee koral*, sea coral) [*Tetragonia fruticosa*] grew on the seashore ... salad, dressed with oil and vinegar.

Oxalis cernua (*wilde syring*) [*Oxalis pes-caprae*] " ... grew to the greatest size and the greatest abundance of all the species appertaining to this genus" ... a good salt of wood-sorrel [1: 289–291].

August

"The winter rains having moistened the dry hills in the environs of the Cape, various beautiful and elegant flowers of bulbous plants began to spring in the month of August." Notes *Ixia bulbocodium* [*Romulea flava* and *R. rosea*]; *Moraea collina; M. spathacea* [*Bobartia indica*]; *M. undulata* [*Ferraria crispa*]; "... the elegant family of irises, however, especially the *papilionacea* [*Moraea papilionacea*] excelled all others in the superb grandeur of its flowers, which was greater than can be expressed. [1: 294]

"The *Mirabilis dichotoma* (*vieruurs bloem*, or four o'clock flower) [*Mirabilis jalapa*] was planted in a few gardens ...

"Of the *Restio dichotomus* (*beesem-riet*) [*Thamnochortus fruticosus*] brooms were made to sweep the floors with."

Haemanthus coccineus and *puniceus* [*Scadoxus puniceus*] were called King of Candia. [1: 295]

Amaryllis ciliaris [*Crossyne guttata*] "... grew all over this district; although it was never seen to blossom." [1: 296]

Noordhoek:

"The downs here consisted all of quicksand, raised into hills of various heights; those that had been lately formed were still bare, and those that were of a more ancient date, overgrown with bushes, especially the wax-shrub *Myrica cordifolia* [*Morella cordifolia*] which frequently grew on them, low and creeping. *Duyn-hout*, or *zwart-hout* [*Peucedanum galbanum*], was the name given to a shrub that has fleshy leaves, and was without blossoms, *Foliis compositis, foliolis cuneiformibus carnosis*. It appeared to be an umbelliferous plant. The *slange-bosch*, *Seriphium* [*Stoebe plumosa*], which grew here, was said, when made into a decoction, to expel worms." [1: 267, 268]

1774 **Thunberg, C.P. (1795)**

Cape Peninsula:

"Bulbous plants, in all probability, repose at times or they are not seen every year in equal quantities. In some places one sees them in one year in great abundance, and another year scarcely any." [2: 126]

Vischershoek [Vissershoek or Salt River]:

"The strangury ranged amongst the cattle here was occasioned by the *Euphorbia genistoides*." [2: 134] [Strangury: A condition where constant attempts are made to pass urine because of a blockage or partial blockage, or a burning sensation of the urethra. It is caused generally by the formation of gravel stones through drinking brack water or from a diet high in salts (such as *Mesembryanthemum*).] Sparrman (1786): "... there is said to grow a herb called ... Pissgrass ... probably a species of *Euphorbia* ... said to be frequently eaten by young ... cattle which thereby get a ... stoppage of urine."

1797 **Barrow, J. (1801)**

At the Cape:

"... hemp [*Cannabis sativa*], called by the Hottentots *dacha*, is produced in great quantities, not, however, for the purpose of being manufactured into cordage or cloth but merely for the sake of the leaflets, flowers, and young seeds which are used by the slaves and Hottentots as a succedaneum for tobacco ... [p. 18]

"In most of the sandy flats are found in great abundance two varieties of the *Myrica cereifera* [*Morella* spp., probably *M. cordifolia* and *M. quercifolia*], or wax plant, from the berries of which is procurable by simple boiling a firm pure wax.

"Of native plants that which is most cultivated in the vicinity of the town is the silver-tree [*Leucadendron argenteum*] ... whole woods of it stretch along the feet of the eastern side of the Table Mountain, planted solely for fuel.

"The *conocarpa* [*Leucospermum conocarpodendron*], another species of *Protea*, the *Kreupel-boom* of the Dutch, is also planted along the sides of the hills. Its bark is employed in tanning leather, and the branches for firewood.

"The [*Protea*] *grandiflora* [*P. nitida*], *speciosa* and *mellifera* [*P. repens*], different species of the same genus, grow everywhere in wild luxuriance and are collected for fuel, as are also the larger kinds of ericas or heaths, phyllicas, brunias, polygalas, the *Olea capensis, Euclea racemosa, Sophora* [*Virgilia oroboides*], and many other arboreus plants that grow in great abundance both on the hills of the Peninsula, and on the sandy isthmus that connects it with the continent.

"The article of fuel is so scarce that a small cartload of these plants sells in the town from five to seven dollars, or 20 to 28 shillings.

"In most families a slave is kept expressly for collecting firewood. He goes out in the morning, ascends the steep mountains of the Peninsula where waggons cannot approach and returns at night with two small bundles of faggots, the produce of six or eight hours hard labour, swinging at the two ends of a bamboo carried across his shoulder. Some families have two or even three slaves whose sole employment consists in climbing the mountains in search of fuel. The expense of a few faggots, whether thus collected or purchased by the load, for preparing victuals only, as the

kitchen alone has any fireplace, amounts in a moderate family to forty or fifty pounds a year. [p. 19]

"The natural productions of the Cape Peninsula in the vegetable kingdom, are perhaps more numerous, varied, and elegant than on any other spot of equal extent in the whole world. Of these, by the indefatigable labours of Mr Masson, His Majesty's botanic garden at Kew, exhibits a choice collection; but many are still wanting to complete it.

"Few countries can boast so great a variety of the bulbous rooted plants as southern Africa. In the month of September, the close of the rainy season, the plains at the feet of Table Mountain and on the west shore of Table Bay, called now the Green Point, exhibit a beautiful appearance.

"As in England, the humble daisy, in the spring of the year, decorates the green sod so at the Cape in the same season, the whole surface is enlivened with the large othonna [unidentified Asteraceae, possibly *Cotula turbinata*], so like the daisy as to he distinguished only by a botanist, springing up in myriads out of a verdant carpet, not however of grass, but composed generally of the low-creeping *Trifolium melilotos* [*Melilotus indica*].

The *Oxalis cernua* [*Oxalis pes-caprae*] and others of the same genus, varying through every tint of colour from brilliant red, purple, violet, yellow, down to snowy whiteness, and the *Hypoxis stellata* [*Spiloxene capensis*], or star flower, with its regular radiated corolla, some of golden yellow, some of clear unsullied white, and others containing in each flower, white, violet, and deep green, are equally numerous, and infinitely more beautiful.

"Whilst these are involving the petals of their showy flowrets at the setting of the sun, the modest *Ixia cinnamomea* [*Hesperantha*], of which are two varieties, one called here the cinnamon [*Hesperantha spicata*, the other the evening flower [*H. falcata*], that has remained closed up in its brown calyx and invisible during the day, now expands its small white blossoms and scents the air throughout the night with its fragrant odours. The tribe of ixias are numerous and extremely elegant, but none more singular than that species which bears a long upright spike of pale green flowers [*Ixia viridiflora*].

"The *Iris* [*Moraea*], the *Moreae* [*Moraea*], *Antholiza* [*Babiana*], and *Gladiolus*, each furnish a great variety of species not less elegant nor graceful than the *Ixia*.

"The *Gladiolus*, which is here called the *africaner*, is uncommonly beautiful with its tall waving spike of striped flowers [exact species uncertain but probably *G. liliaceus*], and has also a fragrant smell. (Footnote: A small yellow *Iris* [*Moraea fugax*] furnishes a root for the table, in size and taste not unlike a chestnut. These small roots are called *uyntjis* by the colonists, and that of *Aponogeton distachion* [*Aponogeton distachyos*], which is also eaten, the *water uyntjes*.) That species of a deep crimson is still more elegant [probably either *Gladiolus priorii* or *G. watsonius*].

"Of those genera which botanists have distinguished by the name of the liliaceous class, many are exceedingly grand and beautiful, particularly the *Amaryllis* of which there are several species.

"The sides of the hills are finely scented with the family of geraniums, the different species of which, exhibiting such variety of foliage, once started an idea that this tribe of plants alone might imitate in their leaves every genus of the vegetable world. [pp. 24, 25]

"The frutescent, or shrubby plants, that grow in wild luxuriance, some on the hills, others in the deep chasms of the mountains, and others on the sandy isthmus, furnish an endless variety for the labours of the botanist ...

"The eye of the stranger is immediately caught by the extensive plantations of the *Protea argentea* [*Leucadendron argenteum*] whose silver-coloured leaves of the soft texture of satin gives it a distinguished appearance among the deep foliage of the oak, and still deeper hue of the stone pine. It is singular enough that though the numerous species of *Protea* be indiscriminately produced on almost every hill of the Colony, the silver tree should be confined to the feet of Table Mountain alone, a circumstance that led to the supposition of its not being indigenous to the Cape. It has never yet, however, been discovered in any other part of the world. [p. 26]

"The tribe of heaths are uncommonly elegant and beautiful. They are met with equally numerous and flourishing on the stony hills and sandy plains, yet unless raised from seed, are with difficulty transplanted into gardens.

"Little inferior to the heaths are the several species of the genera to which botanists have given the names of *Polygala, Brunia, Diosma, Borbonia* [*Aspalathus*], *Cliffortia*, and *Asparagus*, to which might be added a vast variety of others to be enumerated only in a work professedly written on the subject." [p. 27]

Top of Table Mountain:

"On the swampy parts of the flat summit between the masses of rock are growing several sorts of handsome shrubs.

"The *Cenaea mucronata* [*Penaea mucronata*], a tall elegant frutescent plant, is peculiar to this situation, as is also a species of heath called the *physodes* [*Erica physodes*] which, with its clusters of white flowers glazed with a glutinous coating, exhibits in the sunshine a very beautiful appearance.

"Many other heaths common also to the plains seemed to thrive equally well on this elevated situation as in a milder temperature. The air on the summit in the clear weather of winter and in the shade is generally about 15 degrees F. lower than Cape Town. In the summer the difference is much greater when that wellknown appearance of the fleecy cloud, not inaptly called the table-cloth, envelopes the summit of the mountain." [p. 38]

1810 Burchell, W. (1822)

29 November — Cape Town:

"As soon as we had passed the houses, my attention, in spite of myself, was entirely engrossed by the rich and wonderful variety of plants that grew in every spot. In the bushes, weeds, and herbage by the roadside, at every step, I recognised some wellknown flower which I had seen nursed with great care in the greenhouses of England." Lists 32 of these.

"A little further on we came to some plants of the great American aloe, *Agave americana*, in flower. The noble plant is frequently used for forming hedges and, when they stand close together, their thorny leaves present an impregnable barrier to cattle, and even to men ..." [1: 14, 15]

5 December — At a brook at the base of Table Mountain:

"... we sat down under some beautiful silver trees [*Leucadendron argenteum*] which shaded us from the very hot sun ..." [1: 17]

Table Mountain: "To give some idea of the botanical riches of the country I need only state that in the short distance of one English mile I collected in four hours and a half, 105 distinct species of plants even at this unfavourable season and I believe that more than double that number may, by searching at different times, be found on the same ground." [1: 18] On page 19 lists 72 species.

7 December — Lions Rump:

"On the following day we took a walk on the Lion's Rump and added 43 more species to my Herbarium, although the earth was quite parched off by the sun." Another list of plants.

Landdrost's House, Cape Town:

Saw an "... oleander tree above 10 feet high decorated with a profusion of rosy flowers; and a large shrub of *Cassia corymbosa* loaded with bunches of blossom." [1: 20]

11 December — Cape Town:

Burchell comments pertinently on the perverseness of man who, with all the richness of the flora at the Cape, preferred introducing all kinds of alien plants such as tulips, hyacinths, etc., which were given the place of honour in gardens. Lists such garden plants, "...but in none are any of the elegant tribe of heaths ever seen under cultivation; and it is a curious fact that among the colonists these have not even a name, but, when spoken of, are indiscriminately called *bosjes* (bushes). Although the Dutch language has a word to express heath yet, whenever I made use of it in conversation with the farmers, it seemed always to be unintelligible." [1: 22]

12 December — In the Government Garden he was disappointed to find "...scarcely anything except vegetables", but a footnote adds: "There is however a fine plant of *Strelitzia augusta* [*Strelitzia nicolai*]; an *Aloe dichotoma* [actually *Aloe barberae*] about thirty feet high; *Halleria lucida*; *Gleditsha triacantha* [*Gleditsia triacanthos*]; *Tabernaemontana* ; and *Royena pubescens* [*Diospyros*]." He also mentions *Arum colocasia* (the St. Helena yam) [*Colocasia esculenta*]. [1: 24]

Between the Government Garden and the foot of Table Mountain: "...an uncultivated plain extending to the foot of Table Mountain and, in some parts, abounding in low scrubby trees of *kreupelboom* much used for firewood [*Leucospermum conocarpodendron*]." [1: 25]

26 December — A house in Cape Town:

"... it is thatched with a very durable species of rush peculiar to this part of the world and which the Dutch call '*dak-riet*', *Restio tectorum* [*Elegia* (= *Chondropetalum*) *tectorum*]." [1: 26]

27 December — Green Point:

"We took the road round Green Point, an extensive sandy level which forms the western part of Table Bay and which, in the month of September, becomes a complete flower garden by the astonishing variety of the tribe of Ensatae [Iridaceae], Oxalides [*Oxalis* spp.], and small liliaceous plants." [1: 27]

Camps Bay:

On a walk to a cottage under Lion's Head: "About this spot grew *Mahernia incisa* [*Hermannia* sp.], *Phylica buxifolia, Solanum tomentosum, Eriocephalus racemosus*, *Euphorbia genistoides*." Collected 56 species at Camps Bay. [1: 28]

1811 Burchell, W.J. (1822)

3 January — Near Rondebosch:

"We passed Roodebloem (here pronounced Roibloom) where the great road from Hottentot Holland and the interior of the Colony joins the road from Simons Bay. This place is called Roodebloem from a profusion of red flowers (probably gladiolii) [in this case *Gladiolus watsonius*] which annually spring up there before the land was brought under cultivation.

"The country between Newlands and Paradise is rich in botany beyond all that I could have imagined; and, as a European, I might say that we wandered through coppices of greenhouse plants and forced our way through thickets of rare exotics." Collected 104 species, and gives a list. [1: 35]

23 January — Slopes of Devil's Peak:

Two thirds of the slopes were alight. Burchell said that slaves collecting firewood daily often start fires (despite this being a public offence) to cook and to keep themselves warm; and they do not trouble to dowse them properly afterwards. Such fires only make subsequent collection of firewood more difficult because cover is reduced. "It is a very common practice, at certain seasons of the year, purposely to set fire to the old dry grass and bushes for the purpose of cleaning the land and allowing the young and fresh pasture to spring up clear from the dry stubble and withered grass which is found to prevent cattle feeding with advantage on the new herbage." [1: 38, 39]

24 January — Up Platteklip Gorge, Table Mountain:

"On each side of our path was scattered a great variety of shrubs and plants, some growing out of bare rock. None were of much greater height than 6 or 7 feet and the greater part not larger than one year's growth owing to the fire which happened the year before on the mountain and which unfortunately spread all the way up the ravine. *Crassula coccinea*, had, in many places, escaped the devastation and its fine scarlet flowers ... caught the eye..." [1: 41]

Lists 28 species on the ascent. [1: 42]

The party made a fire for cooking. This "... blazed with the fuel of *Cliffortia ruscifolia*, *Mimetes hartogii* [*Mimetes fimbriifolius*] and *Aulax pinifolia* [*Aulax cancellata*]. Excellent water was found in the cavities of the rocks ..." [1: 43]

Summit of Table Mountain:

"... a tree of a species of *Protea* [*Mimetes fimbriifolius*], the largest I had seen of this kind being between 8 and 9 feet high, with a bushy round head and a trunk half a foot in diameter. The leaves which terminated every branch were of a bright red colour and much more conspicuous than the flowers themselves." Lists 44 species found on the summit. "The number of individual specimens selected and preserved this day was 1 133." [1: 47]

14 February — Between Rondebosch and Wynberg:

"... the sandy heath is covered with flowers and bushes amongst which *Leucodendrum decorum* [*Leucadendron laureolum*] is a very showy and handsome plant, not on account of its flowers but on the fine bright yellow leaves which surround it." [1: 59]

Between Wynberg and Constantia, at Duckitt's farm:

"The place is called 'Witteboom' a name which, with great propriety, it has received on account of numerous plantations of large *witteboom*, or silver trees [*Leucadendron argenteum*], which grow about it. The native station of this handsome tree is the sloping ground at the far end of the eastern side of Table Mountain, and at present very large plantations occupy the same situation on the northern side next to the town. That this space should be the only part in all the Colony where it grows wild can be no subject

of wonder to any person who has the least knowledge of the character of Cape botany since the natural places of growth of a multitude of other plants are circumscribed by limits equally contracted.

"The soil between Wynberg and Constantia is a pure white sand, covered with heath and large bushes [the footnote lists 25 species] chiefly of the proteaceous tribe, the most abundant of which is the *suikerbosch* (sugarbush) [*Protea repens*]." [1: 61]

Constantia:

"Close to the house stands a beautiful tree of *wilde kastanje* (wild chestnut) [*Calodendron capense*: this tree is still standing] the trunk of which was 15 inches in diameter, and 30 feet high below the branches. It well merits the generic name it has received (Footnote: *Calodendron*, or 'beautiful tree') and the colonial name is equally applicable as, in the appearance of both the flowers and the fruit, it very much resembles a horse chestnut, but in foliage it is different. This is the largest and perhaps the only tree within a great distance of Cape Town. Close to it I saw a small tree of *Gardenia rothmannia* [*Rothmannia capensis*], bearing a profusion of large and very sweet-scented flowers. These were an elegant sample of the trees in Cape forests." [1: 63]

22 May

Green Point:

"The effect of the late rains was surprising; not six weeks before the herbage seemed entirely parched up; vegetation had disappeared and the plain looked like a desert waste, but the plain was now changed to a verdant field and myriads of gay flowers had started up out of the earth. Those who have seen this spot only in summer would never suppose that a soil so arid and bare contained such an astonishing quantity and such a great variety of bulbous roots. Blossoms of every colour and every hue were at this time expanded to the genial warmth of the sun, and in such profusion that, from a little distance, some particular parts of the plain appeared as if painted red, others white, and others yellow. It is chiefly to the beautiful tribe of *Oxalis* that these enlivening effects are at this season attributable, but not so to the two other extremely small and delicate plants which in countless multitudes whiten the soil (Footnote: *Ixia minuta* [*Pauridia minuta*] and *Strumaria spiralis*). Of the uncertain flowering of many of the bulbous plants of the Colony, the former, among a great many others, may be adduced as an example, since, by Thunberg, who for three years was indefatigable in collecting everywhere near Cape Town, it was considered a rare plant." [1: 153]

"On Green Point and on the Flats in the neighbourhood of Cape Town grows a celebrated little plant (Footnote: *Gethyllis ciliaris* and illustrated) which still preserves its original Hottentot name being known by no other than that of *kukumakranki*... The children of Cape Town sometimes go in search of *kukumakrankie* and, as it is difficult to find them, being very inconspicuous among the herbage, they consider it a triumph to return home with a few; and the *kukumakranki* season (June) never passes unnoticed." [1: 55]

1815 La Trobe, C.I. (1818; reprint 1969)

25 December

Cape Town:

"Fences of the large alien, and of cactus or Indian fig [*Cactus opuntiae*] are common. Of *pisang* [banana, in this case referring to *Strelitzia*] we saw several large beds." [p. 34]

27 December

En route to Newlands from Cape Town:

"The road lies along the eastern side of Table Mountain which here presents itself in shapes more picturesque and wild than on the western towards the town.

"The foot, both of the Devil's Hill and Table Mountain, is well clothed with *witteboom*, *Protea argentea* [*Leucadendron argenteum*], oak, and other trees, the verdure and foliage of which were in great perfection." [p. 35]

1816 La Trobe, C.I. (1818; reprint 1969)

11 January

Kirstenbosch:

From Newlands drove to "...Kerstenbosch [sic], a country house belonging to Mr Alexander at the foot of the rocky mountains southwest of Table Hill. The country is wild, well-wooded and exhibiting a rich profusion of curious shrubs and plants, some in flower. Rocks of singular shape overhang the dark oak woods behind the house and a cascade, issuing from the upper regions of these romantic hills, shoots down a dark glen... The *witteboom* (silver tree) [*Leucadendron argenteum*] grows here in abundance ..." [p. 52]

17 February — From Newlands towards foot of Table Mountain:

"I took another gentle stroll into the wild wood under the Table Mountain and examined ... some curious trees and plants knowing nothing of the names of either genus or species.

"The *witte-boom* is used for fuel, being unfit for building, furniture, or implements of industry." [p. 104]

1819 Moodie, J.W.D. (1835)

September — Table Mountain:

"The base of the mountain is skirted with plantations of the silver-tree [*Leucadendron argenteum*] which has been found native only in the immediate neighbourhood of the Cape Peninsula but has lately been propagated to a considerable extent in consequence of the increasing scarcity of fuel ... [1: 25]

"I was rather disappointed as to the richness and apparent fertility of the uncultivated parts of the country: the general impression its aspect conveyed was that of aridity, though, from its being the winter season, I saw it under the most favourable circumstances. Wherever the land was not irrigated by springs of water led out artificially, the low grounds were covered with dwarf shrubs, heaths, or very scanty herbage. The soil, however, appeared in many places to be excellent from the great quantity of vegetable matter of a more hardy description which everywhere covered the ground. I was particularly struck with the geraniums [*Pelargonium*] which grew in great profusion in the hollows and could not but admire the beautiful heaths that often rise to a height of 8 or 9 feet. [1: 26]

"The Cape District, with few exceptions, is very inferior to the other parts to the eastward of it, both as a grazing and a corn country. Its soil is generally poor and sandy, and, where good, it is so arid that nothing in the way of cultivation can be done with it without the aid of irrigation ..." [1: 37]

Moodie climbed Table Mountain "... taking what appeared to me to be the most direct road. After struggling through a thick plantation of the silver-tree [*Leucadendron argenteum*], I emerged near the gorge of a tremendous ravine with a footpath in the bottom which led by an exceedingly steep ascent to the summit." He describes this and on page 46 says: "The road I had taken was the only practicable approach on the side of the town ..." Of the top: "... even at this elevated spot the mountain was covered with beautiful heaths and shrubs." Describes finding natural springs on top of Table Mountain and speculates on their origin, deciding that they were originally from rain seeping through the rocks. [1: 44]

1838 Backhouse, J. (1844)

11 July — Lion's Hill and environs of Cape Town:

"We afterwards walked on the Lion Hill... Though the tops of the mountains to the northeast were covered with snow, the hills about Cape Town were bespangled with flowers. Several species of *Trichonema* [*Romulea*] and *Galaxia* [*Moraea* section *Galaxia*] with blue, yellow, or purple flowers resembling those of *Crocus*, and other of *Oxalis*, allied to our wood-sorrel, but greatly diversified in colour, are scattered in profusion over the grassy surface of the ground.

"When in Mauritius [which he visited before coming to South Africa] our friends ... presented us with a bag of Dates... A few have been planted by some of the Mahommedans about Cape Town but they grow much more slowly here than in Mauritius; there are however two fine date palms before a house in Long Street. [p. 72]

14 July — "We took a walk on the ascent of the Duivelsberg [Devil's Peak] ... on which the sugarbush *Protea mellifera* [*Protea repens*] forms extensive thickets, its large, cup-shaped involucres containing the flowers, and consisting of varnished, pink and white scales three inches in length, are very striking.

"A large pink, pea-flowered podalyria [*Podalyria calyptrata*] was also in blossom, and a blue lobelia, *Lobelia pinifolia*, by the side of watercourses. In the lower ground *Zantedeschia aethiopica*, grown in English greenhouses under the name of Arum and Lily of the Nile, was exhibiting its white flowers abundantly. As swine are fond of its roots, it is called in the country, pig-root." [p. 73]

16 July — Between Rondebosch and Wynberg:

"The country between these two places is ornamented by planted woods of oak, stone pine, and poplar, the foliage of which forms a striking contrast with the grey leaves of

the silver-tree, *Leucodendron* [sic] *argenteum* which forms natural woods higher up the sides of the mountains."

4 August — Devil's Peak and Table Mountain:

"... we accompanied William Henry Harvey and a botanist of his acquaintance to a waterfall behind Devilsberg, or Devil's Hill, which is attached to the eastern portion of Table Mountain. The body of descending water is not large nor does it fall perpendicularly but it rushes down a natural bushy gorge from a considerable height at an angle of about 85 degrees. The ravine is crowned by cliffs and decorated with *Todea africana* and several other ferns, abundance of brambles, some low trees, and several heaths.

"By the path ascending to this spot which passes a deserted square signal-station, *Anemone capensis, Antholyza aethiopica* [*Chasmanthe aethiopica*] and several other handsome plants were in flower.. The mountains were still capped with snow. On the lower ground many pretty plants were in flower, among them were various species of *Lacheaenalia* [sic], *Moraea, Homeria* [*Moraea* section *Homeria*], *Hesperantha*, and *Gladiolus*. The arid parts of the country seem full of small bulbous roots; in the spring which is now commencing they send up their beautiful blossoms in profusion. Many of them have fragrant flowers." [p. 80]

6 August — On a sandy flat *en route* to Lion's Hill:

"... there were some curious beetles, and one of vivid green was feeding ... on the *Euphorbia caput-medusae*, an acrid plant with remarkable, fleshy, branches, that was growing contiguously to the bones of a dead horse and the remains of crayfish on the shore." [p. 82]

6 September — Table Mountain:

Descending "... having gathered a yellow disa [possibly *Disa tenuifolia*], a plant of the Orchis tribe, on the top, and a pink one, with some heaths, in the gorge; and the elegant *Agathea parvifolia* [*Felicia* sp., probably *F. aethiopica*] which resembles an Aster, among the bushes below.

8 September — "In a walk on the ascent of Table Mountain we noticed a fine *Leucodendron* [sic] forming an erect bush, four feet high; the flowers almost equalled that of *Magnolia*, the pale bracteas of the leucodendron [probably *Leucadendron strobilinum*] supplying the place of petals. A singular scarlet parasite *Cytinus sanguineus* was growing from the roots on an eriocephalus [*Eriocephalus africanus*], a little hoary Aster-like bush." [p. 85]

27 September — Rondebosch:

"Passing near the village of Ronde-bosch we crossed a flat sandy heath to the Zwarte Rivier, Black River, where we ... unyoked the oxen. They were allowed to feed on the waste until sunset ...

"Many pretty flowers decked this portion of the Cape Flats. Among them were a pink watsonia [probably *Watsonia borbonica*] resembling a corn-flag [*Gladiolus*]; a yellow iris-like moreaea [sic, probably *Moraea neglecta*]; an orange gazania; and a few pink and white mesembryanthemums somewhat of the form of marigolds." [p. 88]

1838 Bunbury, C.J.F. (1848)

28 January — Devil's Peak:

"This is the most unfavourable season of the year for botanising on account of the long-continued heat and drought: all the bulbous, and most of the herbaceous, plants are withered and dried up, yet even now there are many interesting things to be found. I spent some time in botanising on the rough heathy, sloping, ground about the foot of Devil's Mountain and was struck with the great variety of forms of vegetable life observable even at this unfavourable season, although comparatively few of them were in a satisfactory state for examination. The general state of the vegetation, at this time of the year, is certainly rather stunted, harsh and rigid, and, though there were some brilliant flowers, there is no fine verdure nor development of foliage. [p. 55]

"The soil, composed of a hard red clay mixed with the detritus of the sandstone rock which lies immediately beneath it, is covered with heaths and other slender small-leaved shrubs intermixed with prickly bushes somewhat resembling furze, tufts of slender wiry grasses, and hard tough rush-like plants of the *Restio* tribe; and these do not cover the ground closely like the vegetation of our northern heaths and commons but are rather thinly scattered, leaving spaces of bare soil between them.

"Among these, appear, even now, the bright blossoms of a few herbaceous plants, in particular a beautiful pink-flowered chironia [*Chironia baccifera*] and two lobelias, one with golden-yellow flowers [*Monopsis lutea*] (an unusual colour in that tribe of plants) and the other rivalling the gentians of the Alps in the splendid blue of its corolla.

"One of the most abundant shrubs is the *Struthiola erecta* [probably *Struthiola ciliata* or *S. dodecandra*], a neat little heath-like plant bearing a profusion of delicate white flowers, deliciously fragrant.

"I found also the *Erica cerinthoides* with its fine scarlet blossoms; a pretty little milkwort; several everlastings (*Helichrysum*) [and/or *Edmondia* and *Syncarpha*]; the *Muraltia heisteria*, a prickly furze-like shrub with small bright purple flowers peeping from among its spiny-pointed leaves; and numerous other things.

"The only species of the *Protea* tribe that I have yet seen in bloom is the *Leucospermum conocarpum* [*Leucospermum conocarpodendron*], or *kreupelboom*, a large shrub or small tree with greyish hairy leaves and compact heads of tawny yellow flowers which covers a great extent of ground about the foot of Table and Devil's Mountains, forming a kind of dwarf forest.

29 January "I ... ascended a little way up Devil's Mountain as far as the wood of silver-trees which extends along the sides of that mountain and the Table. The silver-tree, or *witteboom*, *Leucadendron argenteum* which appears to be the only tree of considerable size indigenous to the neighbourhood of Cape Town, is very conspicuous from the brilliant silky whiteness of its leaves which have a beautiful appearance when shaken in the wind. It grows to a height of from 30 to 40 feet with rather upright branches, not spreading widely. Its wood is soft and brittle, of no known use except for fuel; its bark is very astringent and appears to contain much tanning matter, but I am not aware that it has been turned to any account.

"I met with several plants today which I had not seen in my former walk, in particular a beautiful scarlet-flowered heath, *Erica sebana* [*Erica coccinea*], nearly out of bloom however. Some proteas in seed. A slender-leaved diosma [probably *Diosma hirsuta*] with small white flowers. A curious little hydrocotyle, *H. centilla* [possibly *Centella asiatica*]; and the *Myrica quercifolia* [*Morella quercifolia*] which is nearly allied to the sweet gale or bog myrtle of our own country, and has the same aromatic smell. There is something in the general aspect of the vegetation here which reminds me of that of Provence and Languedoc although the prevailing plants are of quite different families. [p. 56]

4 February "I gathered the first ferns I have seen here, in a ravine of the Devil's Mountain, one of them an *Adiantum* very like the English maidenhair; the other a *Blechnum*.

"One of the most common of all plants in the neighbour-hood of Cape Town is a large mesembryanthemum commonly called the hottentot fig [*Carpobrotus edulis*], with trailing stems spreading widely over the ground and bearing large straw-coloured flowers. It grows everywhere on the open uncultivated ground, by waysides and on banks, covering large spaces with its matted stems and its succulent bright-green leaves which have a more lively verdure than most of the other indigenous plants." [p. 62]

5 February Green Point area below Lion's Rump:

"... the space between the sea and the hill is a flat expanse of hard clay baked by the sun. The vegetation of this tract, at the present season, is scanty and unattractive. One of its most remarkable productions is a strange uncouth-looking leafless euphorbia [*Euphorbia caput-medusae*], shaped like a crooked club and rough all over with pyramidal knobs like the rind of a pineapple. It grows in broad and dense patches, a number of stems radiating from a central point. Though tolerably abundant in some spots on the hard clay near the sea, it grows in much greater plenty among the shivered sunburnt rocks of the Lion's Rump together with various kinds of *Crassula*, *Cotyledon* and *Mesembryanthemum*." [p. 63]

8 February Part-way up Table Mountain:

"I walked part of the way up Table Mountain to where the cliffs begin which, I should think, is nearly 1 000 feet above sea level. The silver-tree disappears a little below this elevation. The shrubbery of heaths and flowering bushes is very rich and beautiful on this middle stage of the mountain, and, as one ascends, many plants are found which do not make their appearance lower down.

"In a little swampy watercourse among the rocks, the vegetation was uncommonly luxuriant, and I found many novelties, among other the *Psoralea aphylla*, a slender broom-like shrub with very pretty blue papilionaceous flowers ..." [p. 64]

28 February Bunbury wrote that he "... started at 4 o'clock this morning to ascend Table Mountain in company with Mr Harvey [a noted botanist]." Went via Platte Klip Gorge. "The path by which we ascended was rough and narrow, winding among scattered silver-trees, thick bushes and masses of rock ... [p. 75]

"Long tufts of coarse grasses and tough pliant rushes Restiaceae [Restionaceae] grow in the interstices of the stones ... heaths, ferns and various dwarf shrubs adorn the crevices

of the enormous cliff which rise like colossal walls on both sides of the pass. Reached the top at 06h30; the sun was up. [p. 76]

"We proceeded immediately in search of *Disa grandiflora* [*Disa uniflora*], the celebrated beauty of Table Mountain." Describes the top of the mountain as generally level with rock knolls and marshy depressions, a narrow plain about 2 miles long. "A large part of its surface is a kind of pavement of flat or rounded rocks with herbage in the interstices; other parts are swampy and covered with moss or with tall rushes and ferns.

"The *Disa grandiflora* [*Disa uniflora*] grows in a marshy hollow near the eastern extremity where it is abundant among the rushes on the margins of small pools and streamlets, in a black boggy soil. This is the only known locality. It is certainly one of the most splendid flowers I ever beheld, and may rank, I think, among the very first even of the lovely Orchis tribe.

"Besides this we gathered two other rare species of *Disa*, *D. ferruginea* and *tenuifolia*; a delicate cream-coloured gladiolus [*Gladiolus monticola*]; the brilliant *Crassula coccinea*; several pretty heaths, some peculiar to this elevation, others common to the summit and base of the mountain; some curious ferns; a variety of Compositae, etc. *Penaea mucronata* is one of the most abundant plants on the top of the mountain. A large and handsome fern *Todea africana* grows plentifully in the west hollows and among rocks in the Poort [Platteklip Gorge]. [p. 77]

"About 9.30 a.m. we began to descend, but lingered a good while in the gorge collecting mosses and lichens which we found in abundance on the rocks. (Footnote: *Sticta crocata*, a very fine lichen, grows here in great perfection. It is found also in Scotland (where however it is very rare), in North America and in the Falklands Islands.)" [p. 78]

14 March — Slopes of the mountain above Muizenberg:

"I collected above a score of plants entirely new to me among which were the *Indigo juncea* [*Indigofera filifolia*] with its slender broomlike twigs and fine crimson flowers; the *Sebaea ambigua* ... with its profusion of bright, starry, yellow blossoms; a small species of *Statice* or sea lavender [*Limonium scabrum*] much resembling the English *S. reticulata*; the neat *Geranium incanum*, and the *Tarchonanthus camphorates* [actually *T. littoralis*], a shrub remarkable for its powerful smell of camphor and for the white wool which envelopes its seeds.

"The superb chandelier lily *Brunsvigia multiflora* [*Brunsvigia orientalis*] grows plentifully here in the loose sand; its thick succulent stalk rises straight out of the ground without any leaves supporting an ample spreading umbel of more than 20 flowers of a glowing crimson colour, curving upwards like the branches of a chandelier." [p. 83]

August — At the Cape:

"There were but few plants in blossom when I first returned [from his eastern excursion at the end of June] but the alternating rains and sunshine have since brought out a great number, and fresh species are making their appearance every day as the season advances.

"The Proteaceae which abound in the neighbourhood are now for the most part in bloom; one of the most beautiful, as well as the most common of them, is the sugar-bush *Protea mellifera* [*Protea repens*] with its large cup-shaped flower-heads shaded with bright pink, brown, green, and white (or sometimes entirely white) and over-flowing with honey which attracts swarms of bees, and beetles of all kinds. The quantity of honey in these flowers when they first expand is so great that by merely inverting them one can pour it out as from a cup.

"Another species, perhaps equally beautiful, and more singular, is the *Protea melaleuca* [*Protea lepidocarpodendron*] which abounds in the Kloof [Kloof Nek] and under the cliffs of Table Mountain. Its flower-heads, of a more cylindrical form than those of the sugar-bush, and 4 or 5 inches long, are clothed with a kind of glossy black fur, and beautifully feathered at the top with tufts of silver-white hairs.

"The *Protea scolymus* [*Protea scolymocephala*], an inhabitant of the sandy flats between the two bays, though smaller and less showy than these species, is remarkably neat and pretty both in its foliage and flowers, while the *Protea grandiflora* [*Protea nitida*] ... attracts the eye by the size and delicate straw colour of its heads.

"Several species of *Leucodendron* [sic] grow on the hills and flats. They are mostly low shrubs with neat foliage and small flowers but some of them are rendered conspicuous by the bright colours of the leaves which immediately surround their blossoms. In *L. decorum* [*Leucadendron laureolum*] these leaves are of a vivid yellow and give the whole bush a very showy appearance.

"The silver-tree [*Leucadendron argenteum*] which is the largest and one of the most remarkable of this tribe is not now in bloom.

"Several of the Cape Proteaceae are what Humboldt calls gregarious or social plants growing usually in great quantities, where they occur at all, and occupying considerable spaces of ground without much mixture. This is particularly the case with *Protea mellifera* [*Protea repens*], *Leucospermum conocarpon* [*Leucospermum conocarpodendron*], and *Leucodendron* [sic] *argenteum*. The first forms a thick belt of shrubbery along the eastern side of Devil's Mountain and entirely covers many parts of the Flats, while the second predominates in like manner along the northern base of Devil's and Table Mountains. In some parts of the interior I noticed a similar tendency, though less decided, in *Protea lepidocarpon* [*Protea lepidocarpodendron*]. [p. 186]

"The hills and flats about Cape Town are already decorated with a variety of Iridae though the full season for them is not yet arrived. These are certainly among the most attractive plants at the Cape. They are not confined to any particular soil or situation.

"The species of *Gladiolus* are numerous and very various, some rising to the height of 3 or 4 feet with a stately spike of large scarlet flowers [possibly *G. watsonius* but more likely *Watsonia meriana* or *W. tabularis*], while others are of humble growth bearing on their slender stem only one or two flowers of a pale blue or a greenish-brown colour [*Gladiolus gracilis*].

"The *Antholyza aethiopica* [*Chasmanthe aethiopica*] is common in wet places and by rivulets, displaying its tall spikes of orange-red blossoms above the grass and rushes.

"The *Babiana rigens* [*Babiana ringens*], with its scarlet flowers just peeping above the surface of the ground, flourishes in the moist sand of the flats near Muysenburg.

"Several trichonemas [*Romulea* spp.], with bright starry flowers, are common in open ground in the immediate neighbourhood of the town together with a pretty little *morea* [sic], singularly variable in its colour.

"Of the Orchis tribe I have seen only one species in bloom this season, the *Disperis capensis* which is not uncommon among bushes on the hillsides. It is known by the name of 'hottentot bonnet' on account of the peculiar shape of its purple and green flowers.

"The Arum tribe, so numerous in tropical countries, is here represented by a single species well known in our English conservatories, the calla (*Zantedeschia*) *aethiopica* (Footnote: Commonly called at the Cape the pig lily), very common in all wet places and along the margins of rivulets where its large brilliant white spathes and glossy green leaves have a very ornamental effect. This is one of the very few plants which are common throughout the Colony (at least wherever I have been) from Cape Town to the Caffer country. [p. 187]

15 August

"One of the pleasantest places for botanising within an easy walk of Cape Town is 'the Kloof' between Table Mountain and Lion's Head, together with the adjacent slopes of those mountains. Here, at this season, the rough stony ground is profusely decorated with several delicate heaths, fine yellow-flowered hermannias, and various species of *Gladiolus, Oxalis, Mesembryanthemum, Zygophyllum* [*Roepera*], *Dimorphotheca*, etc. Here also, the *Protea melaleuca* [*Protea lepidocarpodendron*] is more plentiful than anywhere else: and a closer search is rewarded by many plants curious and interesting to the botanist though not generally attractive.

"Another very favourable ground for botany is on the eastern face of the Devil's Mountain near the farther blockhouse. Owing to the different exposure, this side of the mountain has the advantage of much more moisture than that next to the town and has quite a different vegetation.

"Here I have gathered the beautiful *Lobelia pinifolia, Anemone capensis*, *Knowltonia hirsuta* [*Knowltonia capensis*], *Penaea squamosa* [*Saltera sarcocolla*], a large *Heliophila*, and several other plants which I have not observed elsewhere.

"Some curious mosses and lichens are to be found near the waterfall on the same side of the mountain. Our common English bramble grows in vast quantities near this waterfall." [p. 189]

24 September

Simonstown:

"The neighbourhood of Simon's Town is less rich in wild plants than that of Cape Town but affords some which are not found here. It abounds with Proteaceae which generally delight in the most barren soil. [p. 197]

"It is remarkable that the seaweeds, shells, and fish of False Bay are in great measure different from those in Table Bay." [p. 198]

10 November

Top of Table Mountain:

"I ascended Table Mountain a second time in the company of Mr Harvey... A small (but perennial) spring of water, the only one on the summit, issues from the rocks near the head of this ravine and is well known to picnic parties [Platteklip Gorge].

"The top of the mountain was at this time very dry (more so than Harvey had ever seen before) and consequently we were less successful in botanising than we expected, yet I

added about 20 species to my collection. The most remarkable was the *Aulaya capensis* (Harvey) [*Harveya bolusii*] a curious parasitical *Orobanche*-like plant, beautifully coloured with shades of rich scarlet, orange, and yellow. It grows plentifully among grass near the spring.

"*Villarsia ovata* [*Villarsia capensis*], and a very handsome white everlasting (Footnote: *Helichrysum sesamoides* [*Edmondia sesamoides*]) are abundant all over the summit; and we found likewise *Dilatris viscosa, Pterygodium atratum* [*Ceratandra atrata*], and several heaths. [p. 205]

25 November "At this season there are but few plants in blossom in the hills, and vegetation in general appears much withered and parched up. The beautiful flowers of the Gladiolus, Ixia, and Orchis tribes, as well as the gay annuals, which were so abundant two months ago, have almost entirely disappeared. Two of the most ornamental plants now in blossom are the *Pelargonium cucullatum* and *Leonotis leonurus* which grow abundantly in most of the ravines and watercourses among the mountains, usually together in thick clumps. The bright purple flowers of the one and the deep glowing orange of the other produce a rich effect. [p. 206]

14 December "It has often struck me as remarkable that among the immense variety of plants which this country produces there are comparatively few that are directly useful to man, either as food or medicine.

"The only native fruit (as far as I am aware) is that of the *Mesembryanthemum edule* [*Carpobrotus edulis*], the hottentot fig, which is the most common and most generally diffused of all plants in the Colony. It is insipid in a raw state but makes a tolerable sweetmeat.

"The *Physalis pubescens* [*Physalis peruviana*], though known by the name of Cape gooseberry [actually on account of the papery calyx, or cape, that surrounds the fruit], is supposed to be a naturalised plant.

"The nuts of the *Brabeium stellatum* [*Brabejum stellatifolium*], the caffer chestnut, are said to be eatable if prepared by soaking for some hours in fresh water.

"The bulbs of many ixias [here probably *Moraea*], and other plants of the same tribe constitute, together with the ants and the locusts, the food of the Bushmen and Korannas when they cannot procure game or milk.

"The inside of the enormous roots of the *Testudinaria elephantipes* [*Dioscorea elephantipes*], and the soft, pithy interior of the stems of the *Zamia* [*Encephalartos*] are also occasionally eaten by the natives, perhaps for want of better food.

"The flowering tops of the *Aponogeton distachys* [*Aponogeton distachyos*], a pretty, white-flowered, floating plant frequent in pools of water in various parts of the Colony are sometimes used both as a pickle and as a substitute for asparagus. [p. 207]

"As useful in medicine, the aloes are the most important plants in the Colony. The juice of their leaves boiled down to a solid consistency is exported in considerable quantities to Europe. The estimated value of the export of Aloes from the Cape in one year amounted to 2 649 pounds. The species which was pointed out to me as the most valuable in this respect was, I believe, *Aloe ferox*. [p. 208]

"Several species of *Diosma* [*Agathosma*], known by the name of *boekoe* or *buku*, have high reputation for their medicinal powers in the Colony (where they are looked upon as almost universal remedies) and have of late years been introduced into European practice. I do not know with what success.

"The *Arctopus echinatus* is recommended as a very efficacious medicine in certain maladies. It is an ugly, prickly, repulsive plant with broad rough leaves lying flat on the ground, and small inconspicuous umbellate flowers which spring directly from the crown of the root without any stem. It is very common on the hills about Cape Town in the winter months.

"The honey which is yielded in such abundance by the flowers of *Protea mellifera* [*Protea repens*] is said to be of some use as a pectoral medicine.

"Among the useful plants of the Cape, the waxberry *Myrica cordifolia* [*Morella cordifolia*] should not be omitted. It is a bush about 3 or 4 foot high with slender upright twigs covered with small roundish rigid leaves, and bearing great quantities of hard globular berries about the size of black currants, and covered over with a crust of white wax. The wax is frequently collected and used for making candles which afford a tolerable light ..." [p. 209]

Regarding the grass *Briza maxima,* which Bunbury states is found on the Cape Flats: "This last, indeed, has been supposed to be an introduced plant but it grows on the top of Table Mountain as well as in the low grounds about the town ...

"The splendid *Protea cynaroides* ... grows rather plentifully on the Flats and occurs also on the summit of Table Mountain ... [p. 217]

"I must not quit the subject of Cape botany without making some mention of the very interesting botanical garden of Baron von Ludwig, a gentleman remarkable for his zeal and liberality in the cause of science, in a country where it has but too few votaries. Baron von Ludwig is a native of Prussia but long settled at the Cape. His garden which is situated on the outskirts of Cape Town, towards the Lion Mountain, contains a rich collection of rare and curious plants from all parts of the Colony as well as from Australia and other countries, and its treasures are open in the most liberal manner to all who can appreciate them." [p. 221]

1838 Delegorgue, A. (1990)

Table Mountain:

"When we had taken our fill of this immense view, we went down again by the same way and soon arrived at a knoll covered with trees that gleamed with a silvery lustre. These trees, from which I gathered a few branches, were the *Protea argentata* [*Leucadendron argenteum*] which apparently exist only on the slopes of these mountains lying at the tip of Africa, between the town and the Cape of Good Hope. The leaves underneath are covered with hairs which have the soft sheen of satin. The fruit is similar to that of the pine. The trees are used for firewood in some of the neighbouring districts and, towards Constantia, they have been planted over fairly large areas of ground, probably because they succeed better there than the trees brought from Europe." [pp. 14, 15]

1838 Krauss, F. in Spohr (1973)

Table Mountain:

"Frequently, however, the mountain is covered by mist (the table-cloth)... I was particularly thrilled to see the beautifully flowering *Penaea squamosa* L. [probably *Saltera sarcocolla*, but possibly *Brachysiphon furcatus*]; the magnificent *Disa* orchids [*Disa uniflora*] flower only in autumn. (I collected them during March 1840) ..." [p. 9]

September–October

Cape Peninsula:

"With the beginning of spring the whole country changed into a veritable garden, and it was a pleasure to botanise along the slopes of Table Mountain and Devil's Peak among the flowering bushes (*bosjes*) of all kinds of *Protea, Erica*, legume, thymelea. From the clay ground bulbs suddenly develop with brilliant multi-coloured blooms. Together with the flowers the birds appeared in great numbers ...

"Straight as our pines, the beautiful silver-trees [*Leucadendron argenteum*] with their bright silver leaves stand in all their glory on the slopes of Table Mountain as far as Muizenberg where they are used as firewood.

"The plateau of these mountains has also many interesting flowering plants... The dry bushes of Ericacea, Thymelea, Diosmea [*Diosma*], legume, Composita, *Polygala*, Labiatea, and various other families now display their various blooms, and among them, the whole army of bulbous plants flower, (Iride, Amaryllide, Hypoxide, Asphodele, *Oxalis*, etc.) in brilliant colours. Bulbous plants do particularly well between Groene Kloof [Mamre] and Table and Saldanha Bay." [p. 12]

27 November "I travelled across Cape Flats through the sand dunes, rising to a height of 40 feet in height. These are occasionally covered thinly by mesembryanthema, but are usually quite bare. Between these hills there are numerous streams and bogs, particularly after the rainy season, covered with Restiaceae and Cyperaceae. These streamlets dry up in summer." [p. 22]

1839 Bunbury, C.J.F. (1848)

9 January Bunbury had taken a house on the Cape Flats called the Camp Ground near Wynberg:

"While on the hills and in the Table Valley all vegetation is parched up, the Flats are still gay with a multitude of pretty flowers among which the heaths are conspicuous. The most abundant plants of this genus, on the Flats, are the *Erica cordifolia, ramentacea* [*E. multumbellifera*], *pedunculata* [*E. pilulifera*], and *pulchella* which grow socially, like our European heaths, and cover large spaces of ground, while the more splendid *Erica mammosa*, and *E. concinna* [*E. verticillata*], though sufficiently plentiful, grow singly, scattered here and there among other shrubs. These two are very handsome plants with large tubular blossoms. *Erica mammosa* varies in the colour of its fine waxy-looking flowers from a crimson to a pale-flesh colour, and in one variety they have nearly the tint of red lead. *Erica concinna*

[*E. verticillata*], which grows to the height of a man, and bears large blossoms of a light purplish-pink colour, flourishes chiefly in the marshy hollows and along the margins of the little streams which intersect the Flats in various directions where it is intermixed with *Cliffortia strobilifera, Psoralea pinnata* and various species of *Rhus, Brunia*, and *Leucodendron* [sic]. Of the beautiful Gladiolus tribe there are but few in blossom at this season. The principal are the stately watsonias (called *afrikaaner* by the colonists) with their tall scarlet spikes, and the pretty little aristeas whose brilliant blue flowers remain open but a few hours.

"Although the vegetation of these sandy plains is so various and beautiful when examined, yet in its general effect in the landscape it much resembles that of our English heaths and has none of the strangeness and peculiarity of the frontier vegetation. [pp. 210, 211]

28 February

"The belladonna lily, *Amaryllis belladonna*, one of the most beautiful of South African plants, is now in bloom on various parts of the sandy flats. Its large blossoms are of the most exquisitely delicate tints of rose-colour shaded off into white. It is said to be a native of Madeira and even of Sicily.

"Another plant of the Flats which is common to distant countries, is the *Hydrocotyle asiatica*, an inconspicuous little herb but remarkable for the extent of its geographical range since it is found, apparently, in all the temperate and warmer parts of the southern hemisphere.

"Several of the Cape grasses are identical with those of the south and west of Europe such as: *Polypogon monspeliensis*; *Cynodon dactylon*; *Andropogon hirtus*; *Andropogon allionii*; *Cynosurus aereus*; *Briza minor*, and *Briza maxima.*

"This last, indeed, has been supposed to be an introduced plant but it grows on the top of Table Mountain as well as in the low grounds about the town.

"The cynodon appears to spread over all the warmer parts of the world, on both sides of the Equator.

"The splendid *Protea cynaroides*, the most remarkable of all the proteas for the great size of its flowers, grows rather plentifully on the Flats, and occurs also on the summit of Table Mountain, while its range in longitude is greater than that of almost any other of its tribe extending as far eastward as Grahamstown. It is a very dwarf shrub, scarcely more than a foot high but its cup-shaped flowerheads of a pale pink colour are as broad as the crown of a man's hat ..." [p. 216]

1840 Backhouse, J. (1844)

12 June

Cape Town:

Very cold; snow on the distant inland mountains: "In the valleys there was the greenness of spring. Several plants were in flower on the hills in the vicinity of Cape Town. Among them were some gay species of wood sorrel, *Oxalis*, of various colours; a blue *Trichonema* [*Romulea*] resembling a *Crocus*; three species of *Gladiolus*; a *Babiana*; a *Podalyria*; an *Indigofera, Stapelia variegata* [*Orbea variegata*], *Protea mellifera* [*Protea repens*], and many other plants and shrubs such as are frequently met with in English greenhouses." [p. 631]

7 November

Table Mountain:

"I accompanied WH Harvey in a walk among the woods at the foot of Table Mountain above Wynberg. We met with some remarkable trees, and with *Hemitelia capensis* [*Cyathea capensis*], an arborescent fern with a trunk as thick as a man's arm, and 5 feet high ... and among the rocks some beautiful heaths, and a large caulescent aloe [*Aloe succotrina*]. Up to this period the last had escaped the notice of botanists. No species of the genus having been previously met with nearer Cape Town than the vicinity of Paarl. [pp. 640, 641]

28 November

"I accompanied my friend William H Harvey in an excursion to the top of Table Mountain on which numerous interesting plants were in blossom. It was too early for *Disa grandiflora* [*Disa uniflora*], a splendid plant of the Orchis tribe which borders the mountain streamlets much in the way in which Ragged Robin, *Lychnis flos-cuculi* borders ditches in swampy ground in England.

"Everlastings abounded. *Pelargonium cucullatum*, the parent of most of the geraniums of English greenhouses, formed large patches in the warmer ravines.

"In the borders of the woods of silver tree, *Leucadendron argenteum*, as well as in some more open places, the *kreupelboom, Leucospermum conocarpum* [*Leucospermum conocarpodendron*], formed a large round bush, branches of which were terminated by slender flowers forming golden heads of three inches in diameter.

"A profusion of heaths, proteas and other striking plants were also growing there." [pp. 643, 644]

2 WEST COAST AND BOLAND

1497 **Da Gama, V. in Axelson (1940)**

St Helena Bay, West Cape Coast:

7 November Arrived at St Helena Bay and stayed 8 days. Vessels were careened and cleaned, sails repaired and firewood and fresh water were loaded.

The "... tawny-coloured inhabitants" were "... armed with poles of olive wood to which a horn, browned in the fire, is attached.

"The climate is healthy and temperate, and produces good herbage.

"The man (Hottentot) was gathering honey in the sandy-waste, for in this country the bees deposit their honey at the foot of the mounds around the bushes." [From the Roteiro]

1612 **Castleton, S. in Raven-Hart (1967)**

Saldanha Bay:

"Then we sente our Boate to seeke for water, but ranging the Bay they could find none: a little puddle we saw, of which the People drank, making signes, that there was none other. The Countrey seemed to be a very barren place. Our Boate went into River in the Bottome of the Bay [there is no river, perhaps an inlet in the Bay] and went a mile of a very fine river, but all Saltwater and barren Countrey." [p. 62]

1648 **De Flacourt in Raven-Hart (1967)**

October Saldanha Bay and its Islands:

"All the soil of these islands and of the mainland in these regions is very good, and would produce every-thing if it were cultivated. For the most part it is all black earth, and is all covered with the verdure of various sorts of flowering plants and of bushes: there are no large trees." [p. 174]

1657 **Van Riebeeck, J. (1958)**

22 October Near Paarl:

Gabbema's expedition, the first from the Cape: "In the afternoon we had passed through the kloof between the Diamond and Paarl Mountain along on the one side and the Clapmuts Mountain on the other. Part of the land there is good, but for the most part the soil is poor and sandy."

23 October Along the Berg River, Malmesbury District:

"There are fine lands for cultivation and good pasturage along the river." [p. 175]

1659 **Van Riebeeck, J. (1958)**

28 June Cape Flats:

"... the Commander went beyond Bosheuvel from where one can see right over the Flats from the one bay to the other. Nowhere could be descry any encampments of Kaapmans, the land being everywhere inundated from the rains of the past few days so that it resembled a number of lakes." [p. 82]

1660 **Van Riebeeck, J. (1958)**

17 December Olifantsrivier, Clanwilliam District:

"Next we climbed over a height once more. Here we rested after spending the morning crossing over the tops of seven mountains of sandy soil mixed with rocks and covered with thorn bushes." [3: 317]

1661 **Van Riebeeck, J. (1958)**

3 February — Riebeeck Kasteel, 16 km east northeast of Malmesbury:

"Round this mountain there is reasonably suitable agricultural ground." [p. 345]

1666 **De Rennefort, M. in Raven-Hart (1966)**

17 December — Saldanha Bay:

"... they noted that there was no timber other than for firewood ...

"They found five islands in the bay, on two of which he considered that it would be possible to grow some plants and to feed cattle, if water could be dug out; the others were barren where only cormorants could live, or other birds living on fish and seaweed." [p. 27]

1672 **Theal, G.M. (1882)**

Tygerberg, 13 km northeast of Cape Town:

"Every summer a party of men was sent out with scythes to the Tigerberg, and thirty or forty waggon loads of hay were brought back to the Company's stables as forage for the horses.

"The recesses in the mountainside facing the sea contained patches of evergreen forest in which were found great varieties of useful timber.

"The grass at Hottentots Holland and the forests in the immediate neighbourhood were mentioned as being superior to those of any other part of the country yet visited.

"The soil was described as rich and the southeast wind, that scourge of the husbandman in Table Valley, was far less violent there.

"It was a bountifully watered land, its streams were stocked with fish, and on its pastures at certain seasons browsed elands and hartebeests and other game." [p. 185]

1685 **Theal, G.M. (1882)**

Piketberg:

"At the Picquetberg the grass was observed to be very rich, and there was timber in abundance in the kloofs, as well as thorn-trees for fuel in plenty along the banks of the rivulets.

9 September — "On 9th September the Little Elephant River [Verlorevlei, 57 km north northwest of Piketberg] was reached, and the train followed its course through a district which was little better than a solitary wilderness, but where some elephants were seen ..." [p. 240]

1685 **Valentyn, F. (1726; reprint 1971)**

26 August — Stink River, near Rietvlei, 10 km north northeast of Cape Town:

"... we camped at a place called the Stink River in a lovely valley fortified around with hills and very convenient and agreeable for a halt since there was good grass and water, and it was also very rarely grown with flowers of all colours. This place gets its name of Stink River because in the dry season the water stinks greatly." [p. 227]

27 August — Tygerberg:

"...the Tygerbergen, being for the most part clay soil, tolerably well grown with grass and provided with water ... inhabited by the Hottentots."

28 August — Tygerberg to Mosselbanks River, 33 km northeast of Cape Town:

Mosselbanks River is "... so-called because mussels are found in it, but entirely unsavoury and not good to eat."

Doornkraal near the present Paardeberg, 14 km south southeast of Malmesbury:

"All the track here was very marshy ... Doornkraal, rich in grass but the water brackish where we halted; and by search His Excellency [Simon van der Stel] found a stream of lovely fresh water ... close under the Groot Paardenberg." [p. 229]

29 August — Between Dassenberg [20 km west of Malmesbury] and Paardeberg:

Went over a hill into a valley "... watered by a streamlet which had its source in the Paardenberg, very good water, extending East and South, grown all along with thorn-trees, but with no other firewood.

"Having crossed this we reached a high hill, up which we marched, the top thickly grown with low scrub in the hollows, and with a very pleasant valley sown by Nature with flowers of all colours, and with abundance of grass... Going onwards we camped at a place called the Holle River with good grass and water."

30 August — From Holle River to Diepe River, which flows into Salt River and thence to Table Bay:

"All hilly land there ... with some lovely valleys watered by various brooklets of fresh water and the hills well grown with wood. From there northeast by north for 3 or 4 miles over a flat which was very marshy and soft after the rainy season when the land is completely soaked by the water running down the hills ... but it hardens again in the dry season... We then marched ... to the foot of the mountain called Riebeecks Castle below which lay an exceptionally lovely valley well provided with every-thing and watered by a pleasant river... In it is a cave which can be entered and it is thickly grown with trees suitable for timber ... we camped, well provided with abundance of grass and water ..." [p. 231]

31 August — Riebeeck's Kasteel to Sonquas Drift on the Berg River:

Made a detour to avoid a marshy flat ... "… most of the land here was hilly ... for the most part overgrown with flat-grass and scrub ..." At the Berg River: "It has forests all along it, suitable for timber." They camped at a place "... having good grass." [p. 235]

1–2 September — Down Berg River on south bank, past Honigsberg [Heuningsberg, 30 km northeast of Malmesbury] to Missverstands Doordrift [Misverstandsdrift, 14 km northwest of Heuningsberg]:

"Here the herb called *prei* [*parey* (leek) in the Dutch text, here referring to *Tulbaghia alliacea* and/or *T. capensis*] in Holland grew wild in such abundance that all the plain was filled with its scent]."

3–4 September — Crossed the Berg River. [p. 239]

5 September — Southern end of the Piketberg:

"... we were busied with seeing if this was provided with enough water and grass which we found to be the case." The incident of the Black Rhino's attack on Simon van der Stel's coach took place here.

7 September — Piketberg:

"... finding there lovely clay and sandy clay soils, abundantly grown with grass and wild oats [probably *Ehrharta calycina*], watered by various brooklets flowing from the Piketberg, and with good firewood and timber everywhere.

8 September — "... we passed through a marsh grown with Dutch reeds (*vaderlands riet*) [*Phragmites australis*] close under Jakhals Kloof and below the Kanariberg [Zebrakop], the highest of the Piketbergen. This halt was sufficiently provided with grass, water and firewood ... a quantity of brooklets flowing from the Piketberg as far as the eye could see and well provided with timber and firewood."

9 September — On from Kanariberg:

"The hills passed this day were all of sandy and rocky soils, densely grown with bush and the valleys full of reeds... Finally we arrived at a halting place, a tolerably large flat with little grass but abundant water and firewood."

10 September — Through St Martyn's Valley, just north of Het Kruis [36 km north of Piketberg]:

"... the hills and mountains on both sides are impassable, being rocky and overgrown with scrub... This halt was poorly provided with grass but abundantly with water."

11 September — Sand-dunes. "They were all completely overgrown with dense scrub." Camped at a place "… well provided with grass, water and firewood." Two elephants.

12 September — Langvlei [Olifants-jag], 34 km west southwest of Clanwilliam:

"We marched ... for the most part through marshy flats or over poor sandy soil densely grown with float-grass ['*lies*' in the Dutch text; probably sedges or other aquatic graminoids] and scrub with no grass, but watered by a small river of fairly good water ... then ... marching in a valley called the Olifants-jag lying between two mountains ... rocky and very sandy. [p. 251]

"The place was only fairly well provided with grass but was watered by two streams, one brackish and the other of only passably sweet water. The valley is overgrown with rhinoceros-bush [*Elytropappus rhinocerotis*], so called because these commonly lodge in it." [p. 253]

13 September — From Langvlei to Brakke Vley, or Jakkals-Rivier, c. 35 km west of Clanwilliam:

Camped at Brakke Vley. "This valley is pretty well provided with grass, and near it is a waterhole with very brackish water except in a little corner about 8 feet square where there is tolerably sweet water... There is no lack of firewood here."

14 September — Past Klipfontein Mountain:

The country was "... well grown with grass but the water brackish and on to the Dassenberg [Heerenlogement, 45 km southwest of Van Rhynsdorp and 6 km north of Klipfonteinberg]." [p. 253]

1686 Valentyn, F. (1726; reprint 1971)

8 January — Brakke Valey:

Found six elephants. "The water was tolerable, but the grass scanty." [p. 359]

17 January — Doolhofs-Hoek, St Martyn's Valley:

"Water and grass were still tolerably good."

18 January — Klein Oliphants River [Verlorevlei]:

"The water in the pools and the grass were still tolerably sufficient."

19 January — Jakhals Kloof, on the Piketberg:

"... finding sufficient grass and water." [p. 363]

23 January — Honigsberg to Riebeeck Kasteel:

"... over sandy hills. Water and grass were passable here ..." [p. 365]

Early 1700s Valentyn, F. (1726; reprint 1971)

Tygerberg and Tygervalley [can be seen from the Fort]:

"... Tygervaley, the cattle can be pastured exceptionally well since this region is one of the loveliest and most fertile hereabouts, not only because a dew-cloud usually lies over this land in the summer and as long as there are crops in the fields: this keeps it unusually moist, and then by day the sun works so wonderfully well on it that unusually fine crops are found there.

"They are called the Tygerbergen, not because these wild beasts dwell there but from certain darker or browner patches which clearly distinguish them from all the other hills and these are caused by the dung of the deer thereon which also enriches the soil [these patches, known as *heuweltjies*, are currently considered to be the result of termite activity].

"There are two valleys of that name, that furthest to the northeast being called the Tygervaley and the one furthest to the southwest the Witte Tygervaley, both lying very close together."

Notes that the soil there was being heavily cultivated and that 22 estates had been established there. [p. 75]

Stellenbosch:

"The town is surrounded to the East by very high hills called the Stellenboschbergen which are as high as Table Mountain. The white cloud seen on it by day usually disappears towards evening and then it is calm until midnight.

"In the clefts of the same, much timber grows, and on their tops, however barren and rough they look, are many flowers and fine plants, herbs, etc., and in the barren valleys around are lovely fields of corn and buckwheat, and vineyards and many magnificent plantations. [p. 137]

"... at the outset, before everything was cleared here, it was a wild forest, so that is has preserved the right name in accordance with its previous nature ..." [p. 139]

Hottentots Holland area:

"In the centre of this region lies a high hill, the Schaapenberg, so named because there is grass for the sheep there all the year ... [p. 147]

"It is well known to all who have been there that here in the gorges and on the hills is much lovely timber." [p. 149]

Bottelary, 7 km northwest of Stellenbosch:

"... is called the Bottelary, apparently because this tract of land ... is like the one and only pantry, store, and, as it were, buttery, from whence is reaped all, or nearly all, of the hay for the horses, since in all Africa there are no lovelier grass-fields than here." [p. 153]

Groene Kloof [Mamre], Waveren and Roode Zand [Tulbagh]:

"... although the lands of Groenekloof, Waveren, and the Roode Zand produce no corn or wine, they have, on the other hand, very valuable pastures for cattle, and provide the best summer pastures since there is enough water and grass ...

"It is also worth noting that here in a whole year the sheep do not lick up even a handful of salt as they however usually do in various parts of Europe; but here it is harmful to them, as also to other animals." [p. 169]

Cape Flats to Great Berg River:

"Another great inconvenience is that there is little firewood here [at the Cape] since although there are indeed lovely and large forests such as at Paradys, the forests near Hout Bay, that along the Berg River near Drakenstein [behind Stellenbosch], and that in Hottentots Holland, and still higher up in Stellenbosch, that near the Olifants River, and elsewhere, all these are either too far off, or are reserved by the Company for itself ..." [p. 217]

1702 Bogaert, A. in Raven-Hart (1971)

Cape Flats:

"The soil around the Cape in the flats, and further inland, is in many places exceptionally good for cultivation and the growing of all sorts of crops... A considerable quantity of bush is round, but hard and knotty, good for nothing but firewood.

"Far inland the forests produce good timber of which Governor Willem Adriaan van der Stel made wonderful use in the building of his magnificent farm called Vergelegen ..." [2: 481]

1705 Starrenberg, J. in Valentyn (1726)

October

Near Twenty-four Rivers Mountains, Porterville:

"Camped in a valley below a forest previously named Oude Elzenbosch and for this reason we gave it the name Elzen Valley [Essenbosch River, 4 km north of Porterville]. It is about 500 paces wide and fully a quarter-hour march long, everywhere of lovely black clay grown with wild *palmiet* [*Prionium serratum*] and other scrub with a little marshland because of the water of the stream which is blocked in some places by the scrub and therefore overflows its banks: by a little clearing this can be remedied and [the marsh] drained."

Went up another valley "... which surpassed the above in its grassy slopes." [p. 19]

Towards Wolfberg [Wolwekop], 65 km northwest of Piketberg:

They had passed over ridges without grass but full of thorn bushes "... and certain small bushes [identity uncertain] from which oozes gum, in smell, taste and colour very like mastic. The Namacquaa Hottentots call this gum Trap and use it for fixing assegais etc, as we use resin... I sent men everywhere along a streamlet to find some water-cress for the horses since on this plain there is not a blade of grass to be found ...

"... on over a plain which we found irksome! All the track is nothing but sand, with hills and valleys full of rocks and mole holes into which the horses and oxen continually fell up to their knees, and overgrown with bushes with no grass at all ..." Met a rhinoceros, so the country must have been scrubby. This was south of the Olifants River. [p. 29]

Verloren Vlei:

The oxen were up to their bellies in grass along the river here. [p. 23]

Between Verloren Vlei and Langvlei:

"We were continually on the move because the oxen and horses did not like to remain in the open flat, but wished to make for the bushes to shelter from the rain and wind." Elephants here. [p. 27]

Just north of the Olifants River, at about Klawer:

They had met scanty pastures on approaching the river from the south, but after crossing they passed "... over the most miserable plain that can be imagined. It is all red sand everywhere, shrubby and entirely undermined by moles." [p. 33]

Saw a lion which "… went to the back of a thornbush... We fired more than 60 shots into the bush and thoroughly raked it without perceiving any further movement ..." [p. 35]

Eastern part of Clanwilliam District:

November — Dug for water. The plain had no grass and the cattle wandered off into the bushes. Went on and found good grass and water. Then went along a "… lovely grassy valley" which they followed until reaching the Olifants River and the Piketberg border. [p. 45]

1750s **Theal, G.M. (1910)**

The settled Districts of the Cape, Stellenbosch, etc.:

"In their report the Heemraden incidentally referred to the change then rapidly taking place in the old settled districts in the disappearance of grass and the springing up of small bushy plants in its stead." [3: 9]

1772 **Sparrman, A. (1786)**

March — Cape Flats:

Remarks that visitors to the Cape have overpraised the Cape because they were so overjoyed to see land again after a long voyage. "I have been informed by Capt Cook that he, as well as Sir Joseph Banks and Dr Solander, prejudiced by the relations of others, considered the Cape, the first time they saw it, as the most delightful and fertile place in the world. So that even the barren heaths to the north of the town, were at the same time very innocently mistaken by them for fine fields of corn.

"Still farther on, the dry heathy lands and sandy plains on the strand, contribute to give the country an arid and barren look. It must be owned however that a considerable quantity of the most beautiful African flowers are scattered up and down in different parts during the fine season of the year, but they cannot show their splendid colours to any great advantage among the various kinds of grass here, which are mostly perennial and of a pallid hue, among the dry bushes, and in the fields, which, at least near the Cape, are almost continually grazed off."

Then considers the Cape far better on the eye than the inland deserts. [1: 8]

Writes of the verdant plains at the base of Table Mountain and the bleak heath (the Cape Flats) beyond them. [1: 35]

October — *En route* to Paarl:

"As soon as I had sat myself down I made a curious discovery of a remarkable prickly *Rumex* (or dock) [*Emex australis*] and likewise of the *Tribulus terrestris*." [1: 53]

Great Berg River, Malmesbury District:

Crossed the river "… on some bundles of the *palmiets* [*Prionium serratum*]." [1: 65]

1772 **Thunberg, C.P. (1793)**

July — Cape Town to Paarl:

"In many places the roads were intersected by large rivers which were now so swelled by the heavy rains that the water almost came into the carriage, the current being at the same time very strong.

"The land in these parts is very poor, being merely loose sand... In these meagre plains, nevertheless, phylicas, ericas, and proteas grew in abundance ... [1: 122]

"The African soil is intrinsically meagre, but its fertility, which is so much cried up by many, must be ascribed to the excellence of the climate... The chief object of the farmer when choosing a spot for his abode is to find an early soil in the vicinity of water." [1: 123]

Paarl:

Leaves of *Calla aethiopica* (arum lily) [*Zantedeschia aethiopica*] eaten by porcupines. [1: 128]

Cape Flats to the Mountain chain:

21 July — "From the Cape, the horizon on the land side appears bounded by high mountains that stretch across the whole country. The plain between the Cape and these mountains, which is one day's journey long, is for the most part an uncultivated tract of sand, and

destitute of water, which, for the most part is nowhere to be met with but near the smaller scattered hills which lie about as if insulated, and without any evident connection with each other." [1: 135]

7 September — Inland, over the Cape Flats:

"All over the sandy fields the *Protea hypophylla* (Footnote: *Leucospermum hypophyllocarpodendron*) was seen creeping and procumbent, with its leaves standing up erect on each side of it." [1: 143]

Groenekloof [Mamre], 22 km west southwest of Malmesbury:

"...Groene Kloof (the Green Valley) a considerable grazing farm belonging to the Company, at a distance of eight hours journey from the Cape. [1: 143]

"The sandy and low plains which we traversed abounded at this time in bulbous plants besides others which were not sprung up in consequence of the heavy rains that had fallen during the winter, and which with their infinitely varied flowers decorated these otherwise naked heaths.

"The bulbs of the *Iris edulis* [*Moraea fugax*], when boiled and served up at table, tasted much like potatoes.

"The African flowers vary greatly as to colour, especially on the upper part, and are more constant on the under part [a curious observation, possibly based on geophytes such as *Hesperantha, Romulea* and *Spiloxene* that have dull undersides to the tepals]." [1: 144]

September — Paardeberg, 15 km south southeast of Malmesbury:

"The seed vessels of the species of *Euphorbia* [*Hyaenanche globosa* is well known for this], pulverised, were used for poisoning wolves.

"Here I saw, for the first time, the *Oleum ricini*, or castor oil [*Ricinus communis*]." Describes boiling the seeds for a purgative, and the use of the leaves for headaches. [1: 145]

Saldanha Bay:

"The expressed juice of the sow-thistle (*Sonchus oleraceus*) was used for cleaning and healing ulcers... The *Albuca major* [*Albuca canadensis* (= *A. maxima*)] grew in this neighbourhood tall, straight, and elegant. Its succulent stalk, which is rather mucilaginous, is chewed by the Hottentots and other travellers, by way of quenching their thirst." [1: 146]

Malmesbury District:

"The black berries of a bush called *kraijebosch*, or crow bush [*Diospyros glabra*], were greedily devoured by the crows at the Cape.

"The root of the anise (*anys wortel*) [*Annesorhiza nuda* and possibly also *A. macrocarpa*] was eaten here roasted, and tasted well... The farmers sometimes make their slaves dig up a large quantity of them which they sell in town.

"The root of the *gatagay* (Footnote: Generic term referring to several species of *Peucedanum*) is likewise roasted in the embers and eaten, but has a bad and disagreeable taste." [1: 149]

Roodesand [Tulbagh]:

"*Tintirinties* [*chincherinchees*] is a name given to a species of *Ornithogalum* [*Ornithogalum thyrsoides*] with a white flower, from the sound it produced when two stalks of it were rubbed against each other." [1: 153]

October — "The *Tulbaghia alliacea* (*wilde knofflock* or wild garlic), the root of which smells very strong of garlic, was reported to be a charm for the serpents. With the poison of serpents and the juice of the *Sideroxylon toxiferum* (*gift-boom*, or poison tree) [*Hyaenanche globosa*] the Hottentots poison their arrows which they use against antelopes and wild buffaloes, as also against their enemies ...

"The *Aponogeton distachyon* (*water uyntjies*, or water lilies) [*Aponogeton distachyos*] grew in many places in shallow puddles of water, very plentifully, and from its white flowers that floated on the water exhaled a most fragrant odour. The roots, roasted, were reckoned a great delicacy. [1: 156]

"From a decoction of the *Solanum nigrum* (or deadly nightshade) and the *Sonchus oleraceus* (or sow-thistle) which were found growing wild near almost every farmhouse, were formed, with wax and lard, some excellent salves for healing of wounds and ulcers of all kinds, remedies which were as common as they were approved."

Thunberg was told by all the farmers of a bush growing on the mountains from "... which grew various wonderful products such as caps, gloves, worsted stockings, etc., of a substance resembling soft plush." He had some leaves brought to him: they were covered with "... a very thick shag or down and very much resembled white velvet." The women showed him how they used them. He eventually found a plant in seed and "I was convinced that this plant belongs to the genus of *Bupleurum* (*Bupleurum giganteum*) [*Hermas gigantea*]. The downy coat, resembling fine wool, being well-dried, was also used for tinder and answered the purpose very well." [1: 157]

1773 Thunberg, C.P. (1793)

At the Cape:

"At Sea-cow-river [presumably Seekoeivlei] the company has a farm where straw (*Restio tectorum*) [*Elegia* (= *Chondropetalum*) *tectorum*] is cut and prepared for... thatching". Describes the method.

"At Muysenberg (or Mouse Mountain) the wax shrubs ([*Morella*] *Myrica quercifolia* and *cordifolia*) grew in abundance along the shore. The berries of them are quite round, full of knobs, soft, and of the size of a pea. The berries themselves are quite black, but covered with a farina of a whitish-grey colour." Describes how they are prepared for wax in candles, etc. [1: 248]

"Planks and boards, as well as beams for building, were extremely dear as they were scarce, and brought a great way from the inland parts of the country, so that the greatest part of them must be imported from Europe or the East Indies." [1: 252]

11 September — Cape Town via Tierberg to Groenekloof:

"The whole country was covered with sand and downs, and abounded in swamps (valley [vlei]) which, having been filled with water during the winter, now began to produce fine pasturage for cattle. For this reason, the farmers here graze only, and sow but a small quantity of wheat... The water is for the most part brackish, and even this, for the greater part of the year, is very scanty. [2: 2, 3]

"The roots of fennel [*Chamarea capensis*] were roasted and eaten in the same manner as those of Anise.

"The bulbs of *Iris edulis* [*Moraea fugax*], a plant which grew here in abundance and decorated the fields with a variety of white, yellow, and blue flowers were ... eaten either roasted, boiled, or stewed with milk ..."

13 September — Mamre:

"The country here was deep sand, and full of downs, which made the roads very heavy. [2: 4]

"The *bucku* (*Diosma*) ... was first dried in the shade and afterwards over a fire before it was pulverised." [2: 6]

28 September — Near Saldanha Bay, on Farm Witteklipp: a white stone was not limestone as thought, but its whiteness derived from a moss, *Byssus lactea* [actually a lichen], growing on it. [2: 9]

"It is only in the spring and in the beginning of summer that these low sandy plains are adorned with flowers ..." [2: 10]

1–5 October — The Swartland, south of the Great Berg River:

"The korrhaens [Black Korhaan, *Eupodotis afra*] were observed to devour the buds of the *Cotula turbinata* which was common in all the low and sandy plains... This tract of the Groenekloof and still further was called Zwartland... The *Cyanella capensis* [*Cyanella hyacinthoides*], *raapuyntjes* [*raapuintjies*], a kind of onion, was roasted for the table of the farmers.

The *Viscum aethiopicum* [*Viscum capense*], *lidtjiestee*, was used in diarrhoeas, and also for tea." [2: 14]

7 October — Just north of Piketberg:

"The road was now perfectly hard ... and the fields were tolerably well covered with grass." [2: 16]

8 October — Kartous Kloof [Cardouw Kloof or Kardouwkloof], south of Citrusdal:

"This spot is like Roode Sand [Tulbagh], a broad valley surrounded by mountains, watered by a rivulet called Olyfant's Rivier, and abounding in grass." [2: 17]

Crossed Olifants River to a hot spring called Engel Bath [probably 'The Baths', 65 km south southeast of Clanwilliam]. The bath had some green vegetable matter growing in it (*Conserva*). The water was not boiling hot, but lukewarm. [2: 18]

14 October — Just north of Grey's Pass:

"The root of the species of *Stoebe* which grew here smelt just like valerian (*Valeriana phu*) and might possibly have the same effect as this plant has in the epilepsy." [2: 21]

22 October — Into Roode Zand Valley, through Mostert's Hoek [Mitchell's Pass]:

Passed many streams. "Near these streams grew several shrubs, especially some of the *Geranium* kind [*Pelargonium*] that sent forth a pleasant strong and refreshing odour." [2: 31]

Winterhoek Mts, 18 km north of Tulbagh:

"... the fly-bush [*Roridula dentata*] grew in great abundance, and the scarce plant, the *Protea nana*, the flower of which resembles the dog rose, was found only in this place." [2: 32]

Tulbagh Valley:

"The *Ixia bulbifera* [*Sparaxis grandiflora* subsp. *grandiflora*, which actually has purple flowers, grows here with red-flowered *Geissorhiza inflexa*], a bulbous plant with a red flower, grew here in the greatest abundance ... the ground appeared as if it were covered with a scarlet cloth.

"In like manner, here and there only, was found beside the brooks, a green variety of the *Ixia maculata* [*Ixia viridiflora*], another tall bulbous plant, which is as elegant as singular, with its long cluster of green flowers growing out like an ear of corn, and is so extremely scarce all over the world." [2: 34]

1774 Thunberg, C.P. (1795)

Mosselbank's River [rises about 6 km west of Paarl and flows westwards]:

"Here I heard much talk of a hottentot watermelon which is said to be a large and succulent root, called *kou* [*Fockea*] by the Hottentots, who grind it down to a meal and bake it like bread." [2: 135]

Piketberg:

"Here grew a shrub called *zand-olyve* (*Dodonaea angustifolia*) the wood of which was of a hard nature. This was dried and a decoction of it was drunk in fevers by way of a purgative.

"*Tygers* [leopards] infested the bushes in these sandy plains. [2: 139]

"The *Stapelia incarnata* [*Quaqua incarnata*], a very branchy plant without leaves, was found in the vicinity of the mountains, though it was scarce; the Hottentots ate it, after peeling off the edges and prickles." [2: 140]

October — Verloren Vlei:

"Verloorenvalley is the name given to a rivulet that derives its source from the above mentioned range of mountains [Captain's Kloof, Driefontein, and Babiansberg] and empties itself into the sea. Its banks are in many places over-grown with reeds and rushes (*Carex*, *Arundo* [*Phragmites australis*]) which sometimes shoot up to the height of several yards insomuch that the rivulet, in such places, cannot be seen. In these impenetrable recesses an innumerable multitude of birds have their haunts and places of refuge... In some places it was narrow, in others broad; but, in particular, it grew wider and wider the nearer it approached to the sea. In some places there were large holes and deep pools. It runs into the ocean to the northward, and when it is low, the mouth appears dry, and the current there entirely choked up with the sand, and stagnating. The nearer it approaches the sea the deeper it grows in the middle, and the freer it is from reeds. It has many windings, and, in its course, runs between two tolerably high mountains. The water is sweet and good; but, near the sea, from the intermixture of the salt water, and especially in the dry season, it grows saltish. We encamped several days along its banks in the open air, till we came to its mouth, in a sandy and barren field where no colonists dwelt, and where there were only a few places for grazing cattle which were mostly committed to the care of the Hottentots. [2: 143]

"From Verlooren Valley we travelled to Lange Valley [18 km to the north] which is a river similar to the former, but much less; and from hence we had a very long and dry carrow-field to traverse before we got to ... Heerenlogement.

"The heights were very sandy, the country dry, and the grazing farms scarce." Farmers did not live there; they hired Hottentots to watch their cattle "... as the drought and barrenness of the soil prevent them from growing corn or planting orchards." [2: 146]

1775 Sparrman, A. (1786)

25 July — Over Cape Flats to Hottentots Holland [Somerset West]:

The oxen: "These ... are easily satisfied with the poor nourishment of the dry shrubs and grass which are common about the Cape, but the horses are under a greater difficulty to find provision sufficiently fine and nourishing." Considers this the reason why Cape horses are less strong and hardy than those in Europe. [1: 120]

1785 Gordon, R.J. in Cullinan (1992)

28 December — Pakhuis Pass:

"The so called cypress trees [*Widdringtonia cedarbergensis*] come to an end here, north in the mountains. This was the reason I rode to this farm... I arrived on this farm and found the cedar trees to be cypress trees. However they grow very tall here in the mountains and even stand up to fifty feet and higher, and extend to the south for only a two days journey. The same occurs with the *wolve-gift* shrub which only grows in the northern parts of the Biedouw and Maskamma." [A footnote makes the cypresses to be *Widdringtonia juniperoides* and the *wolve-gift* to be *Hyenanche globosa,* now *Hyaenanche globosa*, commonly called the *gifboom*, growing to about five metres, and more or less endemic to the Gifberge, c. 5 km northeast of Klawer] [p. 149]

1797 Barrow, J. (1801)

Cape Flats:

"The sandy flat of which the Tigerberg forms the boundary is applied to no use but that of furnishing a part of the supply of fuel for the town, and for the country people and butchers occasionally to turn their cattle upon. [p. 57]

"The plain that stretches to the eastward from the Tigerberg is less sandy, and better covered with shrubs and plants than the isthmus, and has a few farms scattered thinly over it near rills of water the thane broken the surface into deep glens in their passage to the northward. On the more arid and naked parts, consisting of yellow clay and sand, are thrown up many thousands of those cellular masses of earth by a small insect of the ant tribe to which the naturalists have given the name of *Termes* ... the ant-hills in this part of Africa seldom exceed the height of three feet." [p. 58]

Paarl:

"The mountain of Paarl furnishes a fine field for the botanist. The plants are very varied and wonderfully luxuriant.

"The wild olive of the Cape [*Olea europaea* subsp. *africana*] seems to have attained here its greatest size, and the dark-green foliage is finely contrasted with the elegant tribes of heaths [*Erica*], some of which shoot up to the size and form of trees.

"The fruit of the wild olive is small and acrid, but the wood is close-grained, shaded, and takes a polish not unlike that of walnut.

"A great variety of that genus of plants, to which botanists have given the name of *Protea*, decorate the sides of the Paarl Mountain. Of these, one of the most numerous and most conspicuous was the *mellifera* [*Protea repens*], called here the sugar-tree from the great quantity of saccharine juice contained in the bottom of its vase-shaped flowers. Many of the inhabitants are at the trouble of collecting this juice which is sometimes used as a stomachic, and sometimes boiled down to a thick syrup for the purpose of preserving fruits." [p. 61]

Hottentots Holland Mountains and the range to north and south:

"The mountains that form the eastern boundary of the valley are eminently grand, but destitute near the summits of a shrub, or even a blade of grass." [p. 62]

July — From the Berg River to the entrance of Roodesand-kloof [Tulbagh Valley]:

"The road beyond the ferry [at Sonquas Drift on the Great Berg River] is excellent, being a level head of hard clay, but the country is very thinly inhabited. In advancing to the northward the surface has fewer inequalities, and becomes sandy. Nothing, however, like drifts or beds of sand, meets the eye, but on the contrary it wanders over an uninterrupted forest of verdure arising from a variety of frutescent plants, among which the tribe of proteas, of heaths, and two species of *Seriphium* [*Elytropappus*], called here the rhinoceros-bush.

"In those places where the ground is least covered, the hillocks thrown up by the termites most abound ...

"It was near the middle of the night before we arrived at a solitary habitation situated in a wild, bleak, open country, and on the borders of a lake called Vogel Valley, or the Bird Lake.

"The word 'valley' in the Colony implies rather a lake or a swamp [vlei]; at this time the place in question was the latter, but it abounded with ducks, geese, and teal ... white pelicans ... and ... flamingo. [Voëlvlei, 13 km southwest of Tulbagh] [p. 69]

"A few miles beyond this lake or swamp brought us to the entrance of the Roode Sand Kloof, or the red sandy pass over the great chain of mountains... The plants, sheltered by the large fragments of rock that have rolled down the mountains, are uncommonly luxuriant. Of these the different species of *Protea* were the most conspicuous; that species of *Ricinus* called the palma christi [*Ricinus communis*] which affords the castor-oil was very plentiful, and the two species of the *Melianthus* grew in every part of the kloof. The *Calla ethiopica* [*Zantedeschia aethiopica*] was everywhere abundant and in full flower. [p. 70]

"The valley of Roode Zand, or Waveren, is a fertile tract of land well watered by streamlets falling from the inclosing mountains... The Cape olive grows wild in great abundance, and also the palma Christi [*Ricinus communis*]." [p. 71]

Leaving Roode Zand Valley towards Hex River:

"Quitting this division, the country becomes wild and almost uninhabited. Bogs, swamps, and morass covered with rushes and sour plants, large tracts of naked hard clay, deep sandy roads, pools of stagnant water, and those infallible indications of a barren soil, hillocks of ants, are the chief objects that meet the eye of the traveller. For several miles no human habitation makes its appearance ..." Describes the rugged and bare mountains. [p. 72]

"Came to a hot spring [either at the site of present Goudini Spa at the foot of the Badsberg, or at Brandvlei]. "The water was perfectly clear, and deposited not the smallest degree of sediment, neither in the pool where the springs were, nor by the edges of the stream. A green conserva grew on the margin of both. No change of colour was produced upon the plants and stones with which the water came in contact ..." [p. 73]

1798 **Barrow, J. (1801)**

Cape Flats:

"The middle of the isthmus is inhabited only by a few poor people who gain a subsistence by collecting the stems and roots of the shrubs that grow in the sand and sending them in small carts to the Cape where they are sold as fuel." [p. 356]

11 April Mamre:

"Groene Kloof is a division of the Cape District consisting of several clumps of small hills that cross the sandy strip extending along the western coast. On the dales that lie within these hills are copious springs of good water, and excellent pasturage for cattle and horses ..." Notes the various game animals there.

"Various species of the liliaceous tribe, particularly of the *Amaryllis* and other bulbous rooted plants, were now in bloom, but the long drought had left little verdure on the sides of the hills. At this season of the year, that refreshing tint is only to be looked for in the neighbourhood of springs and rivulets." [p. 359]

Early April Country around Saldanha Bay:

After stating the suitability of Saldanha Bay as a harbour usable at all times of the year, he mentions serious disadvantages which would prevent its use by a fleet: "These are the want of wood and fresh water. The first might indeed be supplied to a certain degree from the adjacent country. In the sandhills that surround a part of the bay grow several kinds of shrubby plants whose long and thick roots are easily drawn out of the loose sand, and in such abundance as scarcely to be credited. They form a kind of subterranean forest.

"The sides of the hills also, and the extensive plains, are covered with frutescent plants." Barrow suggests that by planting oaks, poplars, silver trees and others that grow near the Cape, plenty of firewood might, in a few years, be furnished for any number of shipping that would ever frequent the bay. [p. 362]

"The scarcity of water is a much more serious evil than that of wood, and perhaps more difficult to obviate. There are two small springs towards the south end of the bay but the water of both is slightly impregnated with salt." The farmers do not dig wells or open the springs—they build dams. Holes dug to 30 or 40 feet near Hoedjies Bay gave an ooze of salty water. [p. 363]

"The best method of supplying water at the bay seems to be that of bringing it in leaden pipes from the copious elevated spring about 6 miles to the northward of Hootjes Bay. This spring at Witte Klip, or the white rock, appears to be quite sufficient for every purpose, and the expense of conveyance would be moderate ..." [p. 364]

Upper Malmesbury District:

"The general surface of the country between the Berg River and Saldanha Bay is flat and sandy, exhibiting however a continued forest of shrubbery. It is very thinly inhabited on account of the scarcity of fresh water. The ground however is uncommonly fertile. The usual returns on wheat are from 15 to 20 fold. Barley yields from 30 to 40. They use no manure and, in some places, the soil is so loose and sandy that the operation of ploughing is unnecessary ..." [p. 365]

April — Piketberg District:

Crossed the Berg River and passed over sandy plains. [pp. 369, 370]

"The deep sandy plains were succeeded by still deeper sandy hills over which the waggon made very slow progress, the wheels sinking to the axles every moment. These hills, or rather mountains of sand, extended nearly 30 miles beyond the point of the Picquet berg before they attained their greatest elevation ..." [p. 371]

Verloren Vlei:

After mentioning the sandiness of the country, he says: "Out of the mouldered remains of these mountains had been formed the inferior hills of sand, while the finer particles, wafted by the winds and the torrents, have rested on the plains that stretch long the sea-coast.

"The united streamlets of water among the hills compose a sheet of considerable extent, called the Verlooren Valley or the Forlorn Lake. It had some resemblance to the Knysna, near Plettenberg's Bay, but was totally devoid of the appendages that beautify the latter. Instead of green knolls, skirted and capped by forest trees, the Forlorn Lake was surrounded by barren mountains of sand, crowned with masses of naked rock. The margin of the lake, however, was belted with good ground and seemed to be tolerably well inhabited." [pp. 371, 372]

Near Olifantsrivier, Clanwilliam District:

"It was three long days' journeys before the hills of sand [near Piketberg] were left behind, and a new sort of country, still sandy, presented along the banks of the Olifant, or Elephant's River, which, like the Berg, is one of the few rivers in the Colony that is never entirely dry." [p. 372]

Mentions excellent farms along its banks; the growing there of rice; and the many birds attacking crops. [p. 373]

May — Twenty-four Rivers area, near Porterville:

"On the west side of the Kardouw [Mountain] lies the division of Four-and-Twenty Rivers extending from thence to the banks of the Berg River. This part of the country to the sea-shore, including Zwartland [Malmesbury], consists of a flat extended plain, very fertile in corn, grass and fruit, and being well watered, is more populous than most parts of the country." [p. 406]

Zwartland:

"In this division there is no scarcity of water in springs or wells but it is universally, and so strongly, impregnated with salt, as not only to be disagreeable, but almost impossible to be taken by those who have not been long accustomed to it. By such it is preferred to the purest water, this being accounted insipid and tasteless." [p. 410]

1803 Lichtenstein, H. (1815)

12 October — Mamre to Klipberg, 30 km westnorthwest of Malmesbury:

South of Uyle Kraal [Uilkraal, 40 km northwest of Malmesbury] "... along a stony and sandy plain which was strewed over with some low solitary shrubs. Many sorts of heath plants enlivened in some degree the dreariness of the scene. We saw several pelargonias, gnidiae, and passerinae, with here and there a plant something of the lily kind, and abundance of *Gorteria,* asters, [h]elichrysia [*Helichrysum* spp. ?], and others of the Syngenesia [Asteraceae] class, the rays of which were even now expanded in the midday sun. [p. 36]

"The Teefontein [8 km northwest of Uilkraal] is one of the best spots in this sandy country and the grass it produces is particularly good for the feed of sheep and horses. In the

shade of high trees these parts are wholly deficient, and those which are to be seen in Le Vaillant's engravings are probably introduced there only with the idea of embellishing the landscape... We were here regaled with a genuine African dish, the anis root (Footnote: Probably the *Sium filifolium* of Thunberg [more probably *Annesorrhiza macrocarpa*, which is common here]) which has a strong spicy taste and when cooked seems extremely nourishing. It is perfection at this time of the year ..." [p. 38]

Saldanha Bay:

"... there is a want of a good supply of firewood, an article of great importance to vessels which are numerously manned. [Barrow (1801), see 1798 Barrow: Early April, Country around Saldanha Bay] conceives that the various sorts of shrubby plants which grow all about these sandhills might be used for this purpose, especially the thick woody roots of one particular sort (he probably means the *Cussonia spicata* which, as he says, grows to such a size as to form almost a subterranean forest). But here it must be remembered that the continuance of this provision cannot be depended upon in the case of large fleets requiring to be supplied from it. These subterranean forests are of very long growth and would be much sooner destroyed than replaced. Against the proposal to plant the oak, the poplar, and the silver tree, no other objection need be made than that it is impracticable, since from the saltiness of the earth nothing will grow here but the proper natives of the soil, that is to say, when the question is of large trees which strike very deep roots." [p. 52]

Left Saldanha Bay and went over "...sandy level country scattered over with Heath plants" to the summit of Mastenberg [Massenberg, 13 km southwest of Saldanha Bay]. Then three hours to Springfontein. "The shrubs which were higher than what we have generally seen, united with several sorts of *Protea, Rhus*, and other small trees, confined the prospect and brought in some sort of remembrance to the little woods of my native country [Germany]."

18 October — At Kirsten's farm 'Fishwater' [?Helderwater, Fresh Water] on the south bank of the Great Berg River, and also on other local farms which "... abound with excellent pasture for horned cattle; they are for this reason distinguished by the appellation 'cattle places'." [p. 65]

October — North of the Great Berg River in the Piketberg District:

Kirsten's farm 'Kirstenfontein' on the right [north] bank of the Great Berg River near the mouth had "... deep tiresome sand but scattered over with some pretty little flowers, particularly several sorts of pelargonia, but nothing like a bush high enough to afford the least shade to the traveller ... [p. 66]

"A bend in the river somewhat diversified our route, and at intervals we found the bank grown over with a small leafy sort of grass ..." [p. 67]

Arrived at the south end of the Piketberg, 10 km north of the town. He found the ground better and firmer than it had been in the sandveld further south. The farms had more trees. "The ravine on our left was well grown over with bushes, several of them in bloom ..." [p. 69]

South of Pikenier's Kloof [Grey's Pass], 39 km northeast of Piketberg:

Comments on the large numbers of termite mounds here, *Termes fatale,* which abound "... in what are called in this country sour-fields [Suurveld] but are never found on the sandy plains and low moist grounds. (Footnote: The name of sour-fields is given to such lands as are a mixture of sand and loam and only produce spontaneously a coarse rushy type of grass ... they are called sour-fields because this sort of grass is very apt to turn sour in the stomachs of cattle that feed upon it. It is nevertheless considered as a wholesome food to horned cattle, and when accustomed to it they grow lean if they be changed suddenly for milder grass. The most fertile parts where the fine grass is produced are called, in contradistinction, the sweet-fields.

"The hillocks at the feet of large mountains, particularly on the southern sides, are commonly sour-fields. They are seldom to be found higher than a hundred toises [French lineal measure, roughly 1.95 m] above the level of the sea and lie in about the same regions as where succulent and rocky plants generally grow. As the white-ant heaps are a certain proof of sour-fields, so, wherever the plant *Kuhnia rhinocerotis* [*Elytropappus rhinocerotis*] is seen growing it is immediately known to be a sweet-field)." [p. 77]

Top of Pikenier's Pass [Gray's Pass]:

On reaching the top of the pass camped at a little grotto with "... a spring of fine fresh clear water." Then went on down into a valley enclosed by "... high naked hills" and "... after another hour's journey through a narrow valley, we reached a fine grassy spot where we found excellent water and feed for cattle" at an outspan place "... called Janskraal [the Janskraal River is c. 36 km south of Clanwilliam]. We perceived a very striking

difference between the vegetable kingdom here and what we had hitherto gone over, so that this day enriched the herbarium and collection of insects very much. The objects added were so much the more valuable as they seemed to belong almost exclusively to this spot, we scarcely ever found them elsewhere." [p. 82]

Verloren Vlei:

"The water that flows through the valley collects itself some miles farther westward toward the coast into a pretty large lake which has the name of Lost Valley. In heavy rains the lake empties itself into the sea but for the greater part of the year the evaporation of the waters is as great as the flow from the hills." [p. 84]

26 October — Between Verloren Vlei and Langvlei:

"After pursuing our way for a considerable time over a dry sandy country ..." [p. 86]

End October — Jakhal Valley [Jakkalsrivier], c. 35 km west of Clanwilliam:

Left here going north up a "… steep sandy hill." At the top saw "… nothing but rocks and sands with some heathy shrubs scattered about them... We have found in abundance a plant which also grows nearer Cape Town in the District of Tulbagh: the colonists call it *rhinosterbosjes* because, they say, that in the time when the rhinoceros was an inhabitant of the country it used to feed upon this plant. It is the same that I have mentioned before under the name of *Kuhnia rhinocerotis* [*Elytropappus rhinocerotis*] as a sign, wherever it grows, of sweet-fields." [p. 89]

1803 Van Reenen, D.G. in Blommaert & Wiid (1937)

Cape Flats:

"This is a large stretch of country consisting of poor sandy soil on which neither trees nor bushes grow. In the winter season it is too wet and in the summer too dry. But it is used as commonage for the grazing of livestock for both those who have farms in the neighbourhood and for those who come long distances from the country. Similarly, the butchers, who provide the residents at the Cape and the Government with meat, make use of it." [p. 263]

October — Mamre:

"The District of Groenekloof consists of extensive fields well covered with grass, but only during six or seven months of the year. Because the summer heat causes the grass to wither and the fountains to dry up, one is obliged, at such times, to make use of the downs and moors which are better supplied with water." [p. 265]

1804 Lichtenstein, H. (1815)

Cape Flats:

Hunting the spotted hyena *Crocuta crocuta*: "The proprietors of the land in the neighbourhood of the Cape Town make parties almost every year to hunt the hyenas, which are called wolf-huntings; of some of these parties I have myself partaken. There are in the plains, about the town, many low spots overgrown with large reeds; one of them is surrounded, and fire is set to the reeds in many places. When the animal becomes oppressed by the heat, and attempts to quit his retreat, the dogs which are stationed about fall upon him, and the sight of this combat forms the great amusement of the party, besides the advantage of destroying these animals, another is derived from the reeds being burnt, that the ground always produces larger and stronger reeds the following year." [p. 19]

January — Olifants River, Clanwilliam District:

Describes how the farmers poison hyenas here: "In the neighbourhood of the Elephants-River on the western coast it is common practice to kill the hyenas with poisoned flesh. A tree [*Hyaenanche globosa*] grows there which is peculiar to that part, bearing a fruit something like a nut, and this fruit, gathered unripe and boiled with flesh, is an infallible poison to them. The tree is known under the name of wolfsbane. I never was able to procure a sight of it and cannot therefore say whether the leaf has any semblance to the laurel." [p. 5]

15 March — Roodezand Kloof, 7 km southwest of Tulbagh, through which the Little Berg River flows to meet the Great Berg River to the west of the range:

A carriage road had only recently been built through the kloof. "The kloof is a good half hour long and is full of trees and shrubs. [p. 115]

"... young grass everywhere springing up in the low grounds and several sorts of *Oxalis*, of *Hypoxis* [*Spiloxene*] and *Moraea*, were already in flower.

"In Roodezand Kloof all the tall shrubs which shade the banks of the Berg River were in full blow [bloom], particularly *Capraria lanceolata* [*Freylinia lanceolata*] and *Capraria undulata* [*Freylinia undulata*], *Phylica buxifolia*, *Cluytia* [*Clutia*] *alaternoides*, *polygonoides* and *tomentosa, Halleria elliptica*... Among the rocks were *Lachenalia, Amaryllis* and *Massonia*, some already in flower." [p. 118]

March — Wagenmaker's Valley [Wellington]:

"There are abundance of shrubs, particularly *Protea*, among which the horses and oxen find wholesome and nourishing pasture the whole year round." [p. 119]

Stellenbosch:

"We were regaled at breakfast with a fruit which I had not yet seen in the Colony, the delightful berries of the *Arbutus unedo*, called here arbiters." [p. 131]

September — Cape Peninsula eastwards:

"Thus, in four months, I had collected all the most beautiful specimens which vegetable nature produces in the Peninsula, in plants of the lily kind, and in the rich tribes of *Protea, Erica, Struthiola, Oxalis*, etc. etc. ... It was natural therefore that I should now be desirable of extending my botanical wanderings to the other side of the isthmus. The present season was, of all others, the most favourable for the purpose since the months of September and October are precisely those in which the shrubs and plants on the other side of the mountains are associated with their beautiful flowers in the highest perfection, whereas, about the Table Mountain, they were beginning to fade away." [p. 137]

2 September — Lichtenstein left Cape Town for the Eerste River, 26 km east southeast of Cape Town.

September — Cape Flats:

"In the sandy plains about Cape Town, excepting various sorts of *Mesembryanthemum*, few plants are to be seen, only some from the species *Tetragonia, Zygophyllum* [*Roepera*] and *Polygala* with single plants of the *Gladiolus plicatus* [*Babiana* spp.] and the *Antholyza plicata* [*Babiana ringens* is meant]: these, with some sorts of the lily tribe are the only plants which come out of the sands; they commonly flower immediately after the first rains in June and July." Discusses the vegetation on the slopes of the Hottentots Holland and compares the flora of the Cape Flats unfavourably with that of the mountains.

Western slopes of Hottentots Holland Mountains:

"... the more we ascended the more fertile and the better cultivated did we find the country... On the hills we were now ascending, everything on the contrary [to the Cape Flats] was at this time most beautifully in flower. A number of the shrubby sort of *Protea* were scattered in little copses over the slopes on which the long-tailed honeybird [Cape sugarbird, *Promerops cafer*, or possibly the malachite sunbird, *Nectarinia famosa*] was everywhere to be seen... Between the copses were abundance of *Gorteria*, and *Gnidia*, with heath plants and the tenderer kinds of lily, to which may be added the smaller species of *Ixia*, of *Gladiolus*, of *Hypoxis* [actually *Spiloxene*], and *Lachenalia*. I particularly observed two sorts of *Gladiolus* known here as *kalkoentje* [*Gladiolus alatus*] and *baviaantje* [*Babiana ambigua* and/or *B. nana*] ... which seem hitherto to have escaped the attention of botanists although they are by no means rare in the neighbourhood of Cape Town (Footnote: Professor Wildenow, who three years ago undertook to examine my collection of plants, gave to these the name of *Gladiolus papilionaceus*)." [p. 141]

Up the Hottentots Holland Kloof [Sir Lowry's Pass]:

African bushes are very different from those in Europe in that northern trees and shrubs tend to have white or feebly-coloured flowers, but the stronger light and greater heat experienced in South Africa produces larger and more brightly coloured flowers: "Gigantic heaths, for the most part covered with red flowers of all shades, several sorts of the slender *Capraria* [unidentified Scrophulariaceae], *Thesia* [*Thesium*], *Gnidia, Podaliria* [*Podalyria*], *Borbonia* [*Aspalathus*], *Aspalatha* [*Aspalathus*], and *Phylica*... Besides these, and more numerous than all, were *Protea* of every form and description which belongs to this numerous class... The *Protea*, indeed, occupy a very large share of these hills and shade over the other plants, while the broad-leaved sorts of this tree, with umbelliferous flowers and an undivided cup, as the *Protea scolymus* [*Protea scolymocephala*], *mellifera* [*Protea repens*], *conifera* [*Leucadendron salignum*], *strobolina* [*Leucadendron strobilinum*], *imbricata* [*Sorocephalus imbricatus*], *saligna* [*Leucadendron salignum*], *argentea* [*Leucadendron argenteum*], etc. love low grounds and abound most in the clayey soils at the foot of the mountains, the smaller-leaved sorts

with separated flowers which belong to the *pinnata* and *acerosae* come forth in these higher regions from the clefts in the rocks and more especially from the heaps of loose and broken masses of stone." [p. 144]

Hottentots Holland Mountains:

"The *Protea sceptrum* [*Paranomus sceptrum-gustavianus*] and the *lagopus* [*Paranomus spicatus*] were the sorts of which I saw the greatest abundance: the latter were, above all, striking to the eye from large stems of flowers which rose among the leaves at the end of every twig. Besides the *Protea racemosa* [*Spatalla racemosa*], *comosa* [*Leucadendron comosum*], and *prolifera* [*Spatalla prolifera*], I found several species not less beautiful though hitherto but little known. Of these I recommend to the notice by anyone who should come after me, the *Protea helvola* [*Serruria elongata*] of Professor Wildenow which is to be known by the beautiful brown of the cup, the pyramidal bunches of the flowers and the numerously feathered leaves ...

"I must add that these mountains were examined by me with particular assiduity. For the rest, it is somewhat remarkable that the *Protea* which grow on the hills of the Hottentots Holland are not to be found on Table Mountain or the other heights of the Cape Peninsula, while, on the other hand, the celebrated silver tree, *Protea argentata* [*Leucadendron argenteum*] and some other sorts are produced only in this small peninsula and in no other part of the world.

"It is further remarkable that the hills which lie somewhat more northerly, by Stellenbosch and Drakenstein [20 to 25 km north], and which are immediately connected with those of Hottentots Holland have again their own appropriate species of *Protea* which do not grow in any other part. [p. 145]

"Between these large shrubs are many smaller plants of the highest quality among which ... the *Erica petiveri* [*Erica coccinea*] with its fine yellow flowers and long brown anthers, the *Erica plukenetii* and the [*H*]*elichrysum proliferum* [*Phaenocoma prolifera*]. A considerable space is also covered with several sorts of *Cliffortia* for the most part of the same that grow in the Table Valley only with this difference that here we found both sexes whereas there, during the whole winter, we could find none but the female plants.

"The *Erica banksii* was in amazing profusion, covering over large heaps of stones, its runners fastening themselves among the interstices."

With the help of his slaves Lichtenstein collected many new species of plants. [p. 146]

"Ten sorts of heaths not to be found in the Table Valley ... four of these I have ascertained since my return to be wholly new. Besides them, numbers of the most beautiful [*H*]*elichrysa*, some *Penea* [*Penaea*], *Borbonia* [*Aspalathus*], *Crotalaria* [almost certainly not *Crotalaria* itself but other yellow legumes], *Diosmea* [*Diosma*], *Gnidia*, etc. presented themselves within the first hundred paces." [p. 147]

Late summer

Burgersdrift, on the Great Berg River:

The country was quite dry then, a condition he ascribed to the river being choked with *palmiet* [*Prionium serratum*], which "... shelters the river against the all-parching heat of the sun and keeps it flowing even in the driest seasons till the summer is far advanced. The stem of every plant acts as a sort of reservoir for the water, whence it oozes out by degrees so that the river in the plain will always contain water though no rain has fallen in the mountains for months. At length, however, the supply being exhausted, the bed of the river dries up and by the end of summer the plants are deprived of all nourishment. They have nothing to protect them but the shade of their crowns; yet on the first abundant rain that falls, the stems and roots form anew a sort of dam through which the water has so much more difficulty to penetrate. The drier they and the bed of the river become, the more the body and strength of the moisture that would press on, is diminished at every moment by the suction of the plant. Thus is happens that after a heavy rain some days will perhaps elapse before the water that has pressed through these groves was to arrive at the plains. Persons who passed the ford of Burgersdrift only 12 hours after me found the water already 3½ feet deep." [p. 197]

1811 Burchell, W.J. (1822)

31 January

Cape Flats, from Salt River to Munnich's Bridge:

"In the ponds hereabouts and in many other parts of the Colony, there grows a plant called *water-uyentjes* (Footnote: *Aponogeton distachyum* [*Aponogeton distachyos*]) the root of which, when roasted, is much eaten by the slaves and Hottentots. The heads of flowers, boiled, make a dish which may, in taste and appearance, be compared to spinach ... [1: 51]

"Southeast of Salt River beyond which, ascending the higher ground, is a heath of pure sand, loose and exceedingly white. It was quite covered with *Haemanthus coccineus* in

full bloom, the red flowers of which formed a fine contrast with the snow-white soil... Among them was a variety of white flowers." [1: 53]

The strong winds which swept over the Cape Flats exposed the very roots of the bushes in some places but, in others, buried them in mounds of sand so that only the "…tops of the bushes" showed. "The scarcity of firewood in Cape Town has forced the poor inhabitants in Cape Town to discover a timely resource in these underground stems and roots which, being in loose sand, are dug up with ease. But, however convenient this source of fuel may be to individuals, the destroying of the bushes, root and branch, will at last become a greater inconvenience to the public as the isthmus will then be reduced to semi-desert still more difficult for waggons to travel over than at present." Burchell then suggests an opposite exercise, viz. the planting of shrubs and trees, sedges and sand-grasses to act as windbreaks and also to provide food for cattle, because those there did not like the "…hard reedlike stalks of the different kinds of *Restio* that overspread a great part of these Flats."

Near Liesbeeck River:

Travelled "…over level ground decorated with many heaths, the sand and wind being here less annoying. The isthmus, in most places, is dotted with bushes of great variety and hard coarse rushes (Restiones) but grass is rarely to be found. *Protea levisanus* [*Leucadendron levisanum*] is everywhere a common shrub (Footnote discusses taxonomy), and the hottentot fig [*Carpobrotus edulis*] grows in many places, spreading over the ground in large patches. It produces plentifully in all seasons of the year a fruit of the size of a small fig of a very pleasant acid taste when perfectly ripe. It must however be first divested of the outside pulp or coat which is at all times saltish; and even the fruit, when unripe, has a disagreeably saline and austere taste. This name was given by the first colonists on account of its form bearing some little resemblance to a fig and because it is every-where eaten by the Hottentots. I have frequently seen it in the market but, by the Dutch it is used only as a sweetmeat in which state it still retains the same agreeable acidity." [1: 54]

9 April — Hottentots Holland Pass and Mountain:

"The most strikingly beautiful [plants] then in flower were *Erica taxifolia* and *Erica fascicularis*; many kinds of *Protea*, particularly *Protea speciosa*, together with *Protea cordata*, a very singular species of a growth nearly herbaceous."

From Hottentots Holland Pass to Palmiet Rivier:

"... the beautiful pink flowers of *Penaea squamosa* [*Saltera sarcocolla*] caught my eye; and I once or twice dismounted to pluck *Retzia spicata* [*Retzia capensis*], *Erica massonii, Erica axillaris,* and *Protea* (*Spatalla* of Salisbury) *incurva* [*Spatalla incurva*]." [1: 86]

15 April — Southern Tulbagh District:

"... a great number of coloquintida melons, *Cucumis colocynthis* [*Citrullus lanatus*], lying scattered on the ground ..." They looked like the common garden melon. "They are found in great abundance in many places, growing in the plains, the plant being widely disseminated over the whole of the extra-tropical part of southern Africa ..." [1: 126]

17 April — On Schurfdeberg:

"On the summit of the mountain I found a great variety of plants, a large proportion of which I had not met with before. The beautiful nodding red flowers of *Protea nana* ..." Gives a list of 25 plants. [1: 131]

Roodezand Kloof:

19 April — "... a narrow winding defile about 3 miles in length just wide enough to allow a passage for the Little Berg River, on each side of which the mountains rise up abrupt and lofty. Their rocky sides are thickly clothed with bushes and trees from their summits down to the water...adorned with a variety of foliage ..." [1: 137]

Berg River near Wellington, *en route* to Paarl:

"The ford, which had all the appearance of a lane, led us through the tall thick palmite [*Prionium serratum*] with which the river was in this part so choked up that its waters seemed as if struggling to find a passage through the stems. It would be very unsafe, without great care, for a traveller to ford a river of this kind, for should he, by the force of the stream, be carried into the palmites he might find the greatest difficulty in extricating himself or his horse from amongst their entangled trunks ..." [1: 140]

20 April — Paarl village:

"In a walk to the foot of the mountains behind the house I first met with *Cunonia capensis* growing wild in the damp rocky places along the banks of the rivulet. This is a handsome tree with fine shiny green foliage contrasted by numerous dense elongated bunches of small milk-white flowers and twigs of a red colour; having a habit rather

of a tropical than a Cape plant. Its colonial name is *rood elze* (red alder) although the tree has not, in any point of view, the least resemblance to the Alder of Europe, but the waggon-makers say there is some similarity in their wood. I am however inclined to believe that the name was given rather on account of their growing in similar situations, and this seems more probable as the name of the *witte elze* (white alder) is applied to another tree, *Weinmannia trifoliata* [*Platylophus trifoliatus*], which naturally grows in the same kind of places as the common alder.

"In most places I met with *Erica pubescens* growing luxuriantly and covered with a profusion of little pink flowers; this is one of the commonest of the Cape heaths.

"Growing on the branches of *Cassine capensis* [*Cassine peragua*] I found the Cape mistleto, a very curious parasitic plant bearing small white berries but without leaves, and exceedingly brittle (Footnote: Vignette (p. 147) is a figure of *Viscum capense* or Cape mistletoe).

"A kind of wild cucumber (Footnote: *Cucumis prophetarum* [*Cucumis africanus*]) spreads itself over the bushes and along the ground bearing a small yellow oval fruit hardly an inch long, covered with soft prickles and called *gift-appel* (poison-apple) on account of its extreme bitterness, in which quality it agrees with the coloquintida and several of the cucumber tribe.

"The 'African sage' (Footnote: *Salvia africana* [*Salvia africana-lutea*]) is an ornamental flowering shrub of very frequent occurrence. All the diosmas, when bruised, give out a strong odour more or less pleasant so that, in walking, it is not easy to tread on a plant of this tribe without being made sensible of it by the smell. By this means I discovered a species (Footnote: *Diosma capitata* [*Agathosma* sp.]) which otherwise might have escaped my notice." [1: 142]

Paarl to Fransche Hoek:

"Leaving the village we continued our way along a level sandy country covered with bushes among which *Protaea* [sic] *corymbosa* [*Leucadendron corymbosum*] predominated. It may easily be distinguished by its long slender upright stems about 4 feet high (having at the top a corymbe of short branches) springing from a dense base of suckers and leaves, a singularity of growth not observed in any other proteaceous plant.

"Small trees of *Rhus villosum* [*Rhus laevigata* var. *villosa*], 10 or 12 feet high were not infrequent." [1: 144]

21 April — Banghoek [Banhoek]:

"... being in many parts quite woody ..." [1: 145]

19 June — Zand Valley [? Sandvlei], a regular outspan place between Cape Town and Tygerberg:

"Our oxen were turned loose among the bushes to graze." [1: 172]

21 June — Pampoenkraal [Durbanville] near Cape Town:

"At this place grows in abundance a small plant (Footnote: *Euphorbia tuberosa*) said by the Boors to occasion a strangury at a certain time of the year if eaten by oxen, and this seemed confirmed by the fact that several of our oxen were at this spot actually taken ill of that disorder. It would seem that its acrid milky juice has the quality of inspissating [thickening] the liquor of the stomach. The Hottentots have a practice of removing the obstruction, and in most cases succeed in giving relief; such fortunately was the case at this time. Whether the complaint is caused by the weeds alone, or by any other, I could not ascertain but it is probable that several species of *Euphorbia* have the same deleterious effect as Thunberg attributes it in like manner to the *Euphorbia genistoides*, a plant which I did not observe growing anywhere hereabouts." [1: 174]

22 June — Just north of Durbanville:

"During the whole of this day's journey which was 20 miles the road was exceedingly even, being over an open and, in most parts, rhinocerous-bush country [*Elytropappus rhinocerotis*]. A variety of proteaceous plants decorate the sides of the road: among them were *Protea scolymus* [*Protea scolymocephala*], 3 feet high, and *Mimetes purpurea* [*Diastella proteoides*]. A very pretty *Blairia* [*Erica*], forming a little shrub a foot and a half high, was now covered with bloom.

"The rhinoceros bush is well known for its valuable property of burning, while green, as freely as the driest fuel, and whole plants which we threw on the fire blazed up in a moment, the larger stems giving a very strong heat and flame. Although one may venture to assert that the whole plant contains a considerable quantity of either inflammable oil or resinous gum, these are not discoverable by the eye." [1: 176]

Olyvenhoutbosch:

"Olive-tree wood, so named from *olyf boom* (Footnote: *Olea similis*, B; *O. europea* Th. et *O. europaea*, var. *verrucosa* Pers. [*Olea europaea* subsp. *africana*]) a tree so much re-

sembling the European olive as to have been mistaken for it by botanists, but few were now growing here. It attains a large size, and the wood, which is exceedingly compact and heavy, is very handsome and well suited for cabinet work." [p. 177]

23 June — Wagenmakers Valley [Wellington] and Drakenstein:

"The ground is well covered with vegetation and abounds with shrubs. Very large bushes of *karree-hout* [*Rhus angustifolia* and *Rhus viminalis*] which in growth and foliage have a great resemblance to our common willows, grow along the banks."

24 June — Footnote: "In this day's journey I frequently met with *Tetragonia hirtsuta* [more probably *Tetragonia nigrescens*] a curious little annual plant with small yellow flowers." [1: 179]

25 June — At Piet van der Merwe's farm in Wellington, Burchell bought a new *disselboom* for a wagon. "The old one ... was made of a wood called *hassagay-hout* (Footnote: So named by the colonists on account of its being the wood of which the Kaffirs most commonly made the shafts of their *hassagays* or javelins). It is the *Curtisia faginea* [*Curtisia dentata*] which possesses the valuable property of extreme toughness, as this accident clearly evinced. Although bent at an angle of about 150 degrees it exhibited scarcely any transverse fracture but appeared split into a great number of longitudinal splinters which still held the two parts together. The pole we had now put in being of *yzerhout* (or iron wood) [*Olea capensis*] was not so tough as the other but many degrees harder and heavier. The Boors esteem the ironwood to be, for this purpose, but little inferior to the *hassagay* wood." [1: 180]

26 June — Roodezand Kloof, Tulbagh:

Gives a list of 36 species collected there. "Among them was a shrub more particularly interesting on account of its close resemblance in character to the plants of New Holland [Australia], in fact a species of *Metrosideros* [*Metrosideros angustifolia*], a genus peculiar to that part of the world and the neighbouring islands. There is a certain affinity between the botany of that country and the Cape of Good Hope." [1: 181]

1 July — Along Breede River, Tulbagh, at Winterhoek:

After a collecting trip: "On my return, it being then nearly dusk, the delightful fragrance of the *avond-bloem* (evening flower), a species of *Ixia* [actually *Hesperanthera*] began to fill the air and led to the discovery of the plant. In the daytime their flowers which, though white within and of a dusky colour on the outside, and being then quite closed, do not readily catch the eye." [1: 186]

1815 La Trobe, C.I. (1818; reprint 1969)

27 December — Road to Stellenbosch from Cape Town:

"Various singular plants adorn the hedges and banks on each side of the road, among which the huge bushes of Indian fig in full bloom (*Cactus opuntiae* [*Opuntia*], used for fences)…the aloe and *pisang* (?*Strelitzia*) were particularly conspicuous." [p. 36]

29 December — Road from Cape Town to Mamre:

"We…dragged through deep sand almost the whole way to Groenekloof. No trees and but few shrubs adorn the waste but we noticed many pretty species of heath, and some elegant flowers unknown to us. The most common plant is the so-called hottentot fig (*Mesembryanthemum edule*) [*Carpobrotus edulis*]." [p. 39]

En route to Mamre from Stellenbosch:

Outspanned and "… unyoked the bullocks and left them to seek their supper among the bushes ... a mat was spread on the ground to leeward of a large bush of the poison-apple (*Solanum sodomeum*, a prickly shrub) [*Solanum linnaeanum*]." Next morning they rekindled the fire "… by feeding it with rhinoceros bushes, a resinous plant with large roots, but easily pulled up [*Elytropappus rhinocerotis*]." [p. 40]

1816 La Trobe, C.I. (1818; reprint 1969)

2 January — Mamre Mission:

Hill west of the farm: "It is a steep bank covered in most places with shrubs and brushwood." Describes the soil. "The waste produces some beautiful plants among which I particularly noticed the *fahlblar* [*vaalblaar*], a species of *Aloe* [*vaalblaaraalwyn*, *Aloe striata*, obviously cultivated], the leaves of which are round, of a pale blue colour and spreading near the ground, the stalk about a foot long, and the flowers which are bell-shaped and of a deep scarlet hanging down in clusters. They adorn the bank behind Brother Schmitt's garden."

16 May — Vicinity of Hottentots Holland Kloof:

"The adjoining precipices are rugged in the extreme but every practicable spot is covered with a profusion of curious plants and shrubs. The sugarbush [*Protea repens*] grows here in great plenty and, with its magnificent starry flower, adorns a wild region." [p. 293]

12 July — Groote Post:

"The Groote Post, which is a government farm, and hunting seat of the Governor, lies nearly north of Groene Kloof. On ascending its heights it appears at about an hour's distance ... under a range of low heathy hills. The road passes through a wilderness covered with rhinoceros [*Elytropappus rhinocerotis*] and other bushes harbouring various kinds of game." [p. 304]

Groenekloof area:

"The sugarbush [*Protea repens*] grows plentifully in the wilderness and in increasing quantity. It has a magnificent flower, and the wood and roots are good fuel." [p. 311]

23 July — Groenekloof estate, Mamre:

La Trobe went to some eminences "…about two or three miles north of the settlement." The interstices of the rocks of the summit "…are filled with many kinds of plants and a variety of plants interesting to the botanist. The second is called the Baviansberg belonging to the Groenekloof estate. Its summit is likewise covered with rocks and masses of granite among high bushes. I was made particularly attentive to the great quantity of olive-bushes growing upon it, some of which have stems six or eight inches in diameter and rise to twelve or more feet in height (*oliven-hout — Olea similis*) [*Olea europaea* subsp. *africana*].

"A variety of *speckboom* [*Tylecodon paniculatus*] attracted my notice. The stem and boughs are easily broken having hardly the consistence of a carrot or a parsnip; the leaf is light-green, waxy, oval, and about 2 inches by 1 inch in surface.

"The whole upper part of the hill or hills, of which the Baviansberg consists, is covered with a wilderness of every kind of bush or shrub common to this country, forming an almost impenetrable thicket. In endeavouring to penetrate it to have a nearer view of some of the rocks we soon found resistance made to our progress by thorny plants of various kinds, particularly by one called *wach en beetgen*, or 'Stop a little' [identity uncertain, possibly *Asparagus* sp.] as it catches the stocking or some other parts of the dress, and patience is required to extricate oneself from its barbed hold. Some thorns lie low enough to tear away the shoe-strings or knee-bands, and others penetrate the skin. We were glad, after much trouble, to get back to the road. [p. 316]

"I observed in that part of the waste over which I walked today a great quantity of *vlachdorn* (p. 397 does not list [possibly *Berkheya armata*, *vlaktedisseldoring*]), a decoction of which is so useful in the stranguary as mentioned above. But its use is hardly known in these parts where many an ox dies of that horrid disease." [p. 317]

5 August — Mamre:

He saw an unfinished stone house lacking woodwork for doors, roof and furniture. "This led to an explanation respecting the possession of wood, and prevented the poor people appealing to the landdrost against the overseer who had very properly prohibited their cutting wood at their pleasure, by which formerly a great many trees have been destroyed.

"Till better instructed, the Hottentots have no thought beyond the present moment, and being too lazy to stoop and apply their axe to the bottom of the stem, they chop it off as high as they can stand to it, besides maiming others by cutting off their branches or tops without any attention to the growth of the trees. The general scarcity of wood makes it therefore highly necessary to prevent such mischief and, as they may have what wood they want to build their huts if they only apply to the overseer, there is no hardship in their asking for it. They were satisfied when Brother Schmitt explained the matter to them." [p. 323]

31 August — Near Mamre:

"There is in this country a plant called by the Hottentots Dacha, a species of wild hemp (*Cicuta*) [*Cannabis sativa*]. Some of them smoke it like tobacco or mix it with the latter herb, and are exceedingly fond of it. Its effects upon the human body are dreadful. It not only takes away the senses for a season even more completely than drunkenness but, by degrees, undermines the constitution, weakens every facility of mind and body and makes cripples of those that continue in the practice.

"It is necessary therefore that most determined resistance should be made against this destructive propensity and, by a rule established in our settlements, the use of dacha is

to be entirely abandoned. Whoever is guilty of smoking it is excluded, but the seducer of others to the abominable practice, expelled.

"The chief complaint against the Hottentots is that they are incorrigibly lazy and unfit for labour. In most cases the cause of it is the use of this poisonous herb. Who would believe therefore that the very men who complain should encourage the growth of it in their grounds and sell it to the Hottentots? Yet this I have seen with my own eyes, even where I least suspected it." [p. 334]

23 September *En route* to Gaensekraal [Ganskraal], near Darling:

"The road is uninteresting, leading through a barren sandy wilderness with not a cultivated spot on either side. But the bountiful Creator has likewise here clothed the waste with an incomparable profusion of flowers which, in some places, cover the sand between the bushes as with a rich carpet." Notes a Tent-tortoise. From Ganskraal they rode to the coast "…through level country overgrown with large bushes ... and the nearer we approached to the coast the more dense was the thicket so as to render it more difficult to penetrate to the water's edge which, where nearest, may be about 2 miles from the farm. Many *speckbooms* [*Tylecodon paniculatus*], olive [*Olea europaea* subsp. *africana*], and milk bushes [*Euphorbia mauritanica*] are intermixed with the rhinoceros bushes [*Elytropappus rhinocerotis*] in wild confusion." [p. 347]

Ganskraal:

"Gaensekraal is a good farm ... the grounds are extensive but bare of trees. The little wood which formerly adorned the premises was cut down under an idea that it harboured birds, particularly a kind of starling, that do great mischief in the fields. But nowhere have I seen such flights of birds as in Mr Dashwood's grounds. Thus the place has been robbed of its beauty to little purpose ..." [p. 348]

25 September Dunes near Ganskraal:

"I have heard much of the singular appearance of the range of Dunen, or sandhills, along the coast. I rode thither ... and was struck with surprise when we entered among them. Their appearance from the Groenekloof is rather unpleasant and not unlike a low sandy dyke skirting the waste in a straight line. But I found them occupying a very wide field extending to several miles from the seacoast. The fine sand, which is chiefly pulverised quartz and as white as snow, is here blown about like sleet on a frozen surface forming hillocks of considerable height, and in shape resembling huge drifts of snow. The flats between them are destitute of verdure, the surface being almost constantly in motion... In other parts, especially where deep recesses or glens are defended by the hillocks, the waxberry bush has found shelter and grows in great abundance (waxberry-bush, *Myrica cordifolia* [*Morella cordifolia*]). To a superficial observer it appears not unlike box [*Buxus*]. Some of the stems are as thick as a man's leg and the bushes from eight to ten feet in height... In a deep glen we saw several of our people from Groenekloof diligently employed gathering wax berries. They sent a little boy to show us the way to a place surrounded by high banks where they had erected a hut and kept their apparatus for boiling the berries and extracting the wax... They showed us the process which is perfectly simple. The [iron] pot is hung over the fire by running a thick stick through the handle which is supported at each end by a fork placed in the ground at a convenient distance from the fire. After the berries have boiled some time the wax appears on the surface of the water and is skimmed off with a spoon.

"Two kinds of waxberry bushes grow here, one smaller [*Morella quercifolia*] than the other [*Morella cordifolia*]. The berries of both have much the appearance of those of the juniper.

"From hence we rode to the Laatste Stuiver, a parcel of land containing much sweet grass and waxberry bushes ..." [pp. 250, 251]

1819–1820 Moodie, J.W.D. (1835)

Across the Cape Flats:

"Our course lay for several miles across the extensive plain which terminated at the base of the Blaawe Berg, or Blue Mountains, and the mountains of Hottentots Holland over the latter of which ranges a rugged road was constructed for communicating with the eastern districts of the Colony.

"The whole of the country in the first part of our journey was generally very sandy and arid... Yet, poor as the soil might appear between the scattered habitations ... the surface was everywhere covered with luxuriant woods, plants, and splendid heaths several feet in height, all of which were strangers to me. In several places I saw excavations in the sandy hills whence large roots of trees in a half-decayed state are dug for fuel and sold in Cape Town.

"The scarcity and dearness of fuel in the neighbourhood of the town have led individuals to give their attention to the cultivation of the native silver-trees [*Leucadendron argenteum*] on the sides of Table Mountain, and there is little doubt that fir plantations on the sandy flats, if properly encouraged by the Government, would succeed equally well ...

"As we advanced, the soil gradually improved until we came to a firm clay." [1: 57]

1838 Backhouse, J. (1844)

28 September — Near Jakkalsfontein:

"The Cape Flats are generally sandy, but beds of impure limestone occur upon them. They are thinly covered with low bushes and herbaceous plants. Various species of heath, *Erica*, growing upon them, some of these are very beautiful but they do not cover the country as in some parts of England; most of them are thinly scattered. A yellow, foetid *Corycium* [probably *Corycium orobanchoides*] and several fragrant species of *Satyrium*, plants of the Orchis tribe, were abundant; the latter were green, white, and orange." [p. 89]

Near Somerset West:

"... we stopped near a spring... Having noticed that a watsonia [*Watsonia meriana*] resembling a corn-flag and almost as tall as a foxglove, grew in moist places, we found the water by going to a place where the fine, deep-pink flowers of this plant rendered it conspicuous." [p. 90]

1 October — Up the Hottentots Holland at Sir Lowry's Pass:

"Along its sides and on the top of the mountain there are many beautiful shrubs and plants among which the most striking are proteas, heaths, everlastings, gladioluses, watsonias, ixias, and plants of the Orchis tribe. The beautiful *Erica massonii* was growing on a springy hillock by the side of the road. Seeing it reminded me of having heard of one of the early collectors of plants in this country going out to seek it and meeting some oxen, with a wagon, having this fine heath with its large waxy blossoms of red and green fastened to their heads to drive off the flies." [p. 91]

1838 Bunbury, C.J.F. (1848)

19 February — Cape Flats:

"I am just returned from spending two very pleasant days at Colonel Bell's country house about 5 miles southeast of Cape Town on what are called the Flats. I botanised in company with Mr Harvey who was staying there at the time on these Flats, a wide and level expanse of loose white sand covered with a vast variety of heaths and other low shrubs ... [p. 66]

"Although this is the least favourable season of the year for botany yet the variety of plants on the Flats is still very great. The heaths [*Erica*] are particularly beautiful: some are tall stately shrubs as high as a man while others rise only a few inches from the ground. Some have scarlet flowers, some crimson, some purple, some pale pink, some white. In some, the corolla is long and trumpet-shaped; in others tubular with a contracted mouth; in others short and bell-shaped; in others, again, almost globular.

Intermixed with these grow numerous brunias, struthiolas and gnidias, beautiful rose-coloured chironias, lobelias with brilliant blue or yellow flowers, a variety of papilionaceous flowered plants [Fabaceae], proteas, cliffortias, rush-like restiones, etc.

"A plant (Footnote: *Harveya capensis* Hooker) allied to *Orobanche* with large white blossoms is frequently here growing on the roots of heaths. And the curious *Cassytha* [*Cassytha ciliolata*], very like our dodder in its general appearance, overruns many of the bushes and loads them with a tangled web of long yellow threads. [p. 68]

22 March — "We crossed the Flats ... and ... reached their limits at the Erst (or First) River, a stream at the time inconsiderable but often formidable in winter. In some spots on the most barren parts of the Flats I found abundance of *Myrica* [*Morella*] *cordifolia*, a shrub bearing round berries covered with white wax from which candles are made ..." Bunbury then arrived at the Hottentot Holland area and wrote: "The ground in this district is little cultivated but there is much wild heath and shrubbery. [p. 89]

August — "The *Protea scolymus* [*Protea scolymocephala*], an inhabitant of the sandy flats between the two bays, though smaller and less showy than *P. mellifera* [*Protea repens*] and *P. melaleuca* [*Protea lepidocarpodendron*] is remarkably neat and pretty both in its foliage and flowers ... [p. 186]

"Several species of *Leucodendron* [*Leucadendron*] grow on the hills and flats; they are mostly low shrubs ...

"*Protea mellifera* [*Protea repens*] forms a thick belt of shrubbery along the eastern side of Devil's Mountain, and entirely covers many parts of the Flats.

"The hills and flats about Cape Town are already decorated with a variety of Irideae though the full season for them has not yet arrived.

"The *Babiana ringens* with its scarlet flowers just peeping above the surface of the ground flourishes in the moist sand of the flats near Muysenburg." [p. 187]

"The low grounds are spangled with a variety of delicate little annual plants."

29 August — Paarl and Paarl Mountain:

Paarl Mountain's "... sides are covered with bushes ... [p. 190]

"Although less than 40 miles distant from Cape Town, the Paarl hill and valley produce a great number of plants which are not to be found in that neighbour-hood. Among these is a small aloe [*Aloe mitriformis*] growing among the granite rocks on the top of the hill. This appears to be the most westerly point to which the genus extends, at least in the southern part of the Cape Colony.

"The prevailing Proteaceae are different from those of the Cape Peninsula. The sugar-bush is replaced by a distinct though nearly allied species, and the *Leucospermum conocarpon* [*Leucospermum conocarpodendron*] by two other handsome shrubs of the same genus.

"We found several hermannias, a fine drosera with large purple flowers [probably *Drosera cistiflora*], a very fine diosma, and numerous other novelties of which I have given a list in the 'London Journal of Botany'."

Berg River:

"The sandy banks of the Berg River are clothed with a thick jungle of flowering shrubs and tall rushes. One of these shrubs is the *Metrosideros angustifolia*, remarkable as the only South African species of a group of plants (Footnote: That section of the myrtle tribe to which the *Eucalyptus*, *Leptospermum* and *Melaleuca* belong) which, in the same latitude, forms a great mass of the vegetation of Australia. This African *Metrosideros* is a graceful shrub with slender upright branches, narrow glossy leaves growing in pairs, and tufts of small white flowers placed in the axils of the leaves." [p. 191]

1838 Delegorgue, A. (1990)

5 September — Great Berg River:

Crossed at an undefined place "... where the water was eight feet deep and barred our way." Hired a boat to take his party across, which took two hours.

8 September — Verlore Vlei, "... vlei with much reedgrowth":

"... across a country of burning sand into which the wheels of the waggon sank eight or ten inches... The heat was unbearable ... the bushes which covered the land stood isolated a few feet apart providing no protection for game ... an occasional dove and a few ostriches ...

"When I descended in to the valley, I was greatly cheered by the sight of a lake bordered by thick reeds from which a cool freshness emanated. This oasis promised good water, baths, and a great abundance of water-birds. We crossed over ... where the width and depth of water provides the only practicable ford for the wagons.

9 September — "...we travelled along the northern shore and outspanned a mile and a half from the sea... Camped 200 paces from the lake, we had within our reach a great quantity of coot, duck, and other birds which were doomed to fill our cooking pots. Behind us the country was exactly as it had been all the way from the Cape; there were dreary, monotonous bushes, eight to twelve feet high, with here and there a duyker, a steenbok, or an ostrich. Opposite us, on the other side of the lake, stretched a ridge of rocky mountains, 400 to 500 feet high, the eastern section of which is called Elands Berg ... and the western section, Bawins Berg [Bobbejansberg]. Only the latter still has the right to its name." [p. 21]

16 December — Near Biedouw Valley, tributary of the Doring River:

"After riding for a long while through stony country we came upon a pretty valley covered in superb pink and white *Amaryllis* [*Crinum variabile*]... Many clumps of indigenous trees grew there and a few planted poplars which sheltered a multitude of bee-eaters.

"Two days later, after crossing the Doorn River at its confluence, and Hantam Karroo... Six hours of slow travel brought us to Zout Pan, salt spring. We found in this area of scrawny vegetation a family of poor but honest people ... the water was too brackish for drinking ..." Crossed the Wolf River "... the Karoo was behind us ..." [p. 32]

1838 **Krauss, F. in Spohr (1973)**

June to September — Cape Flats:

"... At this time of the year most of the plants had dried up, and few were in bloom. [p. 9]

"... into the desolate Cape Flats bordered to the south by the False Bay with high sand-dunes, and to the north by the Tigerberg mountains. It is said that once upon a time the sea extended from Table Bay to False Bay. This plain consists of sand-hills with sparse vegetation and, because of the shifting sand in the strong wind, few farms are found here. It has, however, a characteristic vegetation, the coastal macchia which becomes quite profuse. [p. 10]

"In the northern part of the Cape Flats there are only two rivers of any significance, the Liesbeeck and the Salt River, both flowing into the sandy beach of Table Bay. Even during the rainy season, however, they were dangerous and had to be crossed carefully, they were dangerous as one easily sunk into the mud and disappeared. More than one rider and vehicle has been lost in this way.

"During the winter rains the rivers swell and form lakes of which nothing but marsh remains in summer. Even the big Riet Valley which is crowded with water- and marsh birds, dries up to a great extent during summer ...

"This plain is not a flat stretch of sand but alternates with sandhills, sometimes bare (dunes) and sometimes covered thinly with all kinds of mesembryanthema or low bush and marshy places and sandy lowland. The dunes near Table and False Bay reach a height of 40 feet occasionally and are mostly bare and without vegetation." [p. 11]

Southern slope of the Tigerberg:

"Underneath are layers of 1 ft thick brown coal alternating with 4–5 ft thick layers of sand. The brown coal consists of dark brown elliptic tree trunks measuring up to six feet. An attempt to work the brown coal was unsuccessful." [p. 12]

September to October — West Coast:

"The plateau of these mountains [Cape Peninsula] has also many interesting flowering plants... The dry bushes of Ericacea, Thymelea, Diosmea [*Diosma*], legume, Composita, *Polygala*, Labiatea, and various other families now display their various blooms, and among them, the whole army of bulbous plants flower, (Iride, Amaryllide, Hypoxide, Asphodele, *Oxalis*, etc.) in brilliant colours. Bulbous plants do particularly well between Groene Kloof [Mamre] and Table and Saldanha Bay." [p. 12]

1839 **Delegorgue, A. (1990)**

January — Teafontein Farm, near Mamre:

"... a wretched house, ill-situated on sandy plains covered with stunted bushes ..." [p. 41]

1840 **Backhouse, J. (1844)**

19 March — Vogel Fontein, northnorthwest of Clanwilliam.

20 March — To Uitkomst:

"The country over which we had travelled lately is called the Harde Veld. The cattle were so exhausted travelling over it that they died here."

Set out on horseback for Clanwilliam. "Ascending a steep rocky mountain we travelled over its flat top on which our eyes were regaled by the sight of green grass and fresh water." Descended to Clanwilliam. [p. 594]

21 March — Crossed the Jan Dissels River. Ascended Cedar Mountains to Klip Huis [7 km northwest of Clanwilliam]. Ascended Pakhuis Pass [11 km northwest of Clanwilliam] and on to Groeneberg [17 km east of Clanwilliam]. Descended into "... a long grassy valley called Honing Valei [19 km east of Clanwilliam]." [p. 595]

Continued over the Koudeberg to Wupperthal (Mission), 33 km southeast of Clanwilliam:

"The valley of Wupperthal is grassy and fertile... The mountains afford tolerable pasturage at certain seasons." [p. 598]

24 March — Kliphuis, *en route* to Clanwilliam:

"There are large bushes by some of the streamlets of the valleys, and heaths and proteas [*Protea nitida*] are plentiful on the hills. One of the latter with glaucous leaves forms a small tree. It is scattered on the cliffs whence it derives the name of Klipboom. The Cedar [*Widdringtonia cedarbergensis*] of this part of the country does not grow in woods but is scattered among the rugged mountains. It attains to a considerable size and affords planks resembling coarse deal. In growth it resembles the Red Cedar. Probably it is a species of *Pachylepis*, a genus which differs from *Callitris* in having only four divisions in its fruit. The Australian species of *Callitris*, have universally six. *Callitris quadrifida* of the north of Africa is probably *Pachylepis*." [p. 599]

28 April — Left Clanwilliam going southwards.

3 March — Rhinoster Fontein.

4 March — Alexander's Hoek.

5 March — Company's Drift on the "...Bergvallei Rivier given mistakenly on some maps as Volvaarts":

"A beautiful *Chironia* [or possibly *Orphium frutescens*] was in flower at this place.

6 March — "The little stream called the Bergvallei Rivier runs through a valley clothed with short grass chiefly of the genus *Cynodon* but it is sedgy in the wetter places.

"A large patch of bella-donna lily, *Amaryllis belladonna*, was in blossom among the sedges. Some of the flowers were white, and others pink. The colour of the latter was more diffused than in the variety cultivated in Europe.

"The country from the Heerenlogement to this place is called the Zand Veld.

"In the evening we reached the Kruis Rivier at the northern extremity of the Piquetberg... At this place the Blue Water Lily was in flower." [pp. 604, 605]

8 April — Groen Vallei, c. 32 km north of Piketberg:

"This place was under one of the highest points of the Piquetberg... *Haemanthus coccineus*, the scarlet blood-flower, was plentifully in blossom in this part of the country. Several other plants of the Amaryllis tribe now threw up their flower stems quickly, among them the beautiful *Brunsvigia josephinae* called *marsblom*, March flower, with a large spreading head of deep crimson lily-like flowers, was in blossom in some heathy places. The bulbs of some of these were almost as large as a child's head." [p. 606]

11 April — Misverstaan, just south of Piketberg, is where he crossed the Berg River. [p. 607]

22 April — Franschhoek Pass, 29 km southeast of Paarl:

"We crossed several small branches of the Zondereinde before ascending the kloof called Fransche Hoek Pas... These mountains are clothed with cyperaceous and restiacious rushes, heaths, proteas, and everlastings.

Nerine sarniensis, the Guernsey lily, and *Nerine crispa* [*Nerine humilis*], an allied species, were scattered among the herbage and exhibiting their beautiful blossoms." [p. 614]

25 April — Paarl and Paarl Mountain:

"... among these [the rocks on Paarl Mountain] there are aloes and other plants. The sides of the hills are bushy and afford pasturage. They produce various shrubs of the genus *Protea*." [p. 616]

1 May — Mamre:

Coming to Groenkloof from the north: "On the way we traversed a wide sandy flat ... [p. 619]

4 May — "Groene Kloof from its name gives the expectation of a deep valley of much verdure, but it is merely a shallow, sandy hollow among some low bare granite hills. It has however the advantage of a good supply of water for this part of the world ... a small wood of planted poplar ... it is also ornamental with weeping willows.

"Some aloes and other striking plants grow among the granite rocks and the neighbourhood is famous for the gaiety of its bulbous-rooted flowers."

Arrived at "... D'Urban which was formerly called Pompoen [Pampoen] Kraal [Durbanville, 18 km northeast of Cape Town]." [p. 621]

1847 **Baines, T. in Kennedy (1961)**

3 April Cape Flats:

"Our route lay across an extensive plain of pure sand destitute for miles of the smallest trace of vegetation and, among the most curious phenomena that ever came under my observation, was that of the formation of the ever-shifting hills and hollows upon its surface; a hollow seemed first to be formed by the action of the wind, and the sand blown out of this to be deposited in a semicircular ridge with its concave side to the wind ..." [p. 11]



3 NAMAQUALAND AND BUSHMANLAND

NAMAQUALAND

1661 **Van Riebeeck, J. (1958)**

10 February Meerhoff's Kasteel, 68 km northwest of Van Rhynsdorp and 14 km west of Nuwerus:

"... we continued again following the rhinoceros paths which led along the lower slopes of the mountains. If we had not found these paths we would have experienced great difficulty for this part of the world had nothing but thorn trees and underwood ..." [3: 347]

1662 **Van Riebeeck, J. (1958)**

13 February North of Olifants River:

"The sergeant, two men and the captain of the Great Chariguriquas had searched for water for four days, and if they could have found it, they might have succeeded in finding the Namaquas.

"But between a certain river named the Oliphants River which runs into an inland sea (i.e. the mouth) and the place where the Namaquas are at present camped, there was a stretch of country so barren and salty that it was impossible to traverse. The captain of the Chariguriquas and some of his men rapidly crossed this stretch and came upon the Namaquas. After our men had waited 10 or 12 days they brought the news that the Namaquas had said that there was absolutely no chance of meeting them this season. This seemed to be the case for after the sergeant had endured four days of travelling he returned to his own men, half choked with thirst.

"It had taken the Chariguriqua captain and his men 10 to 12 days to cross this salty, barren territory and come back to our men during which time they had suffered even more severely from lack of water, for the soil there is as dry as a plank and is nothing but sand dotted with mole-hills. There is neither foliage nor grass there, nothing but an occasional puddle of muddy water, so brackish that its edges are encrusted with white salt." [3: 461]

1663 **Bigalke, R. (1951)**

Approaching the Spoeg River, Namaqualand, c. 190 km south of the Orange River:

28 November Quoting from Godee-Molsbergen: "*Bergop, bergaf ging de tocht tot de plek waar Cruithoff het jaar tevoren Namaqua aantrof. Hier beginnen wij vreemt gevogelte en bosschagier te sien en on 28 November ... werden de eerste giraffen gezien ...*"

Translation: Up hill, down dale, went the expedition to the place where Cruithoff met the Namaquas the previous year. Here we began to see strange birds and bushiness, and on 28 November ... the first giraffe was seen. [p. 26]

1685 **Theal, G.M. (1882)**

September North of Olifants River:

"Where the Surgeon Van Meerhof in bygone years, and the Ensign Bergh only recently, had found bare and parched ravines, there were now streams of water three feet in depth. Animal life was abundant. The day after crossing the river, quails in great numbers were met with, which the Hottentots who were with the expedition knocked over with great dexterity by throwing their knobbed sticks at them when on the wing. Hares and antelopes of different kinds were seen sporting about in grass a foot and a half in depth, and were sometimes secured for the table." [p. 241]

October Little Doornbosch River [Swartdoring River], which enters the Groen River 125 km south of Springbok:

"Here some Zonquas were seen and, after a little scheming, were induced to visit the camp where they were presented with a sheep and a flask of brandy. They were wretchedly thin, for they were living upon nothing better than tortoises, caterpillars, locusts, and bulbs of wild plants." [p. 242]

1685 Valentyn, F. (1726; reprint 1971)

14 September — Approach to Dassenberg [Heerenlogement]:

"We were compelled to camp at its foot because that day we had traversed steep slopes of deep sand." The oxen were tired. "This halting place had exceptionally lovely grass, and was watered by various fast flowing springs of very sweet and pleasant water, and the mountains were abundantly provided with firewood." [p. 255]

15 September — "We set out ... along a mountain grown with some timber... Reaching the top of the height we marched ... over wide sandy flat grown with all sorts of thick scrub." Reached a valley called the Hooge Boomen-valey [not found], because in it are two high trees." [pp. 255–257]

Reached Olifants River:

"It is grown with trees of the kind called willows (*wilgenhout*) [*Salix mucronata*], and also with thorn-trees [*Acacia karroo* ?] of unusual height which bear the fruit like Turkish beans, but entirely wild and unpalatable [the Dutch text has '*turkse boontjens*' and a footnote to this gives 'speckled red-and-white beans']." [p. 257]

18 September — Crossed Olifants River.

19 September — Onward from Olifants River. Crossed a flat "... so densely grown with wild oats [probably *Ehrharta calycina*] that it looked like nothing else than a cultivated field in Europe." Through a rocky pass towards a height "... on this was a flat grown with lovely grass" to Bavians berg [Gifberg, near Klawer], "... well provided with wood and grass. There were many quails here ..."

20 September — Left Baviaansberg:

Over "...hills sandy and rocky, grown with bush and scrub. Coming down from them we unexpectedly found a streamlet of pleasant water which is entirely dry except in times of unusually heavy rain, and now on the contrary had fully 3 feet of water. It has thorn-trees [*Acacia karroo*] along it for the most part, and its banks are grown with lovely grass. It flows into the Olifants River ..." [p. 259]

21 September — Bakkely Plaats, between Vredendal and Lutzville:

"... tolerably provided with grass." [p. 263]

24 September — From Bakkely Plaats to [probably] Hol River:

"... reached a rapid stream in which former travellers had found little or no water but which on the contrary was now fully 3 feet deep, though the water was brackish... This place was poor in grass like all our track that day, all being wild and desert land." [p. 265]

25 September — Hoogekraal [not known]:

"... reaching a channel with good water... This place has little or no grass but many small green bushes with which the oxen had to make do, and which served us for firewood."

Camped at Meerhoffs Kasteel, 15 km west of Nuwerus:

"... poorly provided with grass but watered by a small brook; since there are no trees here we were compelled to use the scrub and bushes for firewood." [p. 267]

27 September — "This halt poor in grass ... grown with all sorts of useless greenery and bushes ... brackish stream... The country here looks like nothing but a desert ... no tree to be seen or found." [p. 269]

29 September — Between Meerhofs Kasteel and Swartdoring River, a tributary of the Groen River and 44 km north of Meerhofs Kasteel:

"... reached a river called the Kleine Doornbosch River [Swartdoring River] because of the thorntrees [*Acacia karroo*] here and there along it. Previous travellers had found in it very little or no water, but now in the contrary it was fully 3 feet deep and had a very strong current."

Marched north by west along this river until halting. "This half was very poor in grass and for the most part overgrown with dense scrub which the cattle could not eat." [p. 271]

30 September — From the Swartdoring River, which runs into the Groote Doornbosch [Groen River], he saw the sea and estimated it to be 33 km away:

"The mountains and tracks passed this day were rocky and sandy and without any trees whatever. Our halt had little grass, but abundance of such firewood as is found hereabouts." [p. 273]

1 October — Crossed the Groen River many times [the river he calls Groote Doornbosch River]:

"The Doornbosch River is thus named for the many tall thorntrees [*Acacia karroo*] along it... This river ... is fed by a number of brooklets which flow into it on both sides and from the hills, and it then flows into the sea. Previous travellers found no water in this river except in the furrows and holes, whereas on the contrary it was not very deep and ran swiftly." [p. 275]

2 October — Camped on Doornbosch River:

"We remained here to repair the broken waggons and carts for which this was a convenient opportunity since the timber here was heavy enough to make axles, shafts, and booms and whatever else we had need of, and also indeed for carpentry." Called this halt 'Keert Weder' ["Come again"] because previous travellers had turned back from here. [p. 277]

3 October — Crossing the mountains from Groen River:

"We were compelled to camp here first because there was good water and tolerable grass... The hills over which we had marched are grown here and there with aloe-trees [*Aloe dichotoma*], as also are most of the hills here, according to the Sonquas, some of the trunks being fully 15–16 feet high."

4 October — Onwards over the mountains "... where we halted, this place being well provided with grass and water." [p. 279]

Kamiesberge on their right. "Forced to camp because the flat top of this mountain, as far as this halting place, was nothing but one marsh where the oxen, carts and waggons continually stuck fast. That on such a hill the tracks were so impassable comes from the fact that the surface is full of rocks with much sand between them which the heavy rain that fell in the previous wet season had made marshy; and since the water could not penetrate these rocky soils but could be dried up only by the heat of the sun, the tracks here remained impassable for a long time... Our halting place was tolerably provided with grass and water, and with firewood from thorntrees [*Acacia karroo*] which grew along a brooklet." [p. 289]

13 October — Left Kamiesberg towards Garies:

Came to a flat. "This was a very convenient flat set around with low hills and well provided with grass, wood, and water." [p. 291]

15 October — Left Garies in a northeasterly direction:

"The track was tolerably good, clay and sand for the most part, grown with dense bush... We camped here because the Amacqua Captains informed us that if we marched further we should find no grass or water." The place at which they camped was on a small stream of "…very sweet water, and small thorntrees grew beside it, and good grass."

17 October — Through very narrow, stony pass. Damage done to waggons. Camped. "This place was tolerably provided with grass, as also with small thorntrees. Here we were enclosed all round by very high stony hills, grown in various places with two sorts of aloe-trees, some having thick and pretty high trunks, with a crown above of many branches [*Aloe dichotoma*], the others bearing leaves from the ground up, 7 or 8 feet tall and without branches [*Aloe microstigma* subsp. *microstigma*]."

18 October — Damaged waggons compelled a halt. "For this we had here a good opportunity, since the [Groen] river was grown on both sides with two sorts of trees, thorntrees [*Acacia karroo*] and cypresses ... water somewhat brackish. This place was tolerably well provided with grass.

19 October — "... we were compelled to halt since we were informed that we could reach no (other) water that day... This halt was poorly provided with grass, wood, and water.

20 October — "...we found a spring which according to the Amaquas gives water all the year"... Onward ... Camped. "Wood and grass were scarce here but at that time there was enough water."

21 October — Reached the 'Koperbergen' [Springbok]:

"… where we camped just in front of a pass in one of these mountains from which flowed a rivulet of very cool and pleasant drinking water. This, as we found later, had its source in a rocky hill about a musket-shot distant from these mountains, and was grown with trees, rushes and reeds ...

23 October — "... His Excellency [Governor Simon van der Stel] sent out various of the men to see what firewood and rivers were to be found hereabouts since where we were camped there was no wood other than that of Aloe-trees [*Aloe dichotoma*] and scrub. These on

their return reported that they had found various dry river-beds grown with thorntrees [*Acacia karroo*], 2, 3 or 4 miles away among the mountains, as also with a sort of wood unknown to us whereat several waggons were sent thither to cut the wood in order to burn from it the charcoal necessary of smelting and assaying, which was judged very suitable for this."

25 October — Men prospecting nearby found mountains all round "…but on the way found various streamlets or brooks with water, grown with thornbushes... Meanwhile the wood was prepared and put ready for lighting, to burn charcoal from it ..." [p. 291]

5 November — Departure from Koperbergen after 9 days:

"We set out at 6.30 a.m. in misty weather, taking the way we came, and found that various brooklets which then had half water were now entirely dry. Even at the halt which we had left on 21 October, we now found ourselves obliged to dig holes to seek water." [p. 309]

6 November — Came to Touse, or Sand River [Buffelsrivier, c. 40 km west of Springbok]:

"This was now entirely dry so that we must dig for water, but there was abundance of grass here." [p. 311]

7 November — Following their outward track:

"Here water and grass were scanty."

8 November — Decided to make for the sea about 30 km away:

"This place was tolerably supplied with grass, but wood was scanty."

9 November — A scout reported that "... a large river flowed towards the sea... The river was grown with large thorntrees [*Acacia karroo*], like those here."

13 November — North of Garies:

At October 4th camp site. "Here we camped again since there was good grass and water, though wood was scarce."

14 November — Scouts went out to find a way to the coast:

"On their return reported that they had gone about 4 miles finding the track good for the vehicles, as also a halting place well provided with grass, water, and wood (near Garies)." [p. 319]

15 November — Reached October 11th camp site. Scouts searched for a route to the sea again.

16 November — Along Bitter River:

"A river ran along the site, dry for the greater part but with some water here and there, though brackish. The region traversed this day was for the most part flat with very deep sand, fairly well provided with grass, but with very little wood."

17 November — A scout looking for the sea reached it. Also went to the mouth of the river beside which the camp lay. "... the sea there washed into it for fully 3 miles so that they had found nowhere for us to camp since there was no grass or fresh water there."

18 November — Scout went north to study conditions:

"... he reported that he had reached a very large river [Spoeg River] which had large pools of water here and there but was otherwise entirely dry but was abundantly provided with wood and grass." [p. 321]

21 November — Down Spoeg River, c. 90 km southwest of Springbok:

Scouts sent to the mouth of the Spoeg River reported "... that they had gone down to the river and had found good water and grass there, but no trees at all."

23 November — Camp at mouth of Spoeg River:

"...with fresh water and grass about half-an-hour distant. There were no trees here, but scrub only, but on the shore we found very large washed-up trees which led us to conceive that near here there must be a large river grown with heavy forest from whence these tree trunks came, the more so since the Hottentots had informed us that there were such forests along the river which they called Eyn (Footnote: the Orange River) and we the Vigiti Magna ..." [p. 325]

26 November — Possibly the Swartlintjies River, c. 60 km southwest of Springbok:

"... a large but dry sandy river with some pools here and there, of brackish water for the most part, scanty in grass, and without wood; and that a bay lay at the mouth of this

river, and had found there on the shore a small spring of tolerably good water, though insufficient to supply us and all the beasts."

29 November — Swartlintjies River:

Scouts reported "... that they had found no water. They judged the track by which they had marched to be impassable by carts and waggons, since it was sandy throughout, and overgrown everywhere with low thorny scrub ..." [p. 329]

30 November — To Spoeg River again:

"This camp-site was tolerably well provided with water from the pools and with grass, but wood was very scarce."

1 December — Back to Swartlintjies River:

"... over a sandy flat, somewhat hilly here and there and grown with low scrub... Water, grass, and wood were scanty here [where they camped]. Towards evening His Excellency went to examine the aforesaid bay finding it entirely useless, as previously stated. Here on the shore we found a quantity of thick and heavy washed-up trees ..."

2 December — Swartlintjiesrivier mouth:

"His Excellency sent ... men to look again for the little spring previously found by the hunters and the Hottentots, and dig it out and clear it. They ... reported that they had found it but that the water was altogether brackish because the sea washed into it at high tide. Also that they had left some men here to clean it out as far as possible."

Marched northwest through sand-dunes and reached the spring. "There was no grass or wood there, except for the trees we again found washed up. The water was as reported, and scanty, so that we were compelled to send the animals to the river." [p. 331]

4 December — North from Swartlintjies River:

Scouts reported that for 6 or 7 miles "…they had found no water at all, neither along the shore nor inland ... which had forced them to drink their own urine." [p. 333]

6 December — From Swartlintjiesrivier along the coast towards Buffelsrivier:

"... our animals were altogether powerless and weak, the cause being, as was judged, the great thirst they had suffered, which had forced them to drink salt water; and now, while we were giving them fresh water to drink in little pails, many fell down dead." Sent some to the Orange River to recuperate.

8 December — Scouts reached the Buffelsrivier again:

"At this river they found no trees, but fresh water, and reeds [*Phragmites australis*] like those of Europe, and fully 8 or 9 feet long." [p. 335]

12 December — Back to Swartlintjies River:

"The water pools were very brackish and the water and wood were as previously."

13 December — Back along their old track, reaching the river a mile from their December 1st camp site:

"Wood, grass, and water scanty here, and the water brackish."

16 December — Scouts sent out, who reported "…that towards the shore neither grass nor water was to be found." The camp site was that of November 20th [Bitter River]. [p. 339]

18 December — Towards Doornbosch River [Groen River]:

Scouts reported: "…found the said river, in which were pools of good water, also abundance of grass and wood, this being the thorntrees [*Acacia karroo*] that are found along this river." [p. 343]

20 December — Left Bitter River camp going northwest by west 23 km north of Groen River:

Camped at a bend in the river "... since there was good water and grass here, such as we did not expect to find nearer the sea. The river here was entirely without trees, like all the rivers which we had passed near the shore, although on the contrary they are densely grown with trees higher up, as has been mentioned repeatedly." [p. 345]

24 December — Confluence of Kleine Doornbosch River [Swartdoring River] and Groote Doornbosch River [Groen River], 27 km from the sea:

"The grass here was tolerably good, but we must dig for water." [p. 347]

25 December — Along Groen River:

Very hot; forced to outspan at midday to let oxen water. Inspanned at 4 pm and went south southeast; reached path of Ensign Bergh "…and camped there, grass and water being pretty good at this river, though we must dig for water." [p. 349]

27 December — Southwards to Meerhofs Kasteel:

Animals allowed to drink whenever water was found in the river. Arrived at Meerhofs Kasteel at about 12.30 p.m. and let the oxen "…drink up whatever little water we found in the spring." Went to Eerste Modderkuyl where they had camped on 29 September. "This pool had a tolerable quantity of water, but stinking... The tracks which on our outward journey we had found very marshy and difficult were now entirely without water and dried as hard as stone." [p. 349]

28 December — Near Nieuwe Rust [Nuwerus]:

"His Excellency had the pools dug out and cleaned, and meanwhile the animals were driven to the other pools, to drink as much as possible. Meanwhile it was decided to drive all the oxen to the Olifants River, except one team for each vehicle... What water had come into the pool in the meantime was given to the oxen which we had retained in bowls since it did not suffice for a pailful for each." [p. 351]

29 December — Trekked to the Olifants River and camped at Bakkeley Plaats.

1686 Valentyn, F (1726; reprint 1971)

2 January — Mouth of the Olifants River:

A scout sent to the mouth of the river from Bakkeley-plaats, two days before, returned to say that it was very wide "…and near the outflow was a little island about 100 roods long with a sandy shore and grown above with low scrub." He considered that for about 4 miles from the mouth "…the river had salt and unusable water. From here [Bakkeley-plaats camp] they had found no grass so that it was inexpedient to go thither with the animals." [p. 353]

3 January — Left Bakkeley-plaats on the Olifants River and trekked to Troe-troe [20 km southwest of Van Rhynsdorp] and the Wideouwrivier [runs into the Troe-Troe River]:

"... decided to camp there because of the lovely grass [see entry for 19 September 1685] found there about quarter-mile from the river." [p. 353]

4 January — Through Wideouw River, 9 km southwest of Van Rhynsdorp:

"…which on our outward journey we had found with flowing water but which now was entirely dry ... and camped near Baviaansberg [near Gifberg], finding the grass and water as before."

6 January — To Dassenberg [Heerenlogement]:

"... finding lovely grass and water in abundance ...

7 January — "We remained here, somewhat to refresh the animals with the lovely grass." [p. 355]

1761 Hop, H. in Mentzel (1785)

August — Between Olifants River and Groen River, southern Namaqualand:

"Further, no timber is to be found here, the banks of the dry rivers being covered only with a few small thorn bushes [*Acacia karroo*] and the plains with a few small shrubs and grass. This region, too, is thinly populated and does not abound with big game except in a westerly direction towards the sea where elephants are still fairly numerous." [p. 132]

1774 Thunberg, C.P. (1793 and 1795)

25 October — Heerenlogement:

Heerenlogement "…was a vale between the mountains, with a pretty high hill ... this place which is pleasant, being ornamented with a small wood and a rivulet of fresh water." Mentions another cave. "In the former of these caves there was a small fissure in which a tree, probably a *Sideroxylon* [*Ficus cordata*], had taken root and stood in very flourishing condition being above 8 feet high ...

"On the whole the mountains hereabouts were dry, barren ..." [1: 148]

Found the shrub *Codon royenii*, but saw only one plant: "... The bushes (sic) we met with were covered all over with white, brittle, and transparent prickles." These pierced Thunberg's hands when he tried to pluck them. [2: 147]

Olifants River:

"*Kamerup* was the name given here to the Hottentot's water-melon, [*Fockea* spp., in this locality *F. comaru*] a large succulent root.

"*Karup* again signified the root of a species of *Lobelia* [*Cyphia digitata*], which was eaten by the Hottentots.

"*Moerwortel* is an umbelliferous plant [*Peucedanum gummiferum*], from the root of which with honey the Hottentots make, by fermentation, an intoxicating liquor. [2: 150]

"The river was deep in several places, and a beautiful wood consisting of trees of various kinds, especially the *Mimosa nilotica* [*Acacia karroo*], adorned its banks.

30 October "I found the Hottentot's watermelon [*Fockea comaru*]... The root was almost as round as a ball, above six inches in diameter, of a yellowish colour, and about as hard as an ordinary turnip ... it seemed to me to belong to the order of the Contortae, and I thought it might be referred more especially to the *Ceropegia*, or the *Periploca* genus. [2: 151]

31 October "We proceeded through the desert; in which the farther we advanced, the drier it grew. [2: 152]

"In this Carrow-land grew the most singular mesembryanthemums, and those of the greatest quantity; on the other hand but very few crassulas, euphorbias, and cotyledons." [2: 153]

2 November Bokkeveld Mountains, 36 km northeast of Van Rhynsdorp [not the Cold or Warm Bokkeveld]:

"In ascending this mountain we discovered a species of *Aloe* (*Aloe dichotoma*) ... used by the Hottentots as a quiver for their arrows." [2: 154]

"Bokkeland ... being all over exceedingly barren" had very few farms. Only Hottentot herders. [2: 155]

Bushmen mix snake venom "... with the juice of a poisonous tree (frequently the *Cestrum venenatum* [*Acokanthera oppositifolia*]) ... [2: 162]

"Poisonous bulbous plants (*giftbolles*), *Amaryllis disticha* [*Boophane*, in this locality *B. haemanthoides*] grow commonly in several places. Hottentots use the roots for poisoning their arrows." [2: 163]

1779 Gordon, R.J. in Cullinan (1992)

31 July Near Kamieskroon:

"We found it warmer at first and the country on all sides blazed with flowers, the most beautiful colours in the world: yellow *Oxalis*, orange *Arctotis* [*Arctotis fastuosa*], red, yellow and bluish-purple mesembryanthemums, etc. There were many *kokerbooms* (*Agave*) [*Aloe dichotoma*] in bloom here. (There were three kinds of *Geranium* [*Pelargonium* or *Monsonia* (= *Sarcocaulon*)]). We called the place Floraas- or Bloeme Kloof ..." [p. 78]

3 August Near Buffels River, c. 30 km west of Springbok:

Editor's comment: "[Gordon] had written earlier of mesembryanthemums and euphorbias and a beautiful kind of red *Ixia* [*Ixia latifolia* var. *ramulosa*]." [p. 80]

17 August Mouth of the Orange River, south bank:

"Once over the rises we came upon country as hard as gravel with small, sharp, hard pebbles. They were of every kind of colour and facet; also many beautiful geraniums (*spinosa*) [*Monsonia* (= *Sarcocaulon*) *crassicaule*]. Ugly barren country everywhere ...

"There are large sandbanks with a few small thorn and willow trees... Went a short distance up the river, letting the horses graze the meagre grass that was there...

"Soon after this we found the wagons camped close to the river where it makes a large marsh one hour from the mouth. This marsh changes completely at high tide when it is one and a half hours' wide, with an island against the left bank. At ebb-tide, however, it runs very shallow, revealing many sand-banks, and one can go to the island on foot ... we found that the water was very sweet, though ebbing and flowing strongly. It surprised me that I saw no hippopotamus and only one animal footprint; however there is not much to graze on here." [p. 81]

August — Orange River mouth, Sperrgebiet, Namibia:

"It was low lying country; the soil of clay with a few small fleshy shrubs. Thereafter the soil at the river was entirely sand, without any water. There were low dunes on our left side." Resin is given off by cacativas [identity unknown]. "After we had been going for an hour we came to a rainwater marsh. Beside this we found the small and large footprints of people, very fresh. We also found large, dry, washed-up trees here. Soil had been washed over them and shrubs were growing on them. This means the river must have been very high some years back or that there was a heavy storm at sea ..." [p. 82]

Some of the local people had a large hut "... made of wood (washed-up trees, right-whale or whale ribs) and was thatched with grass and undergrowth, very warm." [p. 83]

25 August — North bank of Orange River, Sperrgebiet, Namibia:

Found elephant. "An elephant can trample down a large thorn-tree and feed itself all along this river where there are still a fair amount of these. It eats the foliage and bark of the trees, especially the thorn-trees (*Mimosa* [*Acacia*]). This greatly stunts the growth of the trees... These thorn-trees produce a good gum which is eaten by the Hottentots. On a thorn-tree which was a good seventy feet high saw an ape like those in Outeniqua Land." [p. 89]

End August — 3 hours up from Orange River Mouth:

"Under the euphorbias (or what are here called *melkbosjes*) there is a fungus or growth like a mushroom which has a taste something like that between a potato and fish roe (because of its small seed) [*Hydnora africana*, a root parasite on species of *Euphorbia*]. It is not unpleasant and is eaten by the Hottentots and called *kaniep*. It also grows in the Roggeveld."

17 September — Northeast of Springbok:

At a Hottentot wedding: "They also mix some other fat together with buchu [*Agathosma*] from [the hair of] the head, (one of the elders does this), and they (the man and wife) eat it from each other's hands." [p. 92]

26 September — Sandfontein farm, near Viools Drift, Orange River:

Very hot. "Yesterday I ate a beautiful wild cucumber [*Cucumis africanus*] which was so bitter that I became ill from it and vomited. This also happened to a Hottentot. [On page 97 is a black-and-white sketch captioned: 'The spiny, or wild, cucumber'.] [p. 96]

"The sand in this veld is looser; grass-country, Bushman grass country, or Taaneina."

28 September — South of Viool's Drift:

"Saw a Kouqua, and Einqua too, who had been to the Briquas and he called their corn *semica* just as the Caffres do." [p. 98]

15 December — Near Ramans Drift, Orange River:

"These river farms had abundant grass but have now been grazed down and because little rain has fallen they are now very sandy and with scant grass. The river runs too deep to water the land, thus it cannot be led out for gardens for planting wheat ..." [p. 128]

1779 Paterson, W. (1790)

1 August — Western end of Kamiesberg:

"Across sandy plain next day... Across sandy country."

Buffelsrivier [Coussie], c. 50 km west of Springbok:

"Good pasture on its banks." [p. 106]

4 September — Returning:

"Thro' desert; arrived at Sand River [Buffels River] with good grass and water." [p. 120]

17 August — Orange River Mouth:

"Country very barren 1,000 yards from the banks of the river, and very mountainous eastwards." [p. 17]

1798 Barrow, J. (1801)

April — To Hartebeest River, which runs southward and enters Swartdoring River, which joins the Groen River in southern Namaqualand:

"Two mountain geese directed us by their flight to a spring of water about 20 miles beyond the Lions Den (Leeukuil). Though sufficiently copious for our wants yet it was strongly impregnated with salt.

"Ten miles beyond this brought us to the bed of the Hartebeest River which, from the very lofty mimosas [*Acacia karroo*] that skirted its banks and entirely buried it within their extended branches, promised a plentiful stream. It happened, however, to be perfectly dry.

"The experiment of digging was made in the bed of the river, and at five feet under the pebbly and crystallised sand ... was a stream of clear fresh water, and from experiments afterwards made in the sandy beds of the rivers of the Namaqua country I am inclined to think that subterranean streams of water pass under most of them in this part of Africa."

28 April — Leeukuil, c. 77 km northeast of Van Rhynsdorp:

"On the 28th we entered a narrow pass among the hills that lay behind the Lions' den, which hills are considered as the commencement of the Namaqua country. The surface continued to be broken into hill and dale but both were destitute of plants except indeed that, along the stony sides of most of the hills, were growing vast multitudes of a tree as unsightly as it was curious. It was a species of *Aloe*, called by the botanists *dichotoma* from the division and subdivision of each branch into pairs. Each of these subdivisions is terminated by a tuft of leaves, and the whole forms a large hemispherical crown supported upon a tapering trunk which is generally of large diameter, but short in proportion to the vast circumference of the crown. This has been said sometimes to amount to many hundred feet. (The largest I met with was about 100 feet).

"It is called in the country the *kooker boom*, or quiver tree, its pithy branches being employed by the Bosjesmans Hottentots as cases for their arrows. In some of the passes ... were thinly scattered species of *Geranium* among which was one whose branches were armed with strong spines [*Monsonia* (= *Sarcocaulon*) sp.]; and also a tree *Cotyledon* [*Tylecodon paniculatus*] that appeared ancient and stunted like the artificial dwarf trees invented and cultivated by the Chinese." [p. 381]

April — Kamiesberg Mts to the Orange River:

"In that part of the Namaaqua country lying between the Kamies and the Groote, or Orange, River, no water is met with except the periodical streams that flow from the mountain under beds of sand in which the natives, when such existed, used to dig deep wells, and cover them over to prevent evaporation.

"These plains are now desolate and uninhabited."

Notes that the hordes of Namaaquas, who had "...vast herds of cattle", had dwindled away to four groups in less than a century. [p. 387]

On and near the Kamiesberge:

"It should seem that some principle does exist in these highly elevated situations of southern Africa that sheds its influence on the animal, and even on the vegetable part of creation.

"The withered stem of a liliaceous plant, apparently the same as that found along the banks of the Orange River, was 7 feet long, and crowned with an umbel of more than 50 flowers, each having a peduncle or foot-stalk of 18 inches in length, making the diameter of the umbel to exceed that of 3 feet [*Brunsvigia josephinae*]. The bulb, of which I could but conveniently carry a few, was as large as the human head. Of this enormous lily the people gave an account... They say ... that the juice of the bulb is a strong poison, that the leaves occasion sudden death to the cattle that chance to eat them, and that if small birds ... perch on its blossoms they instantly roll off lifeless to the ground." Barrow dismisses these as mere stories. [The toxicity of the plant to stock is accurate but not its effects on visiting birds, and its flowers are actually adapted for pollination by sunbirds.]

"Another species of *Amaryllis*, called by the botanists *disticha* [*Boophane disticha*], common on all the mountainous parts of the Colony, was now on the Khamiesberg growing out its long broad leaves in opposite pairs forming the shape of a fan. Both the bulb and the leaves of this plant have been ascertained to be, without any preparation, most virulent poisons that act on the animal system whether taken into it by the stomach or the blood. The farmers pull up the root and leaves wherever they find them growing. It was said that the juice of this bulb, mixed with the mangled body of a certain species of spider, furnishes Bosjesmans with poison for their arrows more deadly than any other they are acquainted with." [p. 391]

After mentioning the large nests of the social weaver, *Philetarus socius*, Barrow continues: "The *Aloe dichotoma,* being the only plant met with on the hills of this country approaching the size of a tree, except the mimosa [*Acacia*] which grows only on the borders of periodical rivers, is generally the resort of these gregarious birds, where they construct their temporary dwellings ..." [p. 394]

1823 Thompson, G. (1827)

15 August — Augrabies Falls, Gordonia:

"As we approached the fall, the sound began to rise upon our ears like distant thunder. It was still however a work of some exertion to reach the spot from which we were divided by a part of the river and beyond that by a tract of wild woodland several miles in extent. The main and middle branch of the Gariep [Orange River] which forms the cataract, traverses a sort of island of large extent covered with rocks and thickets, and environed on all sides by streams of water. Having crossed the southern branch which, at this season is but an inconsiderable creek, we continued ... for several miles through the dense *Acacia* forests ..." [2: 18]

Describes the falls and "... the bright green woods which hung from the surrounding cliffs." [2: 21]

"I named this scene 'King George's Cataract' in honour of his gracious Sovereign." [2: 23]

17 August — Southwest from the Augrabies Falls towards Pella, Namaqualand:

"The plains which we now entered upon were entirely destitute of water... The occasional and precarious thunder-showers are, it appears, sufficient to maintain the hardy grasses of these regions which, rushing up into hasty vegetation after rain and as suddenly fading again after the parching drought, afford pasturage either in a green or withered state to myriads of wild animals who migrate from place to place according to the course of the seasons and the abundance or scarcity of grass. It is from these tracts that the destructive flocks of *trekbokken*, or migratory springboks, pressed by the long droughts, occasionally inundate the northern parts of the Colony." [2: 40]

19 August — Half an hour east of Pella Mission, under the Carlisle or Kaabas Mountains:

Considered the soil too full of saltpetre to be much good for producing vegetables. "I observed, however, several ebony trees which had been transplanted from the banks of the river [the Orange] growing here in great luxuriance. Along the Gariep both black and white ebony [probably *Diospyros*] is found in abundance." [2: 56]

20 August — Pella Mission:

"It is watered by a spring from the rugged mountain which overhangs the encampment. The adjoining plains are covered with grass which grows all in separate tufts like the hair on the head of a Hottentot [probably *Stipagrostis obtusa*]. From this feature the spot derives its name *t'Kams*, a term signifying 'tufted grass' in the Namaqua dialect."

About 400 people lived there "...but the severe droughts and consequent failure of pasturage force them occasionally to disperse themselves in divisions over the country wherever a spring of water exists with grass in the vicinity for their flocks. It was on this account that Pella, though well supplied with water, was at this time entirely deserted. Such an unsettled and roving life is undoubtedly very adverse to the progress of civilization, but the nature of the country is such that a people like the Namaquas must be nomadic... As soon as rain falls the pastures at Pella will instantly spring up and the scattered divisions of the people will again re-assemble." [2: 58]

August — Of Namaqualand near Pella and South West Africa [Namibia]:

"The soil of Namaqualand is in general light and sandy, and thinly clothed with a sort of grass that rushes suddenly up into vegetation after the precarious rains which the climate affords, and furnishes sufficient pasturage for numerous herds of cattle and wild animals. Some of the plains towards the sources of the Borradaile River [Visrivier, Namibia] are reported to be much more fertile in pasturage than the rest of the country, and there are scattered here and there a few copious fountains which the missionaries consider suitable for permanent villages." [2: 63]

21 August — Left Pella going west along the Orange River:

"Having passed the mountain which runs to the west of t'Kams we entered upon an extensive plain clothed with dry tufted grass, but destitute of water... After riding about 12 miles across a dead flat we passed through a defile between two rugged hills beyond which the dry grassy plains extended to the south and west bounded only by the horizon." [2: 80]

23 August — Crossed the Koussie, or Buffalo River in Namaqualand:

At a "...picturesque defile called Pieter's Kloof where there was good water... The face of the country had here a very different aspect from the parched wastes I had lately traversed. Rain had fallen in abundance and the declivities of the mountains were clothed with a green forage of a bushy nature, excellent pasturage for horses and cattle." [2: 87]

Lilyfontein Wesleyan Mission [Leliefontein in the Kamiesberg], Namaqualand:

"... the frequency of snow and rain on this favoured mountain keeps the springs always running... The climate is consequently very different from that of the plains below. Falls of snow are frequent during the winter and the frost is sometimes so severe as to injure the young crops. For this reason, as well as on account of the sour grass, it is not very favourable for rearing sheep." [2: 90]

1836 Alexander, J.E. (1838)

September — Heerenlogement Cave, 28 km northeast of Lambert's Bay:

"We arrived at Heere-logement (or Gentleman's Lodging) where was a pool of water under a hill some distance up which is a large and open cave, or *klip-huis*. A small tree [*Ficus cordata*] grows out of the fissure of the rock above and partly overshadows the floor of the cave, whilst on the north side is carved the names of travellers and hunters from the year 1712 to recent periods. Among others, conspicuous, is that of the renowned 'F. VAILANT, 1783'. Looking from the cave in a westerly direction the eye ranges over a wide extent of plain on which bushes are scattered.

"Elephants have long since disappeared from this locality, the only traces of them being the name of the river [Olifants River, 15 km east of the cave] and the rude figure of one I had seen carved in the *klip-huis* at Heere-logement. [1: 39]

1 October — "On the 1st of October we were on the banks of the Olifant River which ran full and clear between steep banks which were lined with mimosas [*Acacia karroo*] and willows [*Salix mucronata*]."

27 October — From Komaggas to Buffelsrivier, near Bontekoe, 52 km west northwest of Springbok:

"We left Komakas on 27 October ... and passing round the western extremity of the mountain we journeyed north over a flat covered with bushes, and with mountains on our right hand... After five hours ride we arrived late at the Kowsie [Buffelsrivier], the boundary of the Colony, and passing through its dry bed, and the mimosa [*Acacia karroo*] and *dubbee*, or tamarisk [*Tamarix usneoides*], trees which lined its banks, we outspanned ... at ... Bon Koe." [1: 92]

October — Orange River, near Goodhouse:

"All those who have had the good fortune to see the Gariep agree in praising its beauty. Its broad stream at one time rushes tumultuously over a rocky and shelving bed, then is spread out into a translucent lake, then is hurried over a rock 400 feet high forming a grand cataract, sweeps in its course round numerous islands, some of them inhabited by banditti, and others by hippopotami. Its banks are everywhere clothed with a broad belt of thorn, willow, and black bark trees, alive with the notes of birds whilst the strangely-shaped hills which so frequently enclose the river form the most exciting scenes from their wildness and air of romance that can possibly be conceived... Rich grass is always found under the trees. [1: 107]

"I found abundance of ebony, the *Royena deciduas* [possibly *Diospyros lycioides*], the bark of which is so well adapted for tanning, and various thorn trees which would be well adapted for building. Gum might also be collected in any quantity from the acacias along the river, sufficient I should think for the consumption of England." [1: 108]

1839 Backhouse, J. (1844)

24 December — Leeuwin Kuil [Leeukuil]:

"In rainy weather vegetation springs up rapidly in these otherwise barren tracts and the people of the neighbouring country, white and coloured, who have cattle, avail themselves of the opportunity to feed their cattle in these parts so long as the grass, or other congenial herbage, and water last. By this means they save the pasturage nearer to the springs for drier weather. All sorts of cattle in this country feed on certain bushes, those congenial to the taste of oxen and horses were more numerous here than on the Karroo but still the poor animals rarely got a sufficient supply of food."

Water at Tafel Fontein on the slope of Tafelberg. [pp. 514, 515]

26 December — Brak Fontein, 102 km north of Van Rhynsdorp:

"There was a copious spring of brackish water.

"To Draai Fontein ... by the bed of the Hartebeest Rivier [Draaihoek, 105 km north of Van Rhynsdorp] on the sides of which were *doornbooms* [*Acacia karroo*]... We had now entered the colonial part of Little Namaqualand." [p. 516]

27 December — Hout Berg [? Hoedberg, 27 km east southeast of Garies] on the Zwarte Doorn Rivier:

"Zwarte Doorn Rivier, along which were beautiful umbrageous *doornbooms* [*Acacia karroo*] clothed to the ground with verdure and with blossoms of golden hue in thready balls the size of marbles." The people there "… obtained good water by digging in the sand of the river notwithstanding many *brak*-bushes [*Salsola aphylla*] growing along its margins. The *kokerboom* [*Aloe dichotoma*] was scattered over the mountains ... one we measured had a trunk 18 feet high."

Turned southward to Twee Fonteine and outspanned.

30 December — Twee Fontein, under the Kamiesberg:

"The road to the ascent of the Kamiesberg continued over sandy granitic hills among which the singular *Stapelia pedunculata* [*Tromotriche pedunculata*] was in flower."

Walked to Doorn Kraal, 17 km east of Garies. [p. 518]

31 December — Ascending the Kamiesberg:

"At the top of the first ascent ... near a beautiful little spring of clear water which made a plot of ground marshy. On the marsh there were some bushes and the elegant little *Monopsis conspicua* [*Monopsis debilis*] and another plant of the *Lobelia* tribe, a *Bartsia* [*Bartsia trixago*] with pink and white blossoms and several other little plants ..."

The Atlantic Ocean was in view.

"Our road was down a toilsome slope hemmed in with rocks and bushes... We outspanned in a deep kloof having grass between the stones ... and small bushes down the margin of a rill of clear fresh water. This is a treat in Africa." [p. 521]

1840 Backhouse, J. (1844)

1 January — Ezel Fontein, in the Kamiesberg:

"The vales become flatter and more extensive among the tops of these little Alps... Near the top of the next ascent a heath [*Erica plukenetii*] was growing at a spring. It was the first *Erica* we had seen since leaving Lishuani in the Bechuana country [Ladybrand, Free State]." [p. 522]

Soon afterwards reached Lily Fountain [Leliefontein]:

3 January — "The mission village of Lily Fountain takes its name from the growth of *Zantedeschia aethiopica*, the lily of the Nile, in the spring at this place. [p. 524]

6 January — The grass constantly fails here in winter when there is also much snow. On the Onder Veld, the country between the mountains and the sea, it is not nearly so cold at that season." [p. 527]

9 January — Two hours from Lily Fountain:

"The path lay down a very rough steep kloof that was bushy ... on which, at lower levels, there were arborescent shrubs."

On to Wolve Poort, 53 km southwest of Springbok:

"At a kloof that afforded a little pasturage... Among the bushes that clothed this part of the Kamiesberg was *Erythrophila undulata* [*Erythrophysa alata*], a stiff low shrub with triangular scarlet fruit more than an inch long which looked very tempting but on examining them we found they were only bladdery capsules containing in each cell one or two hard seeds." [p. 528]

11 January — Arrived at Brak Fontein:

A solitary "*doornboom* [*Acacia karroo*]".

13 January — Komaggas, 39 km west southwest of Springbok:

"... the chapel was seated with benches of mason-work, plastered and whitewashed, wood being too scarce to be applied for this purpose; none was to be had nearer than the Orange River except from a few *kameeldoorns* [*Acacia erioloba*], some of which had been sacrificed for making a neat pulpit ...

"The land granted by the government to this station was about 128 000 acres ... of very poor quality and, except at the Missionary Station, almost destitute of water in dry weather ... sand, besprinkled with small bushes... Among the rocks at this place there was a considerable variety of shrubs. Several species of *Cotyledon* were conspicuous. A *Loranthus* [*Tapinanthus oleifolius*] with red, tubular flowers, having five reflexed greenish segments and five stamens, grew parasitically among the bushes at the foot of

a cliff over which the water fell in rainy weather... *Erythrophila undulata* [*Erythrophysa alata*] also grew among the drier rocks." [p. 532]

15 January — From Komaggas to Zand Fontein, c. 45 km west of Springbok, in the bed of the Oegst or Komaggas River:

At a pool of brackish dirty water. "At this place there were some striking species of *Mesembryanthemum*, and some euphorbias [*Euphorbia dregeana*] forming bushes of cylindrical green stems about as thick as mould candles... The leaves of some of the former were about 9 inches long, fleshy and tapering to a point so that the plants looked something like small agaves [uncertain to what this refers].

"Mistletoes were growing on the euphorbias; they were much more succulent than when growing on woody shrubs or trees. This I had before noticed between Uitenhage and Enon [Eastern Cape]. One of the mistletoes common in southern Africa has small myrtle-like leaves and red berries [*Viscum rotundifolium*]; another is leafless [*Viscum capense*] and has stems resembling a *Salicornia*.

"The bitter melon *Citrullus amara* [*Citrullus lanatus*] was abundant on the sandy ground between Komaggas and this place; it was rejected by all animals ..." [p. 534]

Visited Bontekoe "... where water was thrown up out of a deep hole in the bed of the Kowsie River [Buffels River] by means of vessels made of the willow of the Orange River." [p. 535]

16 January — To Oeg Grawep or Footjes Kraal [Oograbies or Voetjieskraal, 20 km east of Port Nolloth], and on to Robben Baai [Port Nolloth] on the coast:

"... scanty supply of rigid herbage called here stickgrass [*Stipagrostis namaquensis*] ... a shrubby gramineous plant ..." [p. 540]

January — Left Robben Baai and "... proceeded over a series of sandy hills to an open flat where there was grass but not water." Came to Muishond Fontein, between Port Nolloth and Steinkopf. [p. 541]

23 January — "... ascended the mountains to Uitkyk Fontein... On the ascent of the mountain a shrub [*Sisyndyte spartea*] resembling the Spanish broom *Genista juncea* was growing, but it had large yellow blossoms more resembling those of a rose in form."

Rode to Kok Fontein [Steinkopf]:

„A clear but cold spring boiling up from the ground gives this place its name ... the adjacent plain which is sandy is besprinkled with low bushes and mesembryanthemums. Some of the latter are of the ice-plant tribe but they are erect and have leaves about 5 inches long and 3 inches wide... *kokerbooms* [*Aloe dichotoma*] and shrubby thick-stemmed euphorbias [*Euphorbia dregeana*] are scattered among the hills." [p. 543]

28 January — Ingris, or Henkrees Fontein [Henkries], 88 km northeast of Springbok:

"... plains of granitic sand with thin grass. The outline of the hills on which *kokerboom* [*Aloe dichotoma*] and a species of *Euphorbia* were thinly scattered ..."

29 January — From Henkrees Fontein [Henkries] to the Orange River [c. 5 km]:

"Over rough country having rugged brown mountains on the right and the Great Orange River thickly margined with trees on the left ..." where his party was given "... plenty of *rozyntjes*, the small fruit of an arborescent *Rhus* [probably *Rhus undulata*] growing on the banks of the river." [p. 548]

21 February — From the Orange River *en route* to Kokfontein [Steinkopf]:

"... we rested ... under some broad bushes of a round glaucous-stemmed *Euphorbia* [probably *Euphorbia dregeana*], 4 feet high. A *Cyrtonema* [probably *Kedrostis capensis*], a bryony-like plant with dissected leaves and tuberculed red berries, the size of a small hazel-nut, was climbing among them ..." [p. 576]

Arrived at Gezelskops.

22 February — Left Gezelskops travelling south "... leaving the grassy country and coming upon a karroo of low bushes and mesembryanthemums ... we stopped among some rocks where there was a little grass."

Rode to the Brak River. Reached Kokfontein. [p. 577]

24 February — Left Kokfontein; passed Byzondermeid; to Gra'water (Graven or Digged Water).

25 February — To Springbokfontein [Springbok]. Passed Kowsie, or Buffels, River, 'the boundary of the Colony'. [p. 580]

Left Buffels River and ascended towards the Kamiesberge. Arrived at Lily Fountain [Leliefontein].

27 February — Leliefontein:

"The dryness of the weather had made the pasturage on the Kamiesbergen so deficient that ... many of the people had removed from Lily Fountain to seek pasturage in the adjacent country. There was grass in the Bushman-field [Bushmanland] to the northeast beyond the Boundary but so little rain had yet fallen there that the supply of water was deficient ..." [p. 582]

4th March — Left Leliefontein; rode to Draaiklip in Namaqualand.

5th March — Twee Rivers in the Onderveld, near Garies:

"...on the spot that had been cultivated, there was a little short grass of a species of *Cynodon*." [p. 585]

Crossed the Haas River, southern Namaqualand.

At Oog Fontein "... the water was dried up and the grass was also consumed."

6 March — Groene River, 27 km south of Garies "... in the bed of which the *doornbooms* [*Acacia karroo*] were large and thick, and there were a few reeds on which the cattle browsed."

Inn-doorn Fontein, on the Groene River. [p. 586]

7 March — At Draaiklip, Groene River "... many small birds of the tribe called sugar birds, probably a species of *Cinnyris* (lesser doublecollared sunbird), were feeding on the honey of a species of *Gompholobium* [*Lessertia* (= *Sutherlandia*) *frutescens*], or on insects attracted by the honey. The males were brilliantly coloured with green, blue, and red."

9 March — Left Groene River and arrived at Zwartedoorn River. Continued southward "... when we halted on a bushy mountain likely to afford good food for our cattle, but the vegetation was very dry. Even the succulent plants and shrubs were shrivelled." [p. 588]

10 March — To Klipfontein. Onward; crossed the Zoute River where "... outspanned on top of a low bushy hill."

11 March — Reached Valei Fontein [Vleifontein, 61 km northwest of Van Rhynsdorp]:

12 March — "*Tromotriche pruinosa* [*Quaqua pruinosa*], a plant of the Stapelia tribe, was in flower among the granite rocks.

"Left Valei Fontein ... and outspanned ... among hills where the bushes afforded tolerable forage." [pp. 589, 590]

13 March — Koekenaap on the Olifants Rivier. [p. 591]

Ebenezer, the Rhenish Mission [49 km west of Van Rhynsdorp]:

About 2 300 acres in extent: "... though a large extent of ground is of such quality as requires a large surface for cattle, ours became decidedly weaker here. One died among the low bushes which are scattered over a large part of the country. In the dry weather the cattle have to wander miles to get food, and to return to the river to drink." [p. 592]

18 March — From Ebenezer to Knagers Fontein. Reached Heerelogement:

"... where there was a slender spring supplying some pools of water... At this place there is a cavernous opening with perpendicular sides among the rocks on the ascent of a lofty hill. On the sides of the cave the names of several persons were inscribed. Among them were 'Casp. Hem. 1812' with the figure of an elephant underneath, and 'F. Vaillant 1783'... A wild fig-tree [*Ficus cordata*] hangs into the top of this cave and gives it a pretty appearance." [p. 593]

1877 Anon [?Hardy] in Schaefer (2008)

August — Bowesdorp–Kamieskroon:

"The sides of the road were lined with a perfect border of flowers of every colour – purple crocus [*Babiana*], and brilliant yellow flowers much like the marigold [various Asteraceae], others like the *Gladiolus splendens* [here *Gladiolus saccatus*] – anemones [probably *Grielum humifusum*] of the colour of the primrose, white, pink flowers, blue flowers and vaerieties of plants that I had not seen before covered the ground like a carpet." [p. 198]

BUSHMANLAND

1811 Burchell, W.J. (1822)

September

General description of Bushmanland:

"The country from the Roggeveld Mountain to the northern border of the Colony may be characterised as a high plain free from large mountains ... quite destitute of trees and grass but everywhere covered with bushes springing out of naked red soil deprived of moisture during a great part of the year. These bushes are not more than a foot or two in height, excepting various kinds of *Lycium*, and almost exclusively belong to the natural order of Composite flowers, or the class Syngenesia of Linnaeus." [p. 284]

Travelled via Kopjesfontein, Patryshoogte, Brakkefontein and Leeufontein to Klipfontein.

1823 Thompson, G. (1827)

14 August

Along the Orange River, between Aughrabies Falls and Pella:

Thickets of mimosa [*Acacia karroo*] for at least a mile on either side, but parched plains beyond this. [2: 1]

"After leaving the Falls, going west, across plains destitute of water. Occasional thunder showers are enough to maintain the hardy grasses which, rushing up into hasty vegetation after rain and as suddenly fading after drought, afford pasturage either in a green or withered state to myriads of wild animals who migrate from place to place according to the seasons and the abundance or scarcity of grass and water. It is from these tracts that *trek-bokken*, or migrating springboks, pressed by long droughts, occasionally inundate the Colony." [2: 40]

1850s Currey, J.B. in Schaefer (2008)

"Namaqualand was hilly and covered with bushes. Bushmanland was a dead level covered with a peculiar grass [*Stipagrostis* spp.], so the contrast between the two was remarkable, for within a few miles of Concordia one passed between stony hills thickly clad with euphorbia and aloe into what seemed a vast silver sea." [p. 92]

1854 Atherstone, W.G. in Schaefer (2008)

Henkries [15 km SW of Goodhouse]:

December "Vast sandy plains (called 'Bushman flats') extending as far as the eye can reach to the eastward, and sloping gently to the north, without a trace of vegetation except a few blackened karroo-bushes, dwarfed by perennial drought, and scattered yards apart, with intervening bare patches of yellow sand, in which occasionally tufts of dry Bushman grass [*Stipagrostis* spp.] were still to be seen. Ridges and interrupted lines of low hills of brocken-up rock, like refuse heaps in a quarry, without a trace of soil or shrub.

"The [Orange] river was flooded, about 260 yards across, with a current of 2½ miles an hour – its banks fringed with willows [*Salix mucronata* subsp. *mucronata*], ebony [*Euclea pseudebenus*], and a species of *Rhus* called raisin tree [probably *Rhus lancea*]. I noted also in the valley a few tamarisk trees [*Tamarix usneoides*], but no trees fit for timber." [pp. 72, 73]

1855 Moffat, R. in Schaefer (2008)

10 February

Alwyn Fontein [Alwynsfontein, 20 km NNW of Kliprand]:

"We moved gently on over an apparently level table land, covered with immense quantities of fine grass, which our oxen could not touch for want of water." [p. 54]

1886–1895 Conradie, W.J. in Schaefer (2008)

"Just once I saw the land metamorphosed into the most unbelievable lushness that can hardly be described. Grass and flowers ... bewitched the traveller. However I have also seen these plains as if the host of the armies of the Lord had rolled over them ... leaving only black stubble. The land can be a paradise on one hand, or a howling wilderness on the other. I have seen Bushmanland covered with springbok hordes that cover the

ground from horizon to horizon. They graze everything, and what they don't eat, they trample into dust with their hooves. The springbok plague is worse than the locusts." [p. 198]

1890s **Scully, W.C. in Schaefer (2008)**

Summer "Bushmanland was like an illimitable field of waving corn, the yellow shocks of 'twa [*Stipagrostis* spp.] grass covering it continually for thousands of square miles. In winter these shocks turn black and crumble to dust. [p. 217]

"It was my fortune in 1892 to witness the last great 'trek', as the annual migration of springbucks [sic] from east to west across the desert is termed." [Here follows a clear explanation of the climatic conditions driving this seasonal migration and a graphic description of it.] [p. 224]



4 BOKKEVELD AND ROGGEVELD

1773 Thunberg, C.P. (1795)

October — Koue Bokkeveld, 37 km north of Ceres:

Mentions that the farmers trek from the Cold Bokkeveld to the Warm Bokkeveld from April to September. [2: 22]

"... The Bocke-veld is tolerably smooth without trees or bushes. Except a few rhinoceros bushes [*Elytropappus rhinocerotis*], which are seldom to be met with, it bears only grass and in some places a kind of tall rushes. Near the mountains are sometimes seen a few low and scattered trees of the *Protea grandiflora* [*Protea nitida*] species (*waageboom*). [2: 24]

"The mountains which lie on each side are quite barren ... [2: 25]

"Amongst the few shrubs that grew in the mountains I found here that curious shrub, the fly-bush *Roridula dentata* the leaves of which are covered with hairs and a tough glutinous substance to which smaller insects adhere. It is placed in the houses for the purpose of catching flies." [2: 26]

21 October — Warm Bokkeveld, 10 km northeast of Ceres:

"The land is level, all over covered with grass, and has but a very few springbucks left, which have for the most part been hunted out of the country". [2: 29]

1774 Thunberg, C.P. (1793)

Daunis [Downes], 22 km southeast of Calvinia:

"*Moorwortel* [moerwortel], an umbelliferous plant, was also spoken of here as a root from which, with water and honey, the Hottentots prepare an intoxicating liquor." [The use of *moerwortel(tjie)* (Afr. *moer* = yeast) or *gli* [*Glia prolifera*] from Winterhoek near Tulbagh was earlier recorded by Thunberg for the first time (Smith 1966: 341) but as this species is not known north of Tulbagh, the Hantam plant is presumably something else, possibly an *Annesorhiza* sp.] [p. 167]

Roggeveld, c. 80 km south of Calvinia:

16 November — "The whole country is destitute of wood, and has only a few small shrubs and bushes of the *Mesembryanthemum*, *Pteronia* and *Stoebe* kinds, and a few others such as othonnas, etc." [p. 168]

"The Roode Sand [Tulbagh] and Bokkeveld mountains were lower than Roggeveld. Carrow [Ceres or Tanqua Karoo] lay between these, higher than the Carrowfield [Knersvlakte] which we had passed through between Olyfant's rivier and Bokkeland, and almost as high as Maskamma [Matsikamma, 15 km southeast of Van Rhynsdorp] and the Bokkeveld Mountains." [p. 169]

"Wild cucumbers is the name given to the coloquintida *Cucumis colocynthis* [*Citrullus lanatus*]". Said to be eaten by Hottentots and the colonists, after pickling in vinegar. Very bitter. "The sheep feed eagerly on them. The *Stapelia articulata repens* [*Pectinaria articulata*], a thick plant without leaves is eaten by the Hottentots as also by the colonists, after being pickled ..."

"*Karre-hout* [*Rhus*] is used by the Hottentots for making bows." [p. 171]

Hantam, 10 km north of Calvinia:

"... we found the fungus [actually a flowering plant] we had so long sought, and wished to see *Hydnora africana* [first described by Thunberg]... It always grows under the branches of the shrub *Euphorbia tirucalli* [misidentification of *Euphorbia mauritanica*] and upon its roots. The lower part of it, which is the fruit, is eaten by the Hottentots, Viverrae, foxes, and other animals." [p. 164] [Marloth (1917: 103) and Smith (1966: 132) give the vernacular names *bobbejaankos*, *baviaanskost*, *jakhalskost*, *kannip* and *T'nau*.]

1798 Barrow, J. (1801)

April — After crossing the Roggeveld in Calvinia he entered the Bokkeveld areas in the mountains of Ceres, after first crossing the arid Doring River basin:

"Bordering these arid plains, on the west side, are several clumps of mountains enclosing meadows and valleys, covered with good grass, that are also called the Bokkeveld but

distinguished from the other by the names of Little Bokkeveld and Cold Bokkeveld. These are ramifications of the Great Chain mentioned in the former part of this chapter; and the valleys and meadows within them appear to have been the beds of lakes in which there still remains a number of springs and swamps that never fail to furnish a copious supply of water in the very driest seasons. The ground is productive of good grass, and yields abundant harvests. The cold in winter obliges the inhabitants to drive their cattle upon the Karroo plains but not to quit their houses, as is the case with those of the Roggeveld." [p. 405]

21 April — Travelled east of Bokkeveld Mountains to the Thorn River [Doringrivier, 50 km south-west of Calvinia]:

Where the water was "…salty as brine" despite it being a considerable stream. "A spring near the river called the Stink fonteyn" was saline "… and had a most disgusting fetid smell."

"The surface was dry and dusty, as in the middle of summer and the few shrubby plants that are common to this sort of country, generally of the succulent kind, were so parched and shrivelled that vegetation seemed for a length of time to have been suspended." [p. 379]

April — Roggeveld, c. 80 km south of Calvinia:

"Leaving the Hantam and proceeding south-easterly, I ascended the heights of the Roggeveld that are separated only from the former by a narrow chasm or opening. These heights are so called from a species of rye grass that is found very plentifully in most of the hollows and on which the cattle, during the summer season, in a great degree, subsist ..." [p. 402] [Loxton (1973: 75) states that this wild rye or *wilde rog* is the only true rye (*Secale africanum*) indigenous to South Africa and is confined to the Roggeveld, the name indicating that it was once abundant in this region. It is now known as *Secale strictum* subsp. *africanum*.]

"For several months of the year the Roggeveld is entirely under snow; the inhabitants are then obliged to descend upon the Karoo [Tanqua] with all their cattle, where, in temporary dwellings of rushes and straw, they remain till the spring." [p. 403]

1801 Borcherds, P.B. (1861)

Tanqua Karoo:

"... the Karoo, a sterile and dry part of the country crossed by the beds of several rivers, the principal of which are the Groote River, Doorn River, Oliphant's River, Tanquas River. At times these rivers overflow, but in summer they shrink into a chain of holes containing muddy brackish water, and some are entirely dry when the rain seasons cease. The banks are generally overgrown with fine mimosa [*Acacia karroo*] trees.

"The plants in this part of the country are commonly thorny and, among the heaths, is the *kanna* bush [*Salsola aphylla*], the ashes of which are very serviceable in soap-boiling, and are collected during the period when the sheep farmers of the Rogge and Bokkevelden occupy the Karoo in the winter months, and when a large pot, boiling to prepare soap, is generally seen in front of the house under supervision of the wife or daughters.

"Several species of ice-plant [*Mesembryanthemum* spp.] are also found in these plains." [p. 52]

October — Roggeveld, Sutherland area:

"Among the heaths [here referring to sclerophyllous shrubs in general], which appeared to me differing very little from those of the Karoo, I found one named the *harpuis* (resin) bush [*Euryops* sp., probably *E. lateriflorus*], containing a juice of a gluey substance having the scent of rosin. Of this herb the sheep are particularly fond, and it forms their chief nutriment." [p. 54]

1803 Van Reenen, D.G.in Blommaert & Wiid (1937)

10 August — Verkeerde Valley [Verkeerdevlei], 52 km east of Ceres:

"This valley contains, so they say, any amount of wild duck and fish but the farms roundabout are of little importance." [p. 249]

1803 Lichtenstein, H. (1815)

October — Lower Bokkeveld [Onderbokkeveld]:

"The valley in which Lokenburg [a farm 63 km west of Calvinia] lies is called the Uye, or Bulb, valley because many sorts of *Iris* [*Moraea*] and *Ixia* grow here, the bulbs of which the Hottentots eat and are very fond of them. The country is fruitful and affords

excellent feed for sheep and horses... The country here is thinly inhabited: in the last 20 hours we had scarcely seen a house, and our host himself said that he had not above four neighbours within reach of half a day's journey on horseback... The principal wealth of the Lower Bokkeveld consisted of sheep. [p. 103]

"In large trees, such as would yield wood for building, the country is wholly deficient. Willows grow on the banks of the Hantam River and mimosa on the banks of the Doorn River: on both are also to be found nut-trees. Wood for building is brought ... from the cedar hills [Cedarberg] and the houses in this district are therefore more roomy ... but built in much better taste than the Roggeveld. In the latter district they cannot get hard wood such as could be used in building on account of the almost impossibility of bringing it over the steep mountain roads." [p. 104]

1 November — Oorloogskloof on the banks of the Doorn River.

3 November — To Matjesfontein, 26 km west of Calvinia, and on to Tyger point [? Tierhoek, 14 km northwest of Calvinia] at the foot of Hantam mountain:

"In the neighbourhood of the house [farmer Van der Merwe] we found a rich harvest of rare plants and insects ..." [p. 111]

November — Southern foot of the Hantamsberg:

"... resembles Table Mountain from the flatness of its top and the steepness of its sides, but it is not so high... What, above all things, however, makes it remarkable and occasions it to be celebrated throughout the Colony is the excellent quality of the grass produced in its neighbourhood; it is reckoned particularly salutary for the feeding of horses. Another advantage enjoyed by the country is that it is free from the pernicious droughts which in some parts of the Colony do so much mischief almost every year. The cause of this particular wholesomeness of the grass is not yet fully understood but the inhabitants are inclined to ascribe it principally to the mountain being covered with snow for three months in the winter while even the highest of the neighbouring hills do not remain white for more than a day at a time." [p. 122]

Lichtenstein further notes that the area south of the Hantamberg would be more fruitful if regular winter rains fell there, but that this is not the case and some areas are too dry to be habitable in summer. [p. 133]

November — Daunis Kloof [Downes kloof], 17 km southeast of Calvinia:

"... surrounded by naked craggy rocks, nor, as far as the eye could see, was a tree nor even a shrub to be discovered. Low, thinly-scattered bushy plants among which the *Mesembryanthemum spinosum* [*Ruschia spinosa*] seemed the most abundant, was all that the earth produced but ... a considerable number of sheep were feeding all about." [p. 117]

On the heights of the Roggeveld mountains, 95 km southeast of Calvinia:

Very stony veld. "The stone is covered with a very fine coat of earth but between the crags grow a variety of delightful aromatic plants such as different sorts of *Oxalis*, *Diosma, Pelargonium, Chrysocoma, Pteronia, Othonna*, and others; the *nudicaulis* [*Cotula nudicaulis*] and *Cotula globifera* [*Oncosiphon piluliferum*] abound more particularly. These afford a wholesome food for the sheep and horses and enable them to subsist during the drought of summer, supposing the usual fall of snow and rain in winter does not fail." [When Lichtenstein was there stock numbers were down because of the severe drought then raging.] [p. 123]

Lower Roggeveld:

Corn is grown here by farmers. "Rye (*roggen* or *rocken*) is not cultivated here though the name of the district might lead to the supposition that it was a principal object of cultivation; but the truth is that the name is taken from a species of grass which grows very much among the clefts, resembling rye and which the colonists call wild rye [*Secale strictum* subsp. *africanum*]." [p. 124]

Middle Roggeveld, from Kruis River to Little Fish River, 50 km northwest of Sutherland [these two small tributaries are about 5 km apart, but on opposite banks of the Fish River]:

"... banks on both sides fringed with willows and mimosas" after he had travelled over "... very dull and uniform country. [p. 128]

"In large trees the country is wholly deficient." [p. 129]

November — Cold Bokkeveld:

Loose stones scattered over the ground. "Over these was thrown a light clothing of plants which, mixing their verdure with the fallow ground, threw a hue of faint green over the whole face of the monstrous landscape." [p. 138]

December — Mostertshoek, Warm Bokkeveld:

"The valley is rich in grass and liliaceous plants, and resembles a European meadow more than anything we had seen." [p. 165]

Brand-valley [Brandvlei] hot mineral springs, 10 km south of Worcester:

"The vegetation here is particularly luxuriant; the margin of the basin is fringed round with thick bushes of the freshest green and, but a few paces from it, some poplars that were planted became in very short time, large trees. Faded plants and leaves, held in the water for a few moments, are perfectly revived ..." [p. 183]

1804 Lichtenstein, H. (1815)

4 March — Klipfontein, just east of Draai, near Touws River:

"In comparison with the Karroo, vegetation might however here be called flourishing. Among the rocks, especially on the south side of the sandstone wall, grew a variety of plants, some of an aromatic kind and many wholly new to me." [p. 97]

May — Tanqua Karoo, east of Karoopoort, c. 60 km northeast of Ceres:

Good rains had just fallen after prolonged drought. Reached 'Pretoriskraal', an outspan place at the foot of the Paardeberg [Perdekop]. "I found a very beautiful plant [*Ornithoglossum undulatum*] scattered about, the only one in blow [bloom] ... it belonged to the lily family ... but was so different from any I had yet seen that it led me to suspect it to be wholly new... Later researches have confirmed this supposition. At our return I found both fruit and seeds upon the plant. (Footnote: Count von Hoffmansegg and Professor Wil[l]denow of Berlin who undertook the examination of my collection of plants recognised in this a new species, and the latter gave a description and engraving of it in the Berlin Society's Friend to the Enquirer into Nature, 1808, under the name *Lichtensteinia undulata*. The generic character is *Hexandria tryginia*. I found another sort of this species afterwards at the Orange River. To that was given the name of *Lichtensteinia laevigata* [identity unknown].)" [pp. 207, 208]

Jakhals Fontein [?20 km south of Sutherland, at the top of the Verlatekloof Pass]:

"In the neighbourhood of the Jakhals Fontein were growing among the rocks several sorts of *Oxalis*, and of the smallest species of *Ixia* [*Romulea* spp.], i.e. the *Ixia rosea, bulbocodium* and *tortuosa*. Besides these I found hereabouts *Ornithogalum parviflora* [identity unknown], several *Melanthia* [*Wurmbea* spp.], and many plants of Syngenesia tribe [Asteraceae], as *Aster* [*Felicia*], *Relhania, Cotula, Mussinia* [*Gazania*], *Gorteria*, *Berkheya, Arctotis*, and *Othonna*. Near the spring the *Anamania laserpitiifolia* [*Knowltonia vesicatoria,* not otherwise recorded from here] was in blow, and higher up, the slopes were almost all ornamented with a shrub which grows from 2 or 3½ feet high, called by the colonists *harpuisbosje*, the rosin tree [*Euryops* sp.], and held in great esteem by them. At the time when it is in blossom, which it was now, a considerable quantity of rosin, or bitumen, exudes from it which, hardened into a sort of beads, covers the young boughs almost entirely. This oxidation the colonists consider as a true balsam for the cure of wounds and, as such, it is eagerly collected by them. It is very glutinous, quite transparent and has a strong smell. When quite dry it is covered over with a white powder and it dissolves entirely in spirit of wine. A salve is prepared from it which is almost the only specific for wounds ever made use of by the colonists." He says that Thunberg never mentioned seeing it. "Professor Wil[l]denow pronounced it a *Cineraria* and called the two sorts which grow together here promiscuously, *Cineraria resinifera* [probably *Euryops lateriflorus*] and *polygaloides* [probably either *Euryops marlothii* or *E. trifida*]. Both have the same properties only the latter is smaller than the former." [p. 221]

1804 Lichtenstein, H. (1815)

July — Roggeveld:

Noticed how the oxen were chewing "... half-decaying bones which were everywhere strewed about, and would masticate them for hours together with great pleasure ... especially at night or when they laid down to chew the cud. We had several times on our journey observed them doing the same thing and we were told here that this principally occurs when they are removed suddenly from one kind of feed to another, particularly if the feed is changed from the sweet to the sour fields [sweetveld to sourveld]. It is very probable that the practice may arise from these animals being troubled by acidity in the stomach which instinct teaches them the bones will correct." [This latter supposition is incorrect. The cause of bone chewing is the development of a pica or craving, induced by a deficiency of phosphate in the animal's system. This makes them chew bones or other objects.] [p. 438]

1811 Burchell, W.J. (1822)

7 July — Left De Straat, 60 km northeast of Worcester:

"We continued over level sandy and open country passing close by a lake called Verkeerde Valley (Contrary Valley). This is an extensive sheet of water which in the rainy season has a constant outlet but becomes stagnant during the rest of the year. It is said to owe its name to the circumstances of the rivulet which issues from it running in a direction contrary to other streams in that part of the country. It abounds in waterfowl, chiefly ducks, geese and coot." [1: 197]

9 July — East of De Straat, and west of Karoopoort, Ceres:

In the mountains Burchell collected 45 specimens, mostly new to him, but he lost them.

"The beautiful *Erica monsoniana* may here be seen growing to a height of 6 feet with long straggling branches covered with paper-white flowers. *Protea nana* [actually *Protea witzenbergiana*] and many other proteaceous plants inhabit the mountain; and on the plain below, in moist places, grow *Protea glaucophylla* [*Protea acaulos*] and *repens*." [1: 203]

13 July — Karoopoort, 40 km northeast of Ceres:

"Under the shelter of two large bushy trees of *karree-hout* (karree-wood). (Footnote: *Rhus viminale* [*Rhus lancea*], a species which I now observed to be dioicous (sic).)

"The soil was clothed with low bushes of *Atriplex albicans* [*Manochlamys albicans*] and *Galenia africana*. The latter produces a remarkable effect on the legs of cattle that graze amongst it by staining them of a green colour. All our oxen, but more particularly the white ones, exhibited this singular appearance. [1: 207]

14 July — "Among these rocks, the *Pelargonium renifolium* was found growing to a height of 2 feet; and a frutescent *Othonna*, 4 feet high ... with its large yellow flowers."

Burchell then gives a list of 22 genera occurring there, and says: "Beyond this, a very remarkable change takes place in its vegetable productions. Four of the strongest and most characteristic features of Cape botany, the Ericae, the Diosmae and the Proteaceous and Restiaceous tribes, entirely disappear; nor did I meet with any of them again till two years afterwards when I entered the same botanical parallel at Kommadakka and Zwartwaterpoort [Kommadagga and Swartwaterspoort, 50 km west of Grahamstown] lying in the same latitude as the Karoo Pass but at 6 degrees longitude more to the eastward. The heath mentioned in the list was, I believe, *Erica plukenetii* ... this handsome species had accompanied me till the last moment, to take a long farewell in the name of the whole family." [1: 208]

15 July — Doorn River, or Little Thorn River, east of Karoo Poort:

"I now gathered for the first time specimens of a very extraordinary grass [*Cladoraphis spinosa*]. Its panicle of flowers formed a bunch of strong, sharp thorns, so rigid and pungent that no animal could graze near it, nor would the naked-legged Hottentots venture to walk amongst it although it was not more than 1½ foot high.

"My men pointed out to me a small shrub [*Gnidia* sp.], the flowers of which they use as a dye for giving a yellow colour to the leather of their preparing." Burchell tested this and found the corolla gave out the colour. [1: 211]

16 July — Groot Doorn River, c. 60 km northeast of Ceres:

"... spot surrounded by *Acacia* trees (*doornboom*) [*A. karroo*] 20 feet high. In the midst of the unvaried and treeless landscape of the Karroo the clumps of thorntrees which occur chiefly by the rivers, were as grateful to the traveller as the oases in the sandy desert. [1: 213]

"The Bokkeveld Karroo is covered chiefly with varied species of fig-marigolds of which the thorny kind [*Ruschia spinosa*] with purple flowers was the most abundant and the most widely diffused ..." [1: 215]

17 July — Near Hangklip, Tanqua Karoo:

Collected *Aptosimum indivisum, Cotyledon parvula* [*Tylecodon reticulatus*], *Euphorbia tenax*. "*Euphorbia mauritanica*, also, was here a common plant, growing out of the dry rocky soil, and was here distinguishable, even at some distance, by its pleasing light-green colour." [1: 219]

Ongeluks River, 100 km northeast of Ceres:

"... an abundance of karroo thorns and large karree trees [*Rhus lancea*] afforded us shelter ..." [1: 220]

18 July — Saw sugarbirds feeding from "... a kind of *Salvia* (Sage)." [1: 221]

19 July — Juk River, between Hangklip and Windheuvel:

Collected 48 specimens. Gives names. [1: 225]

"Of that very curious plant *Codon royenii* I saw but one plant ..." Mentions that Thunberg also saw no more than one. "*Geranium spinosum* [*Monsonia* (= *Sarcocaulon*) *crassicaule*] with fleshy stem and white flowers was more abundant, and well deserved its name, and a succulent species of *Pelargonium* [*Pelargonium crithmifolium*] was so defended by the old panicles, grown to hard woody thorns, that no cattle could browse upon it." [1: 226]

30 July — Snyman's farm, east of Windheuvel, c. 30 km southwest of Sutherland:

"From the neighbouring hills ... a short fleshy plant well known to the Hottentots by the name of *guaap* and to botanists as ... *Stapelia pilifera* [*Hoodia pilifera*, however Burchell actually refers here to *Hoodia gordonii*]. It has an insipid yet cool, watery taste and is much used by them for the purpose of quenching thirst ..." [1: 243]

4 August — Mulder's farm:

"*Euphorbia mauritanica* was here very abundant; and several other thorny species resembling in growth torch thistle (cacti) of South America of which these are in Africa the representative ..." [1: 251]

6 August — Middle-Roggeveld, Sutherland:

On the mountain we found "... *Acaena latebrosa*, and a pretty undescribed species of *Alyssum* [*Alyssum minutum*, native to southern Europe: this is the first record of its introduction in southern Africa].

"A neat pretty shrub of the order Thymelaeae [*Gnidia cyanea,* named by Burchell] growing here to a height of 2 feet and which was never met with anywhere else ... long flowers of an azure colour.

"The rhinoceros bush [*Elytropappus rhinocerotis*] which was not seen anywhere in the Karroo here makes its appearance again. But on the mountain itself I did not observe a single plant deserving the name of tree. [1: 255]

"We had now taken leave of the inhabited part of the Colony and with it all intercourse with white men ..." [1: 256]

7 August — Jakkalsfontein:

An uninhabited farmhouse whose owners had quitted this for their other farm elsewhere on the annual movement from the farm to Legplaas.

8 August — Renoster River, c. 5 km northeast of Sutherland:

"The inhabitants of this district when in want of resin use as a substitute a gum which exudes from different species of shrubs [*Euryops* spp.] which they therefore call *harpuis bosch* (resin bush). Of this gum a considerable quantity might be collected." [1: 258, 259]

1811 Burchell, W.J. (1822)

7 August — Roggeveld:

"...had now left behind the last white man's habitation." [p. 256]

Level but rocky, scarcely a blade of grass; low bushes which had been heavily grazed by sheep driven from the Roggeveld in the summer. [p. 257]

1823 Thompson, G. (1827)

2 August — Hantamsberg:

"The top of this mountain, which is flat and of no great elevation, is considered extremely salubrious for the grazing of horses at certain seasons of the year when the periodical sickness prevails in the adjoining plains." [1: 408]

Welbedag, east of Paardeberg, near Moordenaars Poort:

"The boor [farmer] at this place mentioned to me, among other disadvantages of the farmers in this quarter, the prevalence of a poisonous plant called jackal's bush [probably *Dimorphotheca cuneata*]. This shrub, when other vegetation fails in the dry season, is apt to be browsed upon by the sheep and frequently destroys multitudes of

them. Five to six hundred will sometimes perish in a single day. If however they recover from the sickness caused by this plant they are, in future, proof against its deleterious effects." [1: 410]

1838 Delegorgue, A. (1990)

18 December Oorlogs River, Calvinia:

"From the Hantam Karoo, my companion pointed out Spions Berg [Spioenkop] which forms the boundary between these lands and the country of the boschmanes... Crossed the Oorlogs Rivier; there was no water in it, and on its banks only the *caree-boom* grew [karee, *Rhus*]." [p. 33] [He had come into the Hantam from the Bidouw Valley.]

1839 Backhouse, J. (1844)

11 December Renoster River, 85 km southeast of Calvinia:

"... we made a light descent to the Rhenoster River in the deep sandy bed of which there was a pool... The country on this side of the Groote Riet Rivier is called the Onder Roggeveld... In the afternoon we travelled three hours over this land of stony hills and stunted bushes... Not finding water we outspanned ... in a deep hollow among hillocks of tumbled basalt [actually dolerite] where forage for cattle was pretty good." [p. 504]

12 December Arrived at Hartebeest or Karroo Fish River [63 km southeast of Calvinia] which had a slender stream running towards the Orange River to which it is tributary. "By the sides of the Fish River there were some large willows which were the first trees we had seen since ascending the Nieuwveld."

Three hours trek and they reached the Muiskraal Rivier [60 km southeast of Calvinia] "... which, though not large, had lately been flooded and afforded an abundant supply of water. In the bed of this river, and some others in this part, *Crinum capense* [*Crinum variabile*] was supporting fine heads of fine white trumpet-shaped lily-like flowers."

13 December Arrived at Kok Fontein [Kookfontein, 53 km southeast of Calvinia] from Muiskraal River and Hartebeest River and, in the afternoon reached Lang Fontein [50 km southeast of Calvinia] "... having ascended a range of mountains called Roggeveld Bergen." [p. 505]

14 December From Lang Fontein westwards *en route* to the Hamtamsberg. "We set forward direct from Kamiesberg [Hantamsberg is meant] and travelled for 6 hours among stony hills ... and came to Daunis Kloof on the Daunis River [17 km southeast of Calvinia]. [p. 507]

16 December "This morning we entered the Hantam and pursued the course of the Daunis River, the water of which was running in some places and formed pools in others, but it was often lost in the shaly bed of the river. The country was still karroo ...

"... two hours from Daunis Kloof brought us to Onder Daunis, or Onwetende Fontein [17 km east southeast of Calvinia]... Three hours farther to Akkerendam... An hour further was Rams Kop [c. 6 km south of Calvinia].

17 December "*Brunsvigia toxicaria* [*Boophane disticha*] was now in flower among the karroo bushes. Its blossoms, which form a large spherical head, are smaller than those of the Guernsey lily and are of a pale or dingy red colour ...

"We called at Rivier Plaats [10 km southwest of Calvinia on Oorlogskloof] ... [p. 509]

"We crossed the Daunis Rivier once yesterday and three times today, twice near Buffels Kop Fontein... Passed over some high land ... came to Oorlogs Kloof Fontein ..."

18 December Left Oorlogs Kloof Fontein "... and in three hours again outspanned near the Daunis River. On its banks in this place there were a few small trees of the species of *Rhus* called *karreeboom*."

In another hour came "... to Riets [Leeuriet, 42 km west of Calvinia] from whence both lions and reeds had departed." Travelled on another four hours over high country. "Some of the hills in this part of the country were thickly besprinkled with various species of *Cotyledon*. The thick stumps of one of them [*Tylecodon paniculatus*] presented a curious appearance." [p. 510]

19 December Between Leeuw Riets [Leeuriet] and the William River, a branch of the Doorn River [Willems Rivier, north of Nieuwoudtville]:

"The place where we stopped last night proved favourable for water, and moderately so for food for the cattle. After descending a hill we came upon a country where ... the land was clothed with *Elytropappus rhinocerotis*, the *rhinosterbos*, a low shrub which is said to grow only on country which will produce wheat. [p. 511]

"Our course [going north] now lay along the Williams River, a branch of the Doorn River. The sandy ground along its rocky margin was clothed with proteas and other bushes, and with coarse rushy herbage much like that near Cape Town. In the river there was a species of willow [*Salix mucronata*] differing from that which we had met with in southern Africa."

20 December Bok Fontein and on to Kok Fontein, west of Calvinia:

21 December "Pursuing our journey for an hour we came to the edge of the Bokkeveld Bergen. On the descent of this mountain we first saw the remarkable tree aloe, *Aloe arborescens* [*Aloe dichotoma*] called here *kokerboom* which signifies quiver-tree, the Bushmen sometimes forming their quivers from its branches ..."

Of the mountain there: "Karroo-bushes covered its sides and the plain below scarcely afforded anything but species of *Mesembryanthemum* and *Euphorbia* as the cattle could not eat ..."

Proceeded to Stinkfontein. [p. 512]

21 December "Stink Fontein takes its name from the fetid smell of its water which is brackish and gives out sulphuretted hydrogen. There is at this place a beautiful stream of clear water but it is excessively salt. The common reed *Phragmites communis* [*Phragmites australis*] is abundant along its borders and here, as well as in some other salt places, it produces long prostrate shoots. Our cattle fared sumptuously on the young tops of the reeds, disdaining the *brak*-bushes [*Salsola aphylla*] which were here very plentiful as were also *doornbooms* [*Acacia karroo*] and the *abiquas geelhout*, abiquas yellowwood [*Tamarix usneoides*]. The latter is a bluish arbor-vitae-like bush, 15 feet high with slender shoots and closely imbricated cones about three-quarters of an inch long and as thick as a quill. This shrub is called also *dwaeep* or dabby tree.

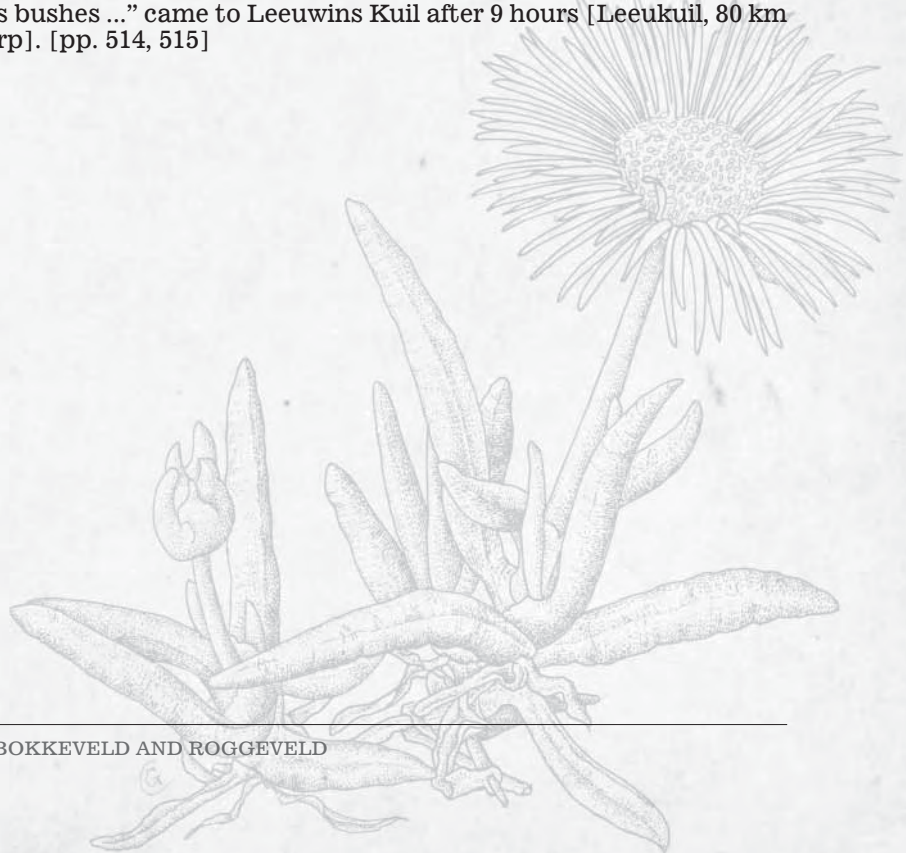
"Under the shelter of one of these our wagon was stationed ... within sight of a remarkable cluster of *kokerbooms* [*Aloe dichotoma*] ... some of them had trunks 9 feet high and 10 feet round with curious plates of bark. Their heads were thickly branched and almost hemispherical. Each branch was terminated by a few fleshy bluish tapering leaves about 1 foot long. They were not in blossom but the flower spikes are short. The wood is lighter than cork." [p. 513]

23 December Stink Fontein:

"Nothing in particular attracted our attention but a jackal drinking the salt water, and some of the plants among which was a pretty *Frankenia* [*Frankenia repens*] with a pink blossom as large as a silver penny. The best water we could obtain was so salty that the coffee made from it failed to quench thirst." [p. 514]

24 December From Stinkfontein "... across the dismal Bokkeveld Karroo [Knersvlakte] upon which a fine *Aloe* [*Aloe falcata*] was scattered. One I gathered had a flower-stem with upwards of thirty branches with scattered blossoms of silvery red.

"... after travelling some distance over granitic sand producing various species of *Euphorbia* and numerous bushes ..." came to Leeuwins Kuil after 9 hours [Leeukuil, 80 km south of Van Rhynsdorp]. [pp. 514, 515]



5 GREAT KAROO AND UPPER KAROO

GREAT KAROO

1770 Moodie, D. (1860; reprint 1959)

7 January — Eastern Camdeboo:

The Boundary Commissioners recommended to the Governor of the Cape, *inter alia*: "... still more farms might be given out along the Bosjesmans Mountains to the eastward as far as a certain height lying between the Bley River [Blyrivier, c. 10 km east of Pearston], being the last or most easterly branch of the Fish River—named by us De Bruyns Hoogte [Bruintjieshoogte, 21 km southeast of Pearston]—for it is true that if the farms now lying in the Camdeboo remain as they are now, it would be, indeed, better; but as the country thereabouts is a more profitable tract, and rich in grass, it is to be apprehended that the occupiers of those farms would avail themselves of this opportunity and take their trek farms there ..." [The eastern Camdeboo around Pearston was, in the 1770s at least, 'rich in grass'.] [p. 4]

1773 Thunberg, C.P. (1795)

December — Great Karoo to Camdeboo, towards somewhere near Aberdeen as seen by Thunberg from the top of the Little Karoo mountains and therefore a description written from hearsay:

"No farms nor houses on this extensive plain ... scarcely any animals reside there except for a short time, in or immediately after the rainy season when a little salt water is found here and there in some of the hollow places ... [2: 100]

"Grass is hardly to be met with in this tract so that it is with difficulty that a horse can find fodder there, but the oxen put up with the brackish water and the salt leaves of the shrubs and bushes." The Hottentots used a number of plants with large, succulent roots: *Mesembryanthemum emarcidum* [*Sceletium emarcidum*], known colloquially as canna-root, *kannawortel*, *kon* or *gunna*; a species of *Cyphia* as *kameka, baroe* or *barup*; and another called *ku*, *Fockea edulis* (Smith 1966). [2: 102]

"The plants, as well as herbs and bushes, stand very thin in the Carrow-veld; and in such a burning hot climate where not a drop of rain falls for the space of eight months at least, it is almost inconceivable how they can thrive at all. Their stems and branches likewise have the appearance of being brittle and quite dried up; but the leaves on the other hand are very thick and filled with briny fluid, and remain green all the year round. These fresh and ever verdant tops and leaves however may perhaps receive from the air, which at night is cool, some moisture for their preservation and nourishment. The ground appears quite burned up ..." [2: 103]

1776 Sparrman, A. (1786)

Camdeboo, from Pearston in the east to Aberdeen in the west:

"Camdeboo is an arid, flat, Carrow-like country, inhabited by Christians [white people] who are chiefly employed in rearing cattle." [1: 160]

1783 Le Vaillant, F. (1790)

7 January — Plaatrivier, 20 km northwest of Pearston:

Went to Snow Mountains [Coetzeeberge north of Pearston, not part of the Sneeuberge proper]. Saw immense stretch of country to the north bounded only by the horizon. The mountains were covered with long grass almost everywhere. [2: 343]

2 February — Over plains to Vogel River [Voëlrivier], which passes Pearston and runs into the Sundays River:

Karoo plains now began; covered in coarse plants and weeds; only small tufts of grass. [2: 357]

1790 Van Reenen, J. in Kirby (1958)

12 September

Between Grootrivier, where it passes through Steytlerville District, and Wolwefontein, 43 km east of Steytlerville:

"Travelled thence to the Wolve Fonteijn through beautiful grassland." [p. 95]

1797 Barrow, J. (1801)

July

Western Great Karoo, having left Hex River Valley *en route* to Constaple [Konstabel, 53 km west of Laingsburg]:

"No huge rocks confusedly scattered on the plain, or piled into mountains, no hills clothed with verdure, no traces of cultivation, not a tree nor a tall shrub, appeared to break the uniformity of the surface, nor bird nor beast to enliven the dreary waste. Vegetation was thinly scattered over a bed of brownish clay, and the low and stunted plants were almost wholly confined to the succulent tribe. Of these the most common were several species of *Mesembryanthemum*, of *Euphorbia, Crassula*, and *Cotyledon*. The grand family of proteas, and the elegant *Erica* had totally disappeared ..." [p. 86]

Konstabel:

A Bastard Hottentot who had tried to farm there had been driven out by the drought. "Two spreading oaks still remained and shaded a spring of excellent water which, however, soon lost itself in the sandy surface of the ground."

Just east of Konstabel:

"Our oxen were beginning to droop for want of pasturage." The stage called Mentjies hoek [Pieter Meintjies, 13 km east of Konstabel] "... afforded a few rushes and abundance of succulent plants among which the bullocks of Africa are accustomed to browse for want of grass; not a blade of any kind had appeared since we entered upon the desert, and shrubbery very thinly scattered over the surface, except in the neighbourhood of the few springs that here and there occurred." [p. 87]

To the Buffalo River, which passes through Laingsburg going south:

15 July

"10 or 12 miles to the riet fonteyn [still so called]... The banks were skirted by a thicket of the doorn boom, or thorntree [*Acacia karroo*], a species of *Mimosa*, called erroneously by the two Swedish travellers who have published their researches in southern Africa [presumably Thunberg and Sparrman], the *nilotica*, or that which produces the gum arabic. The pods of this are very long, and monoliform [sic, moniliform] or divided like a string of beads, whereas the karroo mimosa has short sickle-shaped pods. Armed from the summit down to the ground with enormous double thorns, pointing in every direction ... it makes an impenetrable thicket to most animals except the rhinoceros ...

"The bark, being powerfully astringent, is preferred to that of any other tree in the Colony for preparing leather from raw skins; and the wood, being hard and tough, is used for waggon-poles and as lock-shoes for the wheels. The trunk of the tree gives out great quantities of a clear transparent gum which, however, does not seem to have been applied to any kind of use. It is remarkable that almost every tree which furnished tasteless gums or resins is covered with a bark that is highly astringent and austere to the taste."

Next day crossed the Buffalo River at present-day Laingsburg. [pp. 89, 90]

July

Geelbek, 12 km east of Laingsburg:

"About 10 miles beyond the Buffalo River we encamped for the night upon the banks of a small running brook called Geelbeck winding round a flat sandy marsh overgrown with rushes, and abounding with springs whose waters were strongly impregnated with salt. All the naked sandy patches were thinly sprinkled over with a fine white powdery substance not unlike snow: it was found in great quantities where the cattle of travellers had tied up for the night, and it was observed almost invariably to surround the roots of a frutescent plant that grew here in great exuberance... The plant alluded to was a species of *Salsola* [*Salsola aphylla*], or salt-wort, with very minute fleshy leaves closely surrounding the woody branches. It is known to the country people by the Hottentot name of *canna* [actually *channa*, or *ganna*: the name *kanna*, or *canna* refers to *Sceletium* species (Smith 1966)], and is that plant from the ashes of which almost all the soap that is used in the Colony is made ... [p. 91]

"This *Salsola* grows in almost every part of southern Africa but particularly on those plains known by the name of Karroo, and in such abundance that, supposing the plant, after being cut down and burnt, to be reproduced in five years, the quantity of soda or barilla that might annually be made from the ashes would be sufficient, besides serving the Colony, for the whole consumption of Great Britain ...

"Another shrubby plant with glaucous spear-shaped leaves is generally met with growing among the *Salsola*, the ashes of which also give a strong alkaline lie... The plant was not in flower, but it appeared to be *Atriplex albicans* [*Manochlamys albicans*], a kind of orache." [p. 92]

17 July — Geelbek to Dwkya River, 60 km east of Laingsburg and with the Swartberge 30 km to the south:

"On the 17th we proceeded about 24 miles over a rising country finely marked by hill and dale but altogether barren except that here and there were straggling over the surface a few species of *Mesembryanthemum*, or fig marygold, among which were large patches of the curious and elegant ice-plant [probably *Mesembryanthemum guerichianum*]." [p. 96]

Dwyka River:

"Though the surrounding country was destitute of vegetation, a thick forest of mimosa [*Acacia karroo*] covered the banks of the Dwyka and followed it through all its windings. This plant grows indeed on every part of the desert on which it is the inseparable companion of all the rivers and all the periodical streamlets. Should a traveller appear to be in want of water the appearance of the mimosa is a sure guide to the place where it occasionally at least is to be found." [p. 97]

From the Dwyka River to the Gamka River, 30 km east:

"... in vain did the eye wander in search of tree or lofty shrub, or blade of grass, or living creature. On every side a wide spreading plain, barren as its southern boundary the Black Mountains (Swartberge).... On approaching the river Ghamka the face of the country changed a little for the better. Large mimosas [*Acacia karroo*] skirted its banks among which were also mingled a species of willow [*Salix mucronata*] with a narrow serrated leaf, a *Rhus*, and the *Lyceum afrum* [probably *Lycium oxycarpum*]. A considerable stream of water rolled over the bed of the river." [p. 98]

25 July — Traka River, west of Willowmore and east of Great Loory Fonteyn:

Great Loory Fonteyn "… in which was only a very small quantity of water standing in holes, and this was muddy, salt, and bitter. As there was neither herbaceous nor shrubby plants, and as, since our departure from Swarteberg, the oxen had scarcely tasted vegetable food for, independent of the little time allowed them to browse, the desert offered only the shrivelled stems of the *Mesembryanthemum* tribe, it was thought advisable to continue our journey, though in the dark, in search of a better place of refreshment for our cattle ...

"In the middle of the night we arrived at a place [Little Loory Fonteyn] where once had flowed a rill of water and where still were growing clumps of mimosas, patches of the *Salsola*, and a few other succulent plants. These, like some animals that are said to have the faculty of supplying their own nutriment, are capable of existing for a length of time by the juices which their own roots throw out. Our oxen devoured them with avidity, and the horses made a hearty meal of the branches of the mimosas ..." [p. 102]

26 July — From Little Loory Fonteyn [Klein Loeriefontein farm, 33 km west northwest of Willowmore] to Beervlei, 27 km north of Willowmore:

A distance of 30 miles "…over a bed of solid clay and late at night pitched our tent in the midst of a meadow covered completely with herbage knee-deep. A transition so sudden from unbounded barrenness that on every side had appeared on the previous day, to a verdant meadow clothed by the most luxuriant vegetation, felt more like enchantment than reality. The hungry cattle, impatient to satisfy the cravings of nature, made no small havoc in liberating themselves from the yokes and traces. The name of the spot was De Beer Valley [Beervlei]: it was a plain of several miles in diameter, stretching along the feet of the Black Mountain [Swartberge] and seemed to be the reservoir of a number of periodical rivers whose sources are in the mountains of Niewveldt, of Winterberg, and Camdeboo.

"One of these [the Sout Rivier, which enters Groot River at Beervlei], running at the time with a considerable current, was as salt as brine... Another river, with little current, called the Karooka [the Kariega, which also joins the Groot River at Beervlei] joined the salt river at the head of the valley, the water of which was perfectly fresh, but combined with earth matter.

"The surface of the valley was covered entirely with two or three species of coarse rushy grasses, and all the swamps and springs were buried in large clumps of *Arundo phragmites* [*Phragmites australis*] or common reed (i.e. *fluitjiesriet*). The streams that fell into the valley were finely skirted with tall mimosas which, at their confluence, spread out into a forest of evergreens." Numerous game animals gathered here. [pp. 103, 104]

11 August — From Graaff-Reinet, southwards towards Jansenville:

"Our first route lay directly to the southward towards the sea coast through a country as sandy, arid and sterile as any part of the Great Desert [the Great Karoo, which Barrow had just traversed]."

Passed only two farm houses; the farmers were "…entirely graziers, and for feeding their numerous herds each occupies a vast extent of country. Notwithstanding the miserable appearance of the plains the bullocks were large and in excellent condition, and the sheep were in tolerably good order ..." [p. 115]

12 August — Graaff-Reinet to Zwart Ruggens [just north of Jansenville]:

"On the 12th in the course of 20 miles we saw two farmhouses, one of which was deserted from a scarcity of water, and the following day we also passed two farmhouses." [This shows the scarcity of occupation at that time, and therefore an absence of overstocking by sheep or cattle.]

Crossed the Sundays River nine times during the day and camped "…on an arid plain at a distance from water. This part of the district is called the Zwart Ruggens... Except the plain of our encampment, there scarcely occurred in the distance of 40 miles a hundred yards of level ground ...

"Though vegetation in general was thinly scattered over the stony surface, and languid, some of the eminences were tolerably well clothed with a species of *Euphorbium* whose luxuriance of growth showed it to be congenial to the soil of the situation. The leaves were erect, hexangular, and armed with a row of double spines along each edge [*Euphorbia caerulescens* or *E. ledienii*]. It appeared to be the same species of which Mr Patterson [William Paterson] has given a drawing, but it is not here considered a poisonous plant as he has represented it, though a very obnoxious one as it prevents the cattle from picking up any little herbage that may be growing about its roots.

Another species of *Euphorbium* [possibly *Euphorbia squarrosa*], scarcely rising above the surface of the ground, is here very common. From a central corona issue, as so many radii, a number of round imbricated leaves containing, like all the rest of this genus, a white milky fluid; the central part of one of these plants incloses not less than a pint. The oxen pierce the corona with their incisive teeth, and drink the milk, and it is the opinion of the farmers that they become fat on it. Though less astringent than the fluid that is usually produced by this tribe of plants, it possesses that quality to a very considerable degree, yet no sort of inconvenience is known to attend the use of it to the cattle. The peasantry collect it for another purpose. When warmed over the fire and stirred round with a soft ochraceous stone, it takes the consistency of tar, and in that state is considered as an excellent grease for the axles of their waggon wheels." [p. 118]

14 August — Through The Poort [Maroegas or Naroegas Poort, 17 km east northeast of Willowmore:

"We passed on the 14th a narrow opening called The Poort through a long range of hills running east and west and extending each way beyond the limitation of sight [the Grootrivierhoogte].

"The approach to the chasm was one of the most beautiful things imaginable. For the space of 3 or 4 miles on the northern side the road serpentized through a tall shrubbery diversified with the choicest plants of southern Africa.

"Among these were now in the height of their blossoms a great variety of *Crassula*, a beautiful scarlet *Cotyledon* [*Cotyledon orbiculata*], many species of *Aloe*, some throwing out their clusters of flowers across the road, and others rising above the rest in spikes of blood-red blossoms not less than 15 feet in height, African briony [*Kedrostis africana*] clasping every bush with its vine-like leaves and a beautiful plant resembling the jessamine [probably *Jasminum angulare*] whose clusters of white flowers scented the whole country.

"The road through the shrubbery was composed of a smooth yellowish sandy earth without a stone and had in no part the length of 100 yards in a straight line. The Rietberg, or Reed Mountain [? Baviaansrivier-berge] in the background, blushed to the very summit with a wood of tall smooth-stemmed *Aloes* [possibly *Aloe pluridens*] bearing spikes of pink-coloured flowers." [p. 120]

September — The Camdeboo plains, from Bruintjieshoogte westwards to the Sundays River near Graaff-Reinet:

"From Bruyntjes Hoogte we descended to the Karoo plains of Camdeboo. These plains are intersected by the Bly River, the Vogel River, the Platte River, and the Melk River in their passage from the Sneuwberg [Coetzeeberge] into the Sundag [sic] River. Naked as the surface appeared to be, game of every sort was plentiful... Upon those parched

plains are also found a great variety of small quadrupeds that burrow in the ground and which are known to the colonists under the general name of meer-cats ...” Describes several. [p. 231]

30 September “The Sunday River was nearly dry... We arrived at this village on 30 September having made our long circuitous journey in less than two months.” [p. 233]

9 December From Graaff-Reinet, westwards to Aberdeen and Willowmore and at Beervlei, 25 km north of Willowmore:

Left Graaff-Reinet “…and found the two rivers Sunday and Camdeboo [13 km northwest of Aberdeen] so much swelled with the rains as to he barely fordable. At the poort also of Camdeboo, which opens upon the desert, the small river there was running with a copious and rapid stream, a circumstance that nearly removed every doubt, and scarcely suffered an idea to exist, of the probability even of experiencing any want of water on this side of de Beer valley [Beervlei]. We soon found, by fatal experience, that the extent of the rains had been limited. In fact they had reached only a few miles beyond the Poort. Still we had hopes that the Hottentots River [45 km northeast of Willowmore] a day’s journey further, would contain some water, or, should this even fail, that the Karuka [Kariega, c. 30 km north of Willowmore], whose source was the mountains of Camdeboo, must undoubtedly be full from the late rains that were perceived to fall in those mountains.

11 December “On the 11th therefore, we left the Poort and the farther we proceeded upon the desert, the fainter became the traces of the rain that had fallen till at length they totally disappeared.

“The face of the country very soon presented only one continued sector of uniform aridity and barrenness. The few saline plants, thinly scattered over the surface of white clay sprinkled with red sand, were shrivelled up, crackling under the feet like so many bundles of rotten sticks ...”

Reached the Hottentots River and found it dry.

“Beside the total want of water, there was neither a blade of grass nor shrubbery of any sort upon which the cattle could browse. The succulent and fleshy leaves even of the *Mesembryanthemum* tribe, were shrivelled up to a leathery consistence, and all their juices evaporated. Scarcely a living creature had appeared during the whole day but at night there came into the tent, attracted by the light of the candle, such a multitude of species of insect such as in England are called cockchafers that they literally extinguished the candle and drove us out. This insect was of a pale ash colour, and the thorax was covered with whitish powder.” [p. 327]

12 December From Hottentots River to Kariega River and to Beervlei [Hottentots River enters the Kariega 20 km north of Beervlei]:

Left Hottentots River for Karuka [Kariega] hoping to find water there but there was none, as had been the case at the Hottentots River. [p. 330]

“One single hope remained and that was fixed upon De Beer Valley. This place we knew to be a kind of reservoir in which a number of periodical streams had their confluence from various parts of the distant mountains of Nieuwveld, Winterberg, and Sneuwberg. The distance from our present situation to it was not far ...

“The appearance of De Beer Valley, from a distance, indicated no want of water; it was that of a beautiful green meadow; and the cattle, and the horses, and the Hottentots, the moment it caught the eye, scampered towards it in full career.

“Their looks and manner, on arriving at the spot, sufficiently expressed the disappointment they felt on finding the beds of the pools and rivers all perfectly dry. In one place only, shaded by mimosas [*Acacia karroo*] that had withstood the drought, was a small puddle of muddy water.”

With their hats, they bailed out water for the horses but there was not enough for the cattle. A small pool in some bushes attracted a horse which withdrew immediately owing to the strong salinity of the water. “It was in fact the Salt River mentioned on a former visit to this place. Much of the water having evaporated in the course of the long series of hot weather, the banks were now encrusted with plates of salt that wore the appearance of ice.

The strong grass in many places, and the reeds, still retaining some verdure, were greedily devoured by the oxen, and it is to this circumstance I am convinced their safety was owing.”

Continued to Karee Fonteyn [southwest of Willowmore] where “… a kind of swamp was discovered, containing, in places, a little muddy and fetid water.” [p. 331]

15 December Reached Keur Fonteyn [15 km north of Uniondale] “... and never certainly did any stream of water appear to be more truly valuable and delightful.” [p. 333]

1803 **Lichtenstein, H. (1815)**

November — The Great Karoo:

After describing the shallow soil and the hard core beneath it he wrote: "From these and other concomitant causes, the vegetation must of necessity at all times be extremely poor, and in summer when the sun has dried the soil to the hardness of a brick, it ceases almost entirely. The *Mesembryanthemum* and some other succulent plants: some sorts of *Gorteria*, of *Bergia*, and of asters whose roots, like the bulbs of liliaceous plants, nature has fortified with a tenfold net of fibres under the upper rind to protect them against the hardened clay, such plants alone resist the destructive nature of this inhospitable soil." [p. 152]

Describes how rapidly a rain brings on the plants and their flowers. [p. 153]

The ashes of "… the young shoots of the channa [*Salsola aphylla* (Smith 1966)] ... produce a strong ley" which, mixed with the fat of a sheep, make an excellent soap. [p. 154]

1804 **Lichtenstein, H. (1815)**

February — Travelling across the Pearston District from east to west:

Crossing "... the arid and widely-stretched plain of Camdeboo which, towards the west, is lost in the Great Karroo and has all the characteristics of that country ..." Mentions the difficulty of finding water, how he took water at the Vogel [Voël] River, and how he found none until ten hours later when he arrived at the Melk River [which is only 25 km to the west across the flat plain, with the Plaat River in between].

"It is difficult for an European to form an idea of the hardships that are to be encountered in a journey over such a dry plain at the hottest season of the year. All vegetation seems utterly destroyed, not a blade of grass, not a green leaf is anywhere to be seen ..." [February is the hottest month of the year in the Eastern Cape.] [pp. 448, 449]

1804 **Lichtenstein, H. (1815)**

Possibly in southern Beaufort West District:

"At a camp at a little wood of tolerably high-stemmed mimosas [*Acacia karroo*]..." [p. 41]

End February — Coming down from the north, behind the Swartberg range in Prince Albert:

"The nearer we approached to the Black Mountains the more hilly the country became. On the naked heights we found the *Geranium spinosum* [*Monsonia* (= *Sarcocaulon*) *crassicaule*] growing in abundance, but at this moment it was destitute of either leaves or flowers; nothing was to be seen but tall thick woody stems of an ash-grey colour stuck all over with thorns of about half a finger's length.

"Farther on we came to the Black River [presumably Swartrivier northwest of Prince Albert], a small stream of fine clear water prettily overshadowed with African willows [*Salix mucronata*] and karree bushes [*Rhus* sp.]."

Arrived at Kweek valley, then the name for Prince Albert Village area. [p. 84]

2 March — West of Dweika [Dwyka] River:

At a small river called Buffalo's River, c. 35 km north northeast of Laingsburg, which flows into the Dwyka: "The place where we camped has water all the year round and is called the Wolvefontein. The mimosas [*Acacia karroo*] for a considerable way on the riverside, downwards, had fresher leaves than we had seen for a long time, and their advantageous situation was further manifested by the growth of the thorns, some of which measured five or six inches and a half in length; at their roots was growing a small quantity of grass." [p. 92]

1812 **Burchell, W.J. (1824)**

25 March — Arrived at Graaff-Reinet. [2: 139]

1 April — Graaff-Reinet:

"The village ... is nearly surrounded by the Sunday River and sheltered on each side by lofty mountains decorated with perpetual and beautiful verdure by an abundance of *spekboom* (*Portulacaria afra*) which covers the rocky declivities ... [2: 144]

"The banks of the river were thickly covered with willows and acacias, many of which were clothed with a species of *Clematis* [*Clematis brachiata*] climbing upon the highest branches, while others were decorated with festoons of an elegant species of *Periploca* [probably actually *Jasminum angulare*], the beautiful shining foliage of which was interspersed with a profusion of fragrant white flowers; this plant often grew so luxuriantly that it quite concealed the tree upon which it entwined itself. The branches of these acacias were sometimes ornamented with *Loranthus* [*Tapinanthus*] and two or three kinds of missletoe [sic; *Viscum*].

"Another remarkable plant found on these banks is a climbing sorrel which often mounts by the aid of other shrubs to a height of 15 feet (Footnote: *Rumex* (*Acetosa*) *scandens,* described). [2: 146]

"These mountains are the native soil of an extra-ordinary plant called *hottentots brood* [*Dioscorea elephantipes*]" which he describes fairly fully and notes that the Hottentots eat the "... inner substance" baked. [2: 147]

1822 Pringle, T. (1835)

July

Near Beaufort West, during a bad drought:

"The Great Karroo is an arid desert about 300 miles in length by from seventy to eighty in width bounded by the Sneeuwberg and Nieuwberg ridges of mountains on the north, and by the Zwartberg, or Black Mountain ridge [Swartberge], on the south.

"It is not a sandy plain, and bears no resemblance to the Sahara or the Arabian deserts. It consists of a sort of tableland, or elevated basin... It is crossed by many beds of rivers, or rather torrents, most of which run from north to south, and find an exit for their waters to the coast through a few breaks in the southern chain of mountains. These rivers are for the greater part of the year either entirely dried up, or furnish only a few scanty pools barely sufficient for the wild animals—zebras, quaggas, ostriches, etc., which frequent this inhospitable region. Not infrequently even those brackish pools and fountains also fail, as was the case at our time of the journey, and then the Karroo becomes almost impassable by man, and a large portion of it uninhabitable even by the wild beasts.

"In such a region where rain is rare, and even dew is unknown, the vegetation must of necessity be at all times scanty; and in summer, when the sun has dried the soil to the hardness of brick, it ceases almost entirely. Except along the courses of the temporary rivers, which for the most part are marked by a fringe of mimosas, not a tree, nor a bush, nor a blade of grass, decks the wide expanse of the waste. Low stunted shrubs, resembling heath, numerous species of fig-marigolds and ice-plants (mesembryanthemums), ganna-bosch (*Salsola*), *Gorteria*, asters, etc. some sorts of a prickly *Euphorbia*, and other succulent plants and bulbs, whose root-nature has been fortified with a tenfold net of fibres under the upper rind to protect them during the long droughts, are alone able to subsist in the arid Karoo. During the dry season even these appear to be for the most part parched into a brown stubble ... but in the early spring when the ground becomes moistened with the fall of rain these plants rush into vegetation with a rapidity that looks like enchantment and, in a few days, millions of flowers of the most brilliant hues, enamel the earth."

Pringle then says that the farmers in the Bokkeveld, Sneeuwberg, Nieuwveld and the Roggeveld move their animals from these cold heights down into the Karoo's "...short-lived vegetation." When he passed through, there had been no rain for 12 months. There was no vestige of green pasture.

1839 Krauss, F. in Spohr (1973)

May

Grootrivierpoort, 38 km southeast of Steytlerville, where the Gamtoos River breaks through the Winterhoek Mountains:

Approaching from the south passed "... a completely dry river bed while, high up on the banks Acaciae, *Rhus* and thorny bushes grew, and masses of trunks, rubble, and soil had been washed up." After quite a long ride he reached the poort... Next day he crossed the Springbok Plain [Springbokvlakte]. [p. 53]

15 May

Springbokvlakte, not far from Groot River [Gamtoos]:

"We had already reached the proper Karroo with its bleak scenery. There are vast areas overgrown with low dry bushes, aloes, mesembryanthemums, Stapeliae, and finger-bulbs (*Euphorbia caput-medusae* [actually the similar *Euphorbia inermis*]). The turnip-like roots of this plant have already saved many travellers from starvation. There was no fresh green leaf as far as the eye could reach."

16 May — Crossed the Groot River "...dry foot ... the river itself was overgrown with the usual thornbush. Even this large river had only a bit of brackish water in a few deep holes and it is said that it had not flowed continuously for more than a year.

"The country became more and more monotonous and desolate ... travelling over the vast plain ..." The horses refused to eat the dry bushes.

17 May — Sent the horses "... to the foothills of the mountains where they found some grass" and rode up "... to Dasjes Fontyn (not Dasjes Poort) as it is called on Smith's map. [p. 54]

"About the vegetation of the Karroo there is nothing more to describe. The farmers maintained that the part of the Karroo I travelled was good for sheep and goat farming because those animals could live in the dry short bushes. Even the cattle could live there during the rainy season and were satisfied with fresh *Mesembryanthema*. During the dry period the cattle were fed mainly on the fleshy roots of the finger-bulbs mentioned before, *Euphorbia caput-medusae* [*Euphorbia inermis*]. The farmers hacked the flesh of the plant which looked like a white turnip, off the hard tough rind and fed it, but in pieces, to the cattle. Even the farmers themselves often lived on these, roasting the roots in the ashes. Prepared in this manner they were rather tasteless but cooked with meat and some pepper, they remind one of turnips. Eaten raw they tasted slightly sweetish, juicy and cool, but left a tang in the throat which probably originated from the milky juice of the *Euphorbia*." [p. 55]

UPPER KAROO

1797 Barrow, J. (1801)

20 October — From Graaff-Reinet northwards over the Sneeuberg, and to the Orange River, Hanover District:

"On 20th October we departed from the Drosdty, crossed the Sunday River and its accompanying Karroo, and at the distance of 10 miles north-westerly reached the foot of the mountains within, while a narrow defile of 5 miles in length and a steep ascent of 3 miles at the farther extremity led upon the extensive plains and among the scattered mountains that compose the Sneuwberg." Camped there. [p. 237]

22 October — Encountered a swarm of locusts: "They covered a space of about one square mile in extent so completely that the surface appeared to the eye at a little distance to have been burnt and strewed over with brown ashes. Not a shrub nor blade of grass was visible ..." [p. 242]

23 October — North side of Compassberg on the Sneeuberge:

"The rills of water that meandered through the meadows were covered with the common reed [*Phragmites australis*], and these were frequented with vast flocks of small birds ..." Red Bishop-bird, *Euplectes orix*, in particular. [p. 243]

"The termination of the Snowy Mountains is about 12 miles to the north-eastward of the Compassberg, and here a port or pass through them opens upon a plain extending to the northward, without a swell, further than the eye could command. [p. 244]

"The plants that chiefly prevailed on the elevated parts were tufts of long grass, small heathy shrubs, a beautiful *Mesembryanthemum* [*Delosperma*] with large clusters of small bright, red flowers, and another that seemed to differ in nothing from the former except in the colour of the petals, which were white.

"Besides these were also a small *Diosma*, and two species of *Iris* with tall spikes of flowers, one blue [*Moraea polystachya*] the other yellow [*Moraea spathulata*].

"The lower parts of the plains were charmingly embroidered with almost the whole tribe of syngenesious plants [Asteraceae]. Of these were most abundant various species of *Arctotis, Othonna, Cineraria, Aster, Calendula, Athanasia, Tanacetum, Senecio* and *Gnaphalium,* all of them, at this time, in the height of their bloom.

"But that which mostly discriminated the Sneuwberg from other parts of the country was the total want of shrubbery. For miles together these elevated plains produced not a stick. We passed one kloof between two hills in which stood about a dozen small mimosas [*Acacia karroo*]; and nothing could more strongly have marked the scarcity of bushes than the prodigious quantity of nests that these contained ... sparrows etc. ...

"It is a remarkable fact that there are many persons in the Sneuwberg who have never seen a tree. Even the commandant, who for many years had traversed the whole country to the northward in expeditions against the Bosjesmans, had never seen a wood till he came with us on the present journey into the Kaffer country. Very few of the houses have a stick of any sort standing near them. The violent winds, more than the intensity of the cold, injure the growth of the plants, for oaks, even [those] that in Europe bear almost any degree of cold, will not grow on the Sneuwberg.

"The fuel used by the inhabitants is the dung of animals collected in places where the cattle are nightly pent up ..." Notes that grain crops do well there. [p. 246]

25 October — Sneeuberg to Gordonsfontein, 30 km southeast of Hanover:

"On the 25th we proceeded about 20 miles to the northward over a flat surface of country consisting chiefly of meadow-ground well watered by numerous springs and small rills but destitute of every appearance of a bush or shrub. On every side were grazing a multitude of wild animals, as gnoos, and quachas, and hartebeests, and springboks in such large troops as in no part of the country had before been observed. The place of our encampment was called Gordon's Fonteyn, and near it stood the last Christian habitation, towards this quarter, in the Colony." [p. 253]

26 October — From Gordonsfontein to the Seekoei River, tributary of the Orange River:

About 6 miles from Gordonsfontein: "The Seacow River, and indeed all the streams that behind the Snowy Mountains ran northerly, were remarkably distinguished from those whose currents took an opposite direction by having their banks covered with tall reeds, the *Arundo phragmites* [*Phragmites australis*], and destitute of shrub or tree, whereas the latter were always included by mimosas, willows, and other tall arboreus plants.

"The northern rivers consisted generally of a chain of deep stagnant pools connected by beds of narrow channels that for the greatest part of the year are entirely dry. Some of the gats, or holes, of the Seacow River were five or six miles in length, and deep enough to have floated a line-of-battle ship." Notes that they once contained many hippos. [p. 254]

October — Plettenberg's Beacon on the Seekoei River:

"The baaken of the Governor was less a subject of curiosity than one that appeared on the opposite bank of the river. This was a clump of about half a dozen bushes, the first that had occurred for any many days." These were full of locust-bird nests [Wattled Starlings, *Creatophora cinerea*; locusts were swarming]. "They had devoured every green herb and every blade of grass, and, had it not been for the reeds on which our cattle subsisted while we skirted the banks of the river, the journey must have been discontinued, at least in the line proposed." [p. 256]

Orange River, near the Seekoei River confluence, 48 km north northwest of Colesberg:

"Though there had not been a cloud in the sky since we left Graaff Reynet, very heavy rain must have fallen in some part of the country through which it [Orange River] flowed, for it was evident from the wreck of trees, and plants, and grass, yet green, thrown up near the banks of the river, that the water had subsided twelve or thirteen feet.

"The banks were fringed with the karroo mimosa [*Acacia karroo*], the willow of Babylon [*Salix babylonica*] and the *Rhus viminalis* [*Rhus lancea*]." Hippo were very numerous. [p. 294]

"In the rocky mountains of the long pass that brought us to the river ... the grandest object that occurred in the kloof was a plant of the liliaceous tribe [*Crinum bulbispermum*] with undulate ensiform leaves; the flower-stalk was 6 feet high and an inch in diameter, supporting an umbel that consisted of 20 to 30 flowers; the petals on the outside, striped red and white, were within of a clear snowy whiteness; the anthers were bright crimson." [p. 295]

Orange River, Colesberg District, travelling eastwards:

"On each side of the river the surface of the country was as naked and barren as the Karroo, and infinitely more disagreeable, being loose sand; but at the distance of a couple of miles on the south side, were plains well covered with herbage. In several places the inundations [from a recent flood] had extended beyond a mile from the river as was apparent by the wreck of the large trees, roots, shrubs, and ridges of sand, lying in a long continued line. The elevation of the ground, at such points of inundation, could not be less than 30–40 feet above the level of the river at its ordinary state.

"The Orange River, like the Nile, has its periodical inundations, and, as well as that river, might be made by the help of canals to fertilize a vast extent of adjoining country." [p. 297]

5 November — Orange River to Suurberge, 10 km northwest of Steynsburg:

"... we left the river, and, turning off to the southward travelled over a flat country of a strong clayey soil well covered with fine grass but destitute of wood or bushes and ill-supplied with water. Springs here and there occurred, and these were easily discovered by the patches of tall reeds that surrounded them." Game plentiful. [p. 301]

7 November — Suurberge, 30 km northwest of Steynsburg, looking for a cave with a sketch of a unicorn on its wall:

"In no part of the journey had been found such an assemblage of rare plants as grew on the sides of the Zuure-berg. The number and great variety of the *Geranium* family especially of that genus which, by a late botanical arrangement, has been named *Pelargonium*, was truly astonishing.

"The *Xeranthemum fulgidum* [*Helichrysum aureum*] with its brilliant yellow flowers, and the still more showy *speciosissimum* [unidentified *Syncarpha* species: *S. speciosissima* is restricted to the southwestern Cape], were equally numerous; not less so than many species of the everlasting *Gnaphalium* [*Helichrysum* is meant].

"Two species of that very singular and beautiful plant the *Disa*, found also on Table Mountain, decorated the margins of the springs upon the Zuure-berg." [p. 303]

November — Probably at Teviot, 19 km west of Hofmeyr:

Describes four salt-water lakes and pans. "Close to the margin of the third salt-pan were several springs of clear water, having a bitter-earthy taste, and, along the rills that fell from these into the pan, grew tall reeds and rushes into the very centre of the salt. The others were entirely naked, without a bush or shrub on their banks.

"The surrounding country was also destitute of plants, and the surface was strewed over in many places with thin pellicles of salt. The quantity of game on the neighbouring plains..." was enough to make them pitch their camp there [so the grazing must have been good]. [p. 306]

1800 Somerville, W. in Bradlow & Bradlow (1979)

July — Tarkastad:

"... travelling only under night, we moved ... in one body making large fires wherever we found dry reeds or bushes to announce our approach ...

"From Tarka we went nearly north or little to the eastward of it towards Bamboos Berg travelling along a very good road through a country abounding in bushes such as the sheep pasture upon. The second day's journey we passed along a winding river wherein, from the drought, the water did not run, but in many places we found deep pools: the whole of its winding course was overgrown with reeds about 20 feet high than which nothing can be imagined more rich in appearance. These were set fire to where the river had left them dry, as a token of peace to the natives. On the bank of this river at the bottom of a rugged precipice, exhibiting at a little distance the resemblance of a ruinous castle shaded and obscured in the front with spreading trees ... the ground was strewn with human bones in such number that there remained not a doubt of the place having at some period not very remote been the abode of some unfortunate horde ..." Tells of a story that Klaas Smit took a commando of Boers and wiped out the Bushmen there. [p. 44]

Near Martha and Mary, 10 km south of Tarkastad:

"... we had passed the 'Two Table Hills' which form part of a ridge on one side of which the water flows through Cafferland to the eastern ocean and on the other side to the Great or Orange River... The country, excepting just upon the ridge, is destitute of trees of every description ... we were obliged to carry some pieces of a kind of *Mimosa* [*Acacia*] growing there in our waggons for fuel.

"Clouds of smoke ascended from behind every hill and one vast fire was seen near Winter Berg which we never lost sight of. The country is productive of abundance of rich grass filling extensive plains between mountains which is consumed only by the herds of antelopes which are numerous of various sorts.

"The water is better and clearer than in our settlement. In many places we found the plains burned by the natives, a common practice before the rainy season, that the young grass sprouting may entice the antelopes to there within their reach." [p. 46]

23 October — Near Brak River, southwest of Kareeberg:

"The journey of this day was enlivened in some measure by a progressive improvement in the face of the country, grass was seen in many spots which for some time had been a rare sight, and the faces of gems buck, eland, hartebeest and quacha were found in every direction in greater numbers as the grass became more plentiful." [p. 68]

27 October — Schietfontein, south of Kareeberg:

"... an excellent spring (Skeet Fountain) ... after we passed through a chain of mountains by that name... The whole appearance differs from the general character of the hills we had seen. They rise here uniformly by a very gradual ascent from the level plains at their base, and terminate in a regular table... The table at the top of these mountains is nearly covered with loose fragments of ironstone, with a few thorny shrubs and tufts of grass growing between them... There are many branches in every direction enclosing extensive plains into one of which we now entered and travelled 5 hours across it to a dub [deep pool] of dirty water which had been collected from the rains, and was now nearly dried up by the sun. Fuel was still scarcer than water but here we were obliged to spend the night with a fire of cowdung ...

"Wild onion, or rather shallot [*Allium dregeanum*], grew in plenty about the margin of the small stream ..." [p. 70]

1 November — Groot Riviers Poort [Prieskapoort], 10 km south of Prieska:

"Having entered after two hours into the pass leading through the mountains, the appearance of the country was altered for the better, instead of everything being parched and withered, the grass was growing, and a row of thorn trees in full verdure covered the course of the temporary stream leading to the Orange River at which we arrived in 6 hours. It is almost incredible that in a journey between 500 and 600 miles not a tree had been seen except what had been planted, and of these very few ..."

Mentions an island in the river: "On the lower part of this small island are some willows ..." [p. 75]

2 November — Orange River, Prieska Drift:

"The banks are clothed with wood but only along the margin of the river, chiefly willow [*Salix mucronata*] and karee wood [*Rhus lancea*], and along the tributary streams conducting water to it from almost every hill, though now dried up, are thorn trees." [p. 77]

1801 Borcherds, P.B. (1861)

1 November — Grootrivierpoort, Prieska:

"At Groote Rivier's Poort we saw high hills and mimosas; one species in particular with crooked thorns named the wagt een beetje (tarry a little) [*Acacia mellifera*], and several heaths [sclerophyllous shrubs are meant here] quite different from those we had observed before. The poort is the entrance to the Great or Orange River known by the natives under the name of t'Gariep, and leads to the ford we had to cross called the Prescoas Drift [Prieska Drift]."

Of the Orange River there: "... the banks adorned with beautiful trees such as the willow, mimosa, wild apricot [possibly *Vangueria infausta*] and other evergreens, with the tops of some of the branches hanging over and dipping into the water." The river "...sometimes divided by islands grown with trees 25 or 30 feet high." [p. 64]

1801 Borcherds, P.B. in Bradlow & Bradlow (1979)

Upper Karoo:

"... we reached the Kuilenburgs River. There is nothing noteworthy about this river, the banks are overgrown in some areas with thin reeds ..."

Arrived at a place near the Great and Little Riet Rivers. [p. 209]

Along the banks of the Orange River [? near Prieska]:

"... nearly everywhere along the banks of the Orange River one finds a plant, described by M Vaillant, with the name of *Euphorbia* [perhaps *E. virosa*]. This plant is very juicy; this juice greatly resembled milk but is sticky when it dries, a strong poisonous effect has been ascribed to it—indeed so strong that when small slices are thrown into a pool of water, animals that come and drink the water fall dead to the ground with the passing of a few minutes. I have recorded this detail which I heard various people tell and because it confirms what the abovementioned author alleged about it."

Bows and arrows made by the Bushmen:

"The wood of the bow itself is made of a type of tree commonly known as *caree boomen* [*Rhus* sp.] which is very tough and pliable. The arrows are made of a type of reed fairly common along all springs and rivers flowing here, and known amongst the farmers as *fluitjies riet* [*Phragmites australis*] being about one and a half or even two feet long ..."

The point of the arrow "... is smeared with poison extracted from several poisonous plants and from the fangs of the most poisonous snakes ..." [p. 210]

Bushmen: "Another part of their food consists of a type of small bulb, not unpleasant in taste and most nutritious. These bulbs are usually the size of small marbles and are commonly called ... *mans uijntjes* [unidentified bulb] by the Hottentots... The gum of the thorntree also serves them as food. [p. 211]

"... the women are supplied with a sharp-pointed stick and knob to dig out *uintjes* for their meals ... [p. 212]

"The most important trees along the banks are the weeping willow [*Salix babylonica*, or possibly *S. mucronata*], known everywhere, and the thorntree, *Mimosa nilotica* [*Acacia karroo*], the camel thorn tree or *Mimosa giraffe* [*Acacia erioloba*], the wild apricot tree [possibly *Vangueria infausta*] being a tree whose leaves greatly resemble those of the ordinary apricot tree but which has a very crooked trunk, and another tree [*Acacia mellifera*] which is smaller than the aforementioned trees, the latter is covered in very curved thorns so sharp and tenacious that when a sheep's fleece is caught in them, one has the greatest difficulty in rescuing it. The leaves are small, almost oval in shape and doubled on top of each other, the seedpods are also doubled on top of each other and white in colour, the seeds are very similar to those of the lentil tree. These are most useful for constructing a hedge or fence to prevent the animals penetrating.

"A certain tree also grows here known among the local inhabitants as the *rosijntjes boom* [*Grewia flava*], this bears a small bunch which when dried, greatly resembles the currant grape but is slightly paler in colour and very pleasant in taste.

"There are many other small shrubs, e.g. the *ganna bosch* [*Salsola aphylla*] and the *kareebosch* [*Rhus* sp.] may be found here in great numbers." [p. 214]

1801 Somerville, W. in Bradlow & Bradlow (1979)

21 February

Along the south bank of the Orange River towards Augrabies Falls:

"I never recollect to have seen a more rapid vegetation than had taken place in five days at this spot—from bare ground everything was now green in consequence of the late rains ... about 10 or 15 English miles lower is a considerable waterfall over which half the river runs—with a narrow stream on either side. Six or eight days journey (ox waggon) lower down is a very lofty waterfall [Augrabies Falls] over which the natives say they have seen hippopotami, large trees, and whatever the strong current catches dashed to pieces. [p. 179]

"Here the sheep feed entirely upon bushes and almost every bush that grows is armed with prickles—so strong that the sheep, tho' they have hair and no wool upon their skins, are so completely entangled that they fall a prey to the wolf or jackal unless disengaged by the shepherd." [p. 182]

1802 Borcherds, P.B. (1861)

January

South of Prieska:

"Before us was a level desert as far as the eye could reach behind barren mountains with nothing but a little dry grass and some *Aloe* trees [*Aloe dichotoma*] known by the name of *kokerboom*, the trunks of which are used by the Bushmen for their quivers." [p. 101]

Bushmen in the upper Karoo: "The weapons of the Bushman tribes are the bow and arrow, assegai, and the kirrie. The bow is commonly made of karee wood [*Rhus lancea*] and very tough... The shaft of the arrow is a reed about two or two feet six inches long." [p. 110]

1803 Lichtenstein, H. (1815)

13 December

Left Graaff-Reinet for the Sneeuberge:

Southern slopes of the Sneeuberge: "Not being intersected like most other mountains with deep wooded chasms but presenting in many parts low marshy hollows, in these the horned cattle find excellent pasture while the ridges and heights, being scattered over with small aromatic plants like those found in the Roggeveld [Calvinia], particularly the *Cotula globifera* [*Oncosiphon piluliferum*], by these the sheep are furnished with abundance of the most salutary nourishment." [p. 3]

1803 Van Reenen in Blommaert & Wiid (1937)

Graaff-Reinet:

"In my opinion the Drostdy should not have been placed here, on account of the bad grazing for both cattle and sheep." [p. 221]

July — Sneeuberg:

"This region is covered with snow in the winter and is then of use neither to people or for cattle on account of the severe cold. Firewood or bush is not to be found there and the residents have to resort to dry cow-dung. Every colonist living in this area has special farms in the low country which is called Caroo, and which consists of a reddish soil overgrown with shrubs named *vygebosjes* [Aizoaceae], the latter being excellent for sheep. It is an 'opslagveld' [after rains a profusion of various small, short-lived plants spring up in the open spaces between the Karroo bushes; this growth is designated 'opslag' (Pettman 1913)] and only becomes good in the winter owing to the frequent rains, at which time it is very fertile and also provides grass for the cattle. This Caroo lies at the foot of the Sneeuwberg and along the Zeekoe River, Wolvenkop, Fenter Fontein and the Renosterbergen. Every stock-breeder has one or more farms in this district for the winter, and for that reason the inhabitants often have to take up three or four loan-farms." [p. 231]

[There is a Wolweberg 33 km south of Middelburg town and another Wolweberg 15 km east of Middelburg and near Rosmead; a Wolvenkop is 15 km north of Middelburg, almost halfway between Middelburg and Noupoort. Fenterfontein could be Ventershoek near the Lootsberg Pass. The Renosterberg is 25 km southwest of Middelburg. These places are all in Middelburg District, east of the Agter-Renosterberge, which form the watershed between the Klein Seekoeirivier and Seekoeirivier flowing north into the Orange System and the Kleinbrak River flowing south into the Great Fish River.]

21 July — Orange River, near confluence with Seekoei River:

"... we left the Great River. This river has its rise in Kaffirland in the east and, in the north of the Colony, flows through Namaqualand, beyond Zak River, and then into the sea. It is one of the largest rivers in our country, the current being very powerful, and it harbours hippos in abundance.

"The regions that we have passed through on our journey from the foot of the Sneeuwberg to this river are all suitable for sheep and cattle, but not for agriculture. There are few springs of importance and the only water to be found is in the river. Wood is scarce and only along the river is there a small quantity of willow wood.

"This region resembles the Zak River area. The climate is very warm. Caroo and grassveld alternate." [Zak River flows through Kenhardt, Williston and Calvinia Districts.]

25 July — Southwards, along the Seekoei River:

"From the Great River we journeyed along the Zeekoe River up to its source. All the veld traversed is Caroo or a reddish clay soil overgrown with *vygebosjes* [Aizoaceae]. The inhabitants prefer this veld for their sheep and only use Sneeuwberg when they are forced to do so." [p. 241]

Koup, southern Beaufort West District:

"This farm has wood and water in abundance, good grazing for stock, and it is suitable for all forms of agriculture." [p. 225]

30 July — Gamka River, going southwest:

"Along the river there is much wood. The land is low-lying and flat and consists of Caroo veld covered with *vygebosjes* [Aizoaceae]. It is particularly good for sheep and cattle. Horse-sickness is very severe and recurs nearly every year." [p. 245]

1804 Lichtenstein, H. (1815)

January — Sneeuberge:

"Not a tree grows in these hills, and Mr Barrow's remark that there are people here who never saw a tree or a wood, or even a copse, in their lives, is perfectly just and correct. In those places only, where the rivers begin to flow into the plains, are they shaded with mimosas [*Acacia*] and other little trees... The want of wood here is so great that no supply can be had even for fuel and the people are obliged to burn the dung of their cattle dried ..." Notes that swarms of locusts are a menace here at times. [p. 5]

Buffelsrivier, which passes Murraysburg:

At a spring of water "... round it grew abundantly several sorts of *Rhus* which are here all comprehended under the one appellation of *kareeboom*. From them the spot is often called Karreebosch." [p. 27]

Channakraal [Gannakraal] near Riet River, 33 km southwest of Fraserberg, and 13 km northeast of Seleryfontein:

"Since we quitted the [Cold] Bokkeveld we had not seen a single tree, and even the Karroo now appeared to us a cheerful country, since there at least mimosas [*Acacia*

karroo] were growing along the banks of the streams. A *Lucium* [*Lycium*] of 2 feet high or a bush of *Euphorbium* [*Euphorbia mauritanica*] of a yellow green, was a remarkable thing here, so few plants 2 feet high, or green, were to be seen." [p. 227]

Bushmen in Bushmanland and the Karoo, referring to poisons used on arrows: "The principal ingredient is always the poison of serpents but as this is of itself too thin and evaporates too soon, they mix it with the poisonous sap of one of the larger species of *Euphorbia*, called wolf's-milk, which thickens... Another sort of poison mentioned by them is extracted from the bulb of the *Haemanthus toxicarius* [*Boophone disticha*] which is a sharp alkali and, when mixed with blood, decomposes it immediately.

"The tame Bosjesmans call the sap in Dutch *bolletjies* poison. Another sort bears the name of rockpoison from being a sort of brownish viscous substance occasionally found among the rocks." [p. 247]

Quivers are made from the hollow stems of an *Aloe* [*Aloe dichotoma*]. The colonists called this quiver-plant "...and it is nearly allied to the *Aloe perfoliata.*" [p. 249]

14 May — 'Brakke Fontein' *en route* to 'Patrysse Fontein' [Patrysfontein], c. 65 km north of Fraserburg:

"On account of the poor supply of pasture here we set off again ... and stopped after some hours at a small spring between two hills where there was some grass. This place is called Patrysse fontein." [p. 256]

15 May — Lions Fountain [? Leeufontein somewhere near the Fraserburg/Carnarvon oundary]:

"Plentiful spring of water. Camp was between two hills with a dry bed of a river thickly grown over with dried reeds. These we set on fire, partly to drive out the game ... partly as a signal to the Bosjesmans that we were come in a friendly errand... Vegetation here was so poor that we could not find bushes enough to cook a little soup. Fortunately, some months before a party of missionaries had travelled through the country carrying with them a large number of cattle, and the dried dung of these animals served us as fuel both here and in several other places as we proceeded further. As the poor cattle are obliged in these parts to feed almost entirely upon the woody stems of the *Mesembryanthemum spinosum* [*Ruschia spinosa*], the dung contains a great deal of this which makes it burn almost like turf." But the campers had to take care not to let the smoke enter the saucepans because the smoke "...gives a very unpleasant flavour to everything impressed with it. [p. 257]

"Among the plants which I found near the spring in a somewhat green and flourishing state, the most abundant was *Myrsiphyllum*, or *Medeola asparagoides* [*Asparagus asparagoides*]." [p. 258]

May — Schietfontein [Skietfontein] Mountains in the Kareeberge, c. 10 km west of Carnarvon:

The valleys and slopes: "Not a plant survives here which could furnish food to a man were he driven to the utmost necessity, so that even the very Bosjesman flees these valleys; and there are probably many into which no human being ever yet entered." [p. 261]

Schietfonteinpoort: "One shrub fell under my observation which was very remarkable. Every twig from the root upwards, even to the smallest, came forth by three together so that each one formed with those that stood by its side, as well as with the principal stem, an angle of 120 degrees, i.e. one third of a complete circle. This shrub is known to the colonists by the name of tri-thorn [possibly *Rhigozum trichotomum*] and it appears to be of the lycia family, having the property in common with the tribe that the end twig is always sharp pointed. It was not in flower, nor were other shrubs there." [p. 264]

'Groot Rivers Gate', north of Kareeberge *en route* to Buffelsbout:

"Saw with no small delight the valleys lying before us displaying a richer verdure than any we had yet traversed, and upon the declivity of the hill I found several beautiful plants, some even in blow [bloom]... The plants were almost all new to me. There were not only succulent plants such as quiver-tree and others of the *Aloe* tribe but flowers of the finest perfume and the richest hues, belonging to the tribes *Justicia*, *Salvia, Acanthus, Ruellia* [Acanthaceae and Lamiaceae] and others."

Then travelled "...through a wide spread valley... The greater part of the thickets were composed of a shrub with feathery leaves and strong thorns curved backwards ... but were not then in flower. Krieger [accompanying the expedition] told us that when he quitted the country he had carried cuttings with him to his own house and had raised hedges from them which, on account of the thorniness, were impenetrable to all beasts of prey, even to the jackal. Besides these, I saw several sorts of *Lycium* and *Cestrum* covered over with the most beautiful insects [he mentions buprestids] ... upon these bushes I observed in many places a parasite plant with very fine deep red flowers which

was a real ornament to the valley. (Footnote: M. Wendland, principal gardener in the botanic garden at Her[r]enhausen, determined this plant to be a new species and ... gave it my name [*Lichtensteinia oleifolia*, now *Tapinanthus oleifolius*] which is described among his 'Collection of Native and Foreign Plants'. Vol. 2, Tab.39. Professor Wildenow [Willdenow] has however restored it to the *Loranthus* from which it varies only in the number of its filaments.)" [pp. 277, 278]

End May — Orange River, 20 km north of Prieska:

"Many of the trees which ornament the banks of the river are of a considerable height. Among them may be particularly distinguished the *Ziziphus mucronata* of Professor Wildenow [Willdenow], vulgarly called buffalo's thorn. The stem of the tree is rarely more than 2 feet thickness... Lower down, on the steep banks, are mimosas [*Acacia karroo*], different sorts of willows, and karree bushes. Among the latter the colonists included several sorts of *Rhus*. Between these, and farther into the plain, are many shrubs, particularly of the tribes *Lycium, Cestrum*, and *Zygophyllum*. To get down these banks to the river itself it is best to follow the paths beat by the river horses [hippo] in their nocturnal excursions." [p. 280]

12 July — Prieska drift on the Orange River, 20 km north of Prieska [on the way back to the Cape from the north at Kuruman River]:

"Here for the first time we again saw karroo mimosas [*Acacia karroo*] which did not grow north of the Orange River; they seem the exclusive produce of the countries near the coast of Africa. In the parts we had lately visited their place was occupied by several species nearly related to them, as the beautiful giraffe tree [*Acacia erioloba*], the elephant's thorn and the red ebony tree [*Acacia haematoxylon*]. The wood of the latter is the hardest and finest of any in this country next to the giraffe tree although the stem is seldom more than four inches thick in diameter... From experiments I then made I found that in its specific weight, closeness, and hardness it far exceeds the black ebony [*Euclea pseudebenus*], and in working acquires so fine a polish that an attention to it may very well be recommended to the inhabitants of the Colony as an object of trade from which great profit might be derived. (Footnote: ... a flute made of it by M Eisenhardt of Göttingen, a most excellent instrument-maker ... produced a full and fine tone of sound.)"

Of the specimens Lichtenstein brought back from this trip Professor Wildenow [Willdenow] "... classed them all collectively in the species *Acacia* and calls these two principally *Acacia giraffe* [*Acacia erioloba*] and *haematoxylon* [*Acacia haematoxylon*]." [pp. 425, 426]

1808/9 Stockenstrom, A. (1887)

Sneeuwberg to the Orange River:

"The immense desert tracts between that river [the Orange] and our Colony, westward of the Seacow River, destitute of permanent springs, and therefore uninhabitable by human beings for any length of time, are notwithstanding interspersed with stagnant pools and 'vleys' or natural reservoirs of brackish water which, however bad, satisfy the game." The veld "... literally swarms" with springbok "... when perhaps one year out of four or five a lasting drought leaves the pools exhausted and parches up the soil naturally inclined to sterility. Want then, principally of water, drives those myriads of animals either to the Orange River or to the Colony when they intrude in the manner above described. But when the thunderclouds pour their torrents upon our burnt-up country, reanimating vegetation and restoring plenty to all granivorous things, then we could perhaps afford to harbour these unwelcome visitors, their own instinct and our persecutions propel them again to their more sterile, but more peaceful, valleys and flats, to recruit numbers lost during their migration ... [1: 38]

"On every farm between the great Sneeuwberg Chain and the Orange River we found a Bushman family, or kraal, easily maintained by the enormous flocks of sheep and game... The line running through what is now the town of Colesberg and Plettenberg's Beacon [on the Seekoei River] then constituted the northern boundary of the Colony, and no Colonist was found living permanently beyond it... We, however, fell in with several kraals of the savages ..." [Shows that with game in vast numbers, and with the Hottentots' sheep, the country was still in good shape] [1: 39]

1809 Collins, R. in Moodie (1860)

Renosterberg, 25 km southwest of Middelburg:

January — "The country about Rhinocerosberg abounds with fine pasturage and good water; but this and the neighbouring districts are destitute of wood, and the inhabitants are obliged to use cow-dung for fuel."

Groot Fontein, 27 km northwest of Richmond:

"This is a very fine spot having two large springs of excellent water within a mile or two of each other." [p. 2]

1809 Collins, R. in Moodie (1860)

January — North of the Winterberg range, c. 30 km south of Tarkastad:

"Winterberg is said to be at most times buried in clouds, and is therefore subject to a temperature as cold as its name implies. It is destitute of trees and every species of wood adapted for fuel; but a few bamboos [*Thamnocalamus tessellatus*] were growing on its summit... There is a great quantity and variety of game in this neighbourhood which is said to be also much frequented by lions... The soil here is well adapted for fattening sheep and cattle. The former increased very rapidly, though subject to a fatal disorder." [p. 6]

15 February — Northeast of Maraisburg [Hofmeyr], probably on the Doring River:

Came down from the north *via* Doornhoek "... as far as an inhabited place called Flakke Poort [Vlekpoort]."

16 February — To Elands River.

17 February — Reached Schaap Kraal [Tarkastad] and "... the first house we had seen during three weeks and the last on that side of the Colony. The want of inhabitants between Doorn Hoek and Schaap Kraal is occasioned by the deficiency of water at most seasons. In other respects it is a desirable spot for settlement and the neighbouring farmers often take their cattle to browse upon the rich pasturage it affords. It abounds with almost every species of game." The farmer there was La Boscagne [Labuschagne] and there were three Bushman kraals of about 70 people. [p. 5]

1811 Burchell, W.J. (1822)

9 August — East of Kuilenberg, c. 20 km northeast of Sutherland:

The hills there "... were clothed with abundance of shrubby bushes, none being more than 2 feet in height and as much in diameter. The most prominent shrub was a kind of *Lycium* of about 4 or 5 feet high of robust growth and very thorny [probably *Lycium cinereum*].

"*Mesembryanthemum campestre* [*Ruschia campestris*], now in bloom, everywhere decorated the road; and a kind of *Hebenstretia* [*Oligomeris dipetala*], whose flowers smell like mignonette, was not infrequent. The surface of the land is perfectly destitute of grass; a kind of fescue grass being a rare and solitary exception." [1: 260]

Along the Riet River, c. 35 km northeast of Sutherland:

"The scenery possessed, in some points, a character that had not been noticed before. The rushes which in many places thickly hedged-in the sides of the ponds exhibited a species of the picturesque and quite peculiar. [1: 262]

"From a kind of rush [*Pseudoschoenus inanis*], which here is remarkably abundant, the river may possibly have derived its name, as very little of the true reed is anywhere to be seen unless it may be found in some other part of the river... Of the rush which is called the *hard matjes-goederen* the Hottentots in these districts make all their mats which are much more durable than those made of *Cyperus textilis* distinguished by the name of *sagt* (soft) *matjes-goederen*, the material of all the mats made near Cape Town. The first forms a thatch that will last for many years; all the huts of the Roggeveld colonists are covered in it." [1: 263]

14 August — From Riet River to Stinkfontein, 50 km southwest of Fraserburg:

Passed over open and generally bare but rocky barren country "...scattered over with low stunted bushes without a single verdant blade of grass in the interstices. Here and there, short compact patches of a singular kind of grass [possibly *Stipagrostis obtusa*] of an arid look were observed most of which were in part dead ..." [1: 266]

15 August — To Seleryfontein, 45 km southwest of Fraserburg:

"Over a level country thickly covered with small shrubs, amongst which a thorny kind was most abundant and troublesome [*Ruschia spinosa*]." [1: 267]

24 August — East of Little Riet River, which is at Kannahoek, *en route* to Klein Quaggafontein, 35 km southwest of Fraserburg:

"... scarlet flowers of a new *Aloe* [*Aloe claviflora*]." [1: 271]

26 August — "I here met with a remarkable species of *avond-bloem* (*Hesperantha*) ..." [1: 273]

28 August — Klein Kwaggafontein near Fraserburg:

"... plenty of excellent water but on the other hand firewood was exceedingly scarce. [1: 277]

At Dwaal River I first met with *Hibiscus cucurbitinus* [*Radyera urens*]." [1: 278]

30 August — Arrived at Zak River, 40 km northeast of Fraserburg:

River very low but still running. "Its banks were clothed with the mat-rush [*Pseudoschoenus inanis*] and here and there with some fresh grass produced by rains which appeared to have fallen lately. Not a tree was seen to break the uniformity of the plain through which it meandered or to mark its course ..." [1: 280]

9 September — Karreebergen [Kareeberge], northwest of Carnarvon:

"In this dry unpromising district grows one of the most beautiful little shrubs of the Bushman country. It was *Mahernia* [*Hermannia grandiflora*] not more than a foot in height covered with large scarlet bell-shaped flowers. [1: 295]

"In the middle of a large plain, covered with low arid bushes surrounded by moderately high mountains", he found at Schietfontein that "... the green leaves of a kind of onion [*Allium dregeanum*] growing here wild, were plucked by many of the Hottentots and boiled with their meat... I found them as good tasted as garden onions." [1: 296]

10 September — That part "... abounded in bushes 3 and 4 feet high of that singular shrub *Rhigozum trichotomum* whose stiff branches, constantly dividing and sub-dividing in a most regular manner ... have obtained for it the name of *driedoorn*." [1: 298, 299]

11 September — Plain north of Kareeberge:

"... producing no shrub above a foot in height excepting two or three kinds of *Lycium*. Grass was observed between the bushes but at this season it was short and very thinly scattered, yet, after the rains have fallen, this plain is said to be covered with verdure." [1: 300]

12 September — Arrived at Buffelsbout, but did not stay long; proceeded north:

"For the first three miles the soil was sandy and of a red colour abounding in a species of grass (*Poa*) 18 inches high, the stalks and leaves of which were at this time dead, and white withered. The succeeding part of the day we travelled across plains tolerably well scattered over with bushes. The predominating shrubs were *Eriocephalus decussatus, Rhigozum trichotomum*, and that already mentioned as the *Dais* [*Gnidia polycephala*] ..." The *Rhigozum* was not in bloom. [1: 303–305]

13 September — Moddergat, between Buffelsbout and Prieska, c. 50 km southwest of Prieska:

"Moddergat is situated in a very extensive hollow flat which, in the rainy season, becomes a lake, as was evident from the want of vegetation and the mud which everywhere covered its surface to a depth of one foot ... nearly half a mile across ... and its two extremities stretched eastward and westward farther than we could see." Burchell found there "... a deep hole about 50 feet in diameter in which there was still some good clear water remaining." [1: 307]

On quitting the above "... the land was hard and dry, and plentifully strewed with stones and common white quartz. Low shrubs abounded everywhere; the soil itself was quite red but covered with fine grass, green only at the bottom while the withered stalks remaining showed them to be chiefly a kind of *Poa*." [1: 308]

14 September — Zand Valley, somewhere south of Prieska on the road up from Buffelsbout:

"The larger shrubs were about five feet high, a plant quite new to me by the name of *haakedoorn* and is the same thorny bush which gave us so much annoyance the night before, where it was about 7 feet high." He got caught up in its thorns. "In revenge for this ill-treatment I determined to give to the tree a name which would serve to caution future travellers against allowing themselves to venture within its clutches [*Acacia mellifera* subsp. *detinens*, described by him as *Acacia detinens*].

"On picking up from the stony ground what was supposed a curiously-shaped pebble, it proved to be a plant and an additional new species of the *Mesembryanthemum* tribe; but in colour and appearance bore the closest resemblance to the stones between which it was growing [probably *Lithops* sp.]." [1: 309]

15 September — The last day's journey to the Orange River, more or less via Prieska, to about Scotch Ford:

"We passed over a country rather flat and clothed only with bushes, none of which exceeded a foot in height... Although so small they are completely ligneous plants, and

more resemble trees in miniature than shrubs... Nothing deserving the name of tree, not even an *Acacia*, is to be seen between the Roggeveld Mountains and the Gariep [Orange River] a distance of 360 miles."

A little after 20h00 "... we found ourselves in the midst of trees taller than the waggons... After driving another half hour further between trees" he found his advance party of Hottentots already camped in a grove. [1: 314]

16 September — The camp is "... surrounded by thickets, and large trees of *Acacia*." [1: 315]

At the Orange River "... the drooping willows leaned over the tide ... the long pendent branches dipping their leafy twigs in the stream [*Salix mucronata*, which he describes as *Salix gariepina*]. [1: 316]

"The willows (*wilgen-boom*) which ornamented the banks bore a great resemblance in their growth to the weeping willow of our gardens, but are botanically different; they occupied the lower rank close to the water's edge growing to a height of 50 feet; the next was filled chiefly with *zwarte bast* (black bark) [*Diospyros lycioides*, described by him as *Royena decidua*], *karreehout* [*Rhus lancea*], and *buffeldoorn* (buffalo thorn) [*Ziziphus mucronata*]; and the uppermost with the *doornboom* [*Acacia karroo*]. (Footnote: The name of *zwarte baste* is given in the Cape Colony to *Royena lucida* [*Diospyros whyteana*].)

"The willow had just put on its new leaves... The black-bark and buffalo-thorn had not ... but the soft umbrageous foliage of the karree-tree remains equally verdant at all seasons.

"Along the bank I found a poppy four feet in height with a showy bright-red flower like that of a common corn-poppy, an interesting and unexpected discovery in these southern latitudes of a genus so decidedly northern [*Papaver aculeatum*, described by him as *Papaver gariepina*]." [1: 317]

17 September — He gathered "... a beautiful parasitic plant [*Tapinanthus oleifolius*] growing on the branches of *haakdoorn* [*Acacia mellifera*] and now in full flower." He describes its nature: "The flowers grow several together at every leaf, and their tubular shape, half split open, red without and white within, might very well have caused it to be compared with honeysuckle... A large shrub covered with a cotton-like seed was met with for the first time and occurred in great abundance [*Tarchonanthus camphoratus*]. It was at this time that I first noticed the fact of the genus being dioicious [sic, dioecious] ..." [1: 320]

1812 Burchell, W.J. (1824)

29 February — First day south of Engelsche Drift on the Orange River, 35 km northeast of Prieska:

"After quitting the plain and crossing an extensive level covered with abundance of grass 3 feet high" came to the Brak River. Camped here and named it FIRST STATION [These place names are Burchell's own, for his convenience], 14 miles south of the Orange River. [2: 18]

"The country everywhere around us was flat and open and though lightly covered with low stunted bushes, not a tree was to be seen." [2: 19]

1 March — Left First Station and went south, stopping "... by a solitary buffalo-thorn [*Ziziphus mucronata*] where we found a pool of fresh water." [2: 20]

The ground was "...covered principally with such shrubs and plants as afford alkali: there were the *kanna* bush, and another whose name of *brak-boschjes* [probably *Manochlamys albicans*]. Yet the name of *brakboschjes* does not exclusively belong to this plant. A sort of *Statice* [*Limonium dregeanum*] was found growing in abundance on spots of saline nature, here described. [2: 21]

"Over a plain having no visible termination ... strewed with pebbles but scarcely any grass and not a bush or shrub higher than 1½ feet." Made camp "... amongst a few stunted *drie-doorns* [*Rhigozum trichotomum*] the largest of which was not higher than 3 feet ". He called this DRIE DOORN STATION. It was 24½ miles south of his First Station. [Probably still south of Prieska.] [2: 23]

2 March — Stopped at a pool of fresh water and called this FRESHWATER HALT, which was 12½ miles south of Drie-doorn Station—probably on Prieska-Hopetown road, 50 km east southeast of Prieska:

"Reeds, exactly resembling common reeds of the English rivers, almost everywhere mark its course. These are a sure indication of fresh water and, if attended to, will often be of service in pointing out a spring at a distance... Some species of trees, easily distinguishable from afar, are also peculiar to moist situations" such as karree-wood, *Rhus*

lancea; the buffalo-thorn, *Ziziphus mucronata*; the willow, *Salix mucronata*, and the karoo thorn, *Acacia karroo*.

Burchell turned the oxen "…loose to graze in some meadows of excellent grass." He had been travelling at 2½ miles per hour. [2: 28]

Travelling from Freshwater Halt:

"The surface of this plain was composed of good loamy soil, generally covered with shrubs two feet high but varied with extensive patches of grass and sometimes with bushes of *Lycium* of a greater height than any of the other shrubs. Plants of that singular genus *Stapelia* [*Hoodia*] were here and there observed, particularly one with large flowers of a blackish-red colour, and another with yellow flowers, growing in lateral umbels." [2: 31]

Camped that night "… on the banks of the river which we here found almost hidden by grass of the most luxuriant colour and growth... This spot is… GRASS STATION," 10¼ miles from Freshwater Halt. [2: 32, 33]

3 March — Left Grass Station going southeast to the eastern part of Hyena Mountains where a Bushman, Kaabi, lived. [p. 36]

POVERTY KRAAL, 8¾ miles from Grass Station. [2: 40]

"... across the mountain, and descended to an extensive plain covered with three-thorn shrubs and abounding in pitfalls for catching wild animals ... halted for the night at a spot on a bank where we were surrounded by the most beautiful field of grass." This was his ASTRILD STATION, so called because of many birds known as common waxbills, *Estrilda astrild,* he found there. This was 9¼ miles from Poverty Kraal.

4 March — From Astrild Station to HUNTER'S STATION, 10½ miles away:

"A few miles beyond Astrild Station we passed through an opening formed by an insulated round hill on one side and by the end of a rocky ridge on the other, and entered upon a plain which had more the appearance of a verdant cornfield than of wild uncultivated country." [2: 41, 42]

5 March — From Hunter's Station, 65 km west of Hopetown:

"We passed over a tract thickly covered with a variety of bushes the height of which was generally about two feet and intermingled with mesembryanthemums. Such land is called Karro ground by the Cape farmers who esteem it more wholesome and better suited to the African sheep than grassland." [2: 44]

PYRAMID PASS:

"Soon after leaving this spot we crossed a low neck between rocky hills and came upon a small plain covered with grass ..." [2: 45]

KAABI'S KRAAL, 4¾ miles from Hunter's Kraal:

"This spot is distinguished among the natives by the name of Waterpoint implying … that it is the point of the Hyena Mountains close to which the river flows." [Possibly 48 km west southwest of Hopetown.] [2: 47]

9 March — Departed from Kaabi's Kraal. "We followed the general direction of the river ... crossed it four times. Thus far its course had not been marked by tree or bush larger than those of the plains but here it began to assume a better character; besides a more constant supply of water, it was distinguished by abundance of reeds and bushes of greater size."

Camped at REED STATION, 4¾ miles from Kaabi's Kraal.

10 March — Next day "… the surface became more hilly ... but was everywhere thickly covered with small bushes, although in other respects it was a wide open country ..." [2: 80]

11 March — QUAKKA STATION, 18½ miles from Reed Station, at Strydenburg, 55 km southwest of Hopetown. [2: 83]

12 March — Left Quakka Station going southeast. He saw ahead "… an exceedingly large Table Mountain." His map shows it as 'Bushman Table-Mountain'. [2: 84]

KRAAIKOP KRAAL, in Kraaikop Tafelberg, 15¾ miles from Quakka Station. [2: 85]

13 March — From Kraaikop Kraal to Tafelberg.

Over some plains. Footnote: "In these plains a small species of *Loranthus* was observed growing on the branches of the larger shrubs and, being of a hoary appearance, was named *Loranthus canescens* [*Septulina glauca*]." [2: 90]

Camped at HALFWAY SPRING, 17½ miles from Kraaikop Kraal, 24 km northwest of De Aar:

"It was concealed in a thicket of tall reeds inhabited by numbers of little birds." [rooibekkies or common waxbills, *Estrilda astrild*]

14 March — Over a plain "…nearly 9 miles across, surrounded by mountains." At the southern end of this plain passed through a poort "…as I afterwards learned was known to the Boors by the name of Rhenoster Poort." Here Burchell saw the tracks of a waggon. "On examining the bushes, stones, and grass over which it had passed we ascertained that it must have been two years since that time and that its direction was southeast." [2: 91]

Rhenoster Poort [? De Poort, 6 km northwest of De Aar]:

"On the rocks of this pass I found a new and very neat shrubby species of *Salvia* ...", but he was unable to collect specimens. Here were "… lofty mountains covered with grass." [2: 93]

15 March — Camped at SOUTHERN STATION, 12 miles from Rhenoster Poort.

16 March — GERANIUM ROCKS, 8 miles from Southern Station:

Of the plants of the *Geranium* tribe he had seen previously on his travels "… none had been found of so shrubby a growth, or perhaps of so pleasant a scent as the species which decorates this place [*Pelargonium tragacanthoides*, which he named]."

17 March — Departure from Geranium Rocks going south, c. 55 km north of Richmond:

"We travelled over two large plains which derived a beautifully verdant hue from an extraordinary abundance of *Cyperus usitatus* which, from its growth and appearance, might easily be mistaken for grass; but it was remarkable that no true grass was observed in any part of these plains, the surface being almost everywhere clothed with this plant, intermingled in various places with low bushes such as are generally met with in lands partaking of the nature of Karro. This is the *Cyperus* already described as producing the numerous little bulbs which constitute one of the principal articles of food used by Bushmen. These plains are about 5 or 6 miles across... At the termination of the plain we climbed a rocky ascent which brought us up to an elevated mountainous country of a mile or two in extent, abounding in bushes and grass ..." [2: 99]

Burchell mentions a change here in the geology which "… was accompanied by a change in the botany: their sides were clothed with a richer foliage and with many plants hitherto new, particularly a species of *Rhus* which grew from between the rocks ... generally of the height of 6 or 8 feet. This elegant shrub was found nowhere but in these regions [*Rhus erosa*, described by him as *Rhus serraefolium*]." [2: 100]

18 March — Heading towards Groote Tafelberg; arrived at Jacob van Wyk's farm, 14 miles from Geranium Rocks. [2: 102–105]

Near Groote Tafelberg, 33 km north of Richmond:

"Over a plain nearly 6 miles across ... uniformly covered with low bushes diminishing in size as we advanced till they were, in that part where we halted, not higher on an average than 9 inches, nor could I find any which exceeded a foot." Arrived at POND STATION, 15 miles from Groote Tafelberg and Jacob van Wyk's. [2: 110]

19 March — Groote Fontein, 2 miles east of Pond Station, 27 km north northwest of Richmond:

After travelling over "... a black plain" not a tree was anywhere to be seen in the whole district. [2: 111]

Came to Krieger's Fontein (Piet Vermeulen's):

"The pasture of this farm, and of the whole of the neighbouring country generally, is thought to be less adapted for oxen than for sheep... The country in which we now were is that division of the Graaff-Reinet District which is called Achter-Sneeuberg. It is, as well as several others in this part of the Colony, very deficient in trees of dimensions large enough for planks." Timber for house-building is yellowwood [*Podocarpus* sp.] brought from Boschberg (Somerset East) and Baviaans River (Bedford), and willow [*Salix mucronata*] from the Orange River. [2: 113]

Departed from Kriegersfontein—Klein Tafelberg was 2 miles away. "About 11½ miles brought us to the highest and principal branch of the Zeekoe Rivier ... at the residence of Nieukerk." The river was in flood. [2: 114]

21 March — Descended Sneeuberg, from west of Compassberg into Graaff-Reinet District:

"The first step in our descent from the chilly region brought us to a fine grassy flat covered with what is a rarity in southern Africa, a real turf or sod though in many places

abounding in the mat-rush." But firewood was very scarce here. They arrived at Piet van der Merwe's farm. [2: 125]

"The rhinoceros bush [*Elytropappus rhinocerotis*] grows abundantly on different parts of these mountains and was the only fuel which I saw used at this house, other firewood being exceedingly scarce." He encountered much mist here. [2: 126]

Stopped at what he called COLD STATION. [2: 129]

"The mat-rush [*hard matjesgoederen*, *Pseudoschoenus inanis*] grows here in abundance, but not a tree was anywhere to be seen. With this rush all the houses in these parts of the Colony are thatched ..."

22 March — 8½ miles from Nieukerk's on to Herholdt's farm, beyond which is the Sneeuwberg:

"In less than two hours after passing Herholdt's we gained the most elevated point in the road over the Snow Mountains. Here the declivities of the valleys were covered with abundance of thick grass of a growth equally fine with that of which we call 'sheep's fescue-grass' [the European *Festuca ovina*]."

On his left, Burchell saw Spitzkop and remarks "It has been in later years very unnecessarily renamed Compassberg." [This renaming must have been between 1812, when he was there, and 1822 when his book was published.] This was the highest point of the range: 2 503m. [2: 124]

23 March — "Soon after we left Cold Station we descended below the clouds and mist into a drier region." [2: 132]

Five miles from Cold Station, possibly at about Suurplaas, 54 km north northwest of Graaff-Reinet:

"We arrived at a branch of the Garst (Barley) River [? Gats River]..."

The descent from here was very steep. "Here we found trees of a larger size than we had seen for some time, and the deep glens and bold sides of the mountain were rendered verdant by an abundance of large bushes of *spekboom* [*Portulacaria afra*] and were well covered with wood of rich and beautiful foliage. Amongst these were many which I had never met with before ... (Footnote: *Grewia robusta* and *Celastrus linearis* [*Gymnosporia linearis*], *pen-doorn*, both described)." [2: 133]

1812 Burchell, W.J. (1824)

29 April — In the Coudveld on the Sneeuwberg [? Koueveldberge], 46 km northwest of Graaff-Reinet. This range is the source of the Buffelsrivier running through Murraysburg District:

"Near the house were the largest 'Spanish reeds' [*Arundo donax*] which I had observed in any part of the Colony: but I do not recollect having seen the bamboo, which requires a warmer climate, growing at any place of the Snow Mountains, or in the Achter Sneeuberg."

Came to the "... Buffels River (Buffalo R.), the highest branch of the Camtoos River... On the banks of the Buffalo River which we now crossed three times, I noticed a willow [*Salix mucronata*] which appeared to be of a species different from the willow of the Gariep: the branches were less drooping and it was here, at least, a much smaller tree." [2: 172]

Burchell had here taken a sweep to the west but had not returned to his previous course, going north.

4 May — Back at Groote Fontein.

5 May — Passed Pond Station, 15 km south of Groot Tafelberg; to Wortel Fontein, a farm "... about 6¼ miles beyond which we found the last colonial habitation on our road; and as no one was residing here at this season we took possession of the empty house." [2: 184]

10 miles north of Elandsfontein into "... the wild country of the Bushmen." [2: 185]

6 May — Passed Nuwejaarsfontein, 22 km south of De Aar.

17 May — South of the Orange River "... over a flat covered principally with a species of *Mesembryanthemum* [not identified] ... at a spot abounding in rushes" and which he called Rushy Station and where the water was perfectly fresh. "At this place I found *Marsilea quadrifolia*, an European plant, growing in the water and along the bed of the river in abundance" [actually he refers here to *Marsilea burchellii*, described from his collection from near Asbestos Mountains]. [2: 208]

18 May — Lower Station, Prieska District. Reached the Gariep [Orange River] near Engelsche Ford and "... I hailed the airy *Acacia* groves and drooping willows... Throughout the whole country which we had traversed in our present journey from the Sunday River to this place, not a single *Acacia* had been seen and if this fact be coupled with another al-

ready noticed (on p. 314 of Vol. 1), that this tree does not exist on the Roggeveld Mountains and the Gariep, a very singular geographical circumstance will be discovered that, although that part of southern Africa which has fallen under my observation everywhere else abounds in acacias, there appears to be one large and central region perfectly destitute of every trace of that plant. This region is bordered in the south by the ridge of the mountains, or rather cliffs, which extends in one continuous though irregular line from the farther Bokkeveld, along the northern side of the Great Karoo, connecting the Roggeveld Mts with those of the Nieuweveld and Sneeuberg... It is bounded in the east by the Rhenosterberg and the Nu-Gariep [eastern branch of the Orange River running from the Vaal River confluence eastwards into Lesotho] and on the north by the Gariep, and does not, probably, extend so far westward as to the sea coast." Burchell calls this region the Cisgariepine. [2: 210]

21 May — Engelsche Ford:

At an island "… of considerable length" in the Orange River: "A few trees or bushes grew on it and some rushes of a new and peculiar sort [possibly *Scirpoides dioecus*] which were never met with in any other part of my travels... The woods along the banks were still in their autumnal dress." [2: 215]

1820 Campbell, J. (1822)

September — Near the Seekoei River, c. 25 km northwest of Colesberg:

"After halting a few hours at the Seacow River we went forward amidst many droves of springboks and other game which were feeding on low bushes, for not a blade of grass was to be seen." [2: 323]

1823 Thompson, G. (1827)

4 June — Near Seekoei River:

"The want of timber is also a great drawback to the settlers here. I have not seen a tree nor even a bush large enough to supply a walking-stick since we left the banks of the Sundays River [Graaff-Reinet area]. For fuel the inhabitants are forced to use dried cowdung."

Despite irregular rain in the summer months "… this pasturage is salubrious and capable of supporting a great quantity of stock." [1: 102]

Nearing the Orange River:

Over monotonous country "... the soil looked more fertile and was covered with fine grass." [1: 105]

23 June — South of the Orange River, from Read's Drift towards Van der Walt's Drift:

"The country through which we passed was much encumbered with the accursed *haakdoorn*, or *wagt-een-betje Acacia detinens* [*Acacia mellifera*] from which I had formerly suffered so severely." [1: 245]

28 June — Along Brak River [Ongers River], ? Britstown:

"The country is excellent for grazing and is resorted to by the colonists on that account. About 40 miles westward is situated a tract of country called Burder's Lake by the missionaries. It is a valley about 50 miles in length occupied by a chain of pools which are in fact part of the channel of the Brak River, a periodical stream which only flows after copious rains, and even the pools are frequently dried up for a whole season." [1: 260, 261]

1823 Thompson, G. (1827)

July — Describes the Great Karoo as 300 miles long, about 80 miles wide and only fit for humans for a few weeks in the year, after the fall of periodic rains. "Principal inhabitants are wild game, especially springboks, and the beasts of prey that accompany them, and who, as the pasturage and water fail in one quarter, migrate to another." [1: 270]

2 July — Karoo, west of Beaufort West:

"The Karroo was at this time dismally parched up, not a blade of grass nor any green thing was to be seen except the mimosas [*Acacia karroo*] which skirt the banks of the dried-up river." [1: 273]

10 August — Nearing the Hartebeest and Gamka Rivers; crossed Hartebeest River somewhere south of the Orange River, Kenhardt District:

"The country in general appeared excessively dry and barren, though here and there were spots covered with withered grass... Not a living creature was to be seen ... along the banks of the river which we found in many places covered with mimosas, the certain sign of a climate never subject to any great severity of cold. This plant is even found on the more elevated tracts of South Africa." [1: 438]

Riverbed. "The banks were overhung with an umbrage of mimosa [*Acacia karroo*] and willow [*Salix mucronata*]... Dug for water—very brack... To assuage the cravings of hunger our Hottentots gathered and ate a little gum from the mimosa-trees. I also attempted to eat a small quantity but could not swallow it." [1: 440]

11 August — Riverbed north of Nieuwveld, Beaufort West District, towards Fraserburg.

Because of the long drought the wild game had almost entirely deserted this part of the country. [1: 442]

Koranna people along the banks of the Hartebeest River, Kenhardt "... live upon game when they can kill any and upon such esculent roots as the country produces; and when these resources fail they support life as well as they can upon ants, and gum, and the twigs of a certain bush... At this time, the extreme drought, by destroying all vestiges of the edible bulbs over the surface of the country, had reduced these people to extreme destitution ..." [1: 449]

14 August — Just below confluence of Hartebeest and Orange Rivers:

"We found the banks of the Gariep, as we proceeded downwards, so closely beset with mimosa and willow groves and thickets that it was extremely difficult to get access to the water ..." [2: 13, 14]

Continuing down the Orange River westwards: "The views we occasionally caught of the river from the rising grounds on its banks, were very magnificent. The rich foliage of the willows along the margin, and the thickets, or rather forests of mimosa trees, spreading for at least a mile on either side, formed a striking contrast to the parched-up plains and hills out of the influence of its periodical overflowings." He had gone 50 km down the river. [2: 15]

1825 Philipps, C. (1827)

Behind the Winterberg, *en route* to the Swart Kei River:

"We continued sharp riding through the kloof for some time until we began to ascend an abrupt hill, from the top of which we saw nothing but wild desolation without tree or bush. We had the Tarka on our left, descending into an extensive valley... Continuing our course in the valley, naked of bush as the hills, we began gradually to ascend, and on top had the fine prospect of an extensive country well covered with mimosas [*Acacia*] and the channel of the river T'kei [Kei] was seen about the centre." [p. 266]

1829 Stockenstrom, A. (1887)

From Beaufort West eastwards to Colesberg, and south to the Winterberg:

9 August — Reply to inquiries by the Commissioners of Enquiry as to why Stockenstrom had included Bushmen country into his new boundary delimitations:

"... the whole of it, from the Winterveld eastward is the poorest of grazing country, with weak springs where the Boor builds his house, makes his kraals, and by making ponds, and intercepting occasionally rainwater in dams, is able through part of the year, to support his flocks. Some springs are strong enough to enable the tenant to water some vegetables but very few indeed admit of the irrigation of as much land as will supply a [Richmond] family with bread, so that the inhabitants of the Winterveld, Uitvlug, and New Hantam [Colesberg] were right in the description you state to have received from them. [1: 223]

"It is that poverty of the land, and of the people occupying it, and the vast extent of this miserable country which a grazier must take in order to get at some solitary pool, or grass ridge, which caused the contentions between the surveyor and myself ...

"Yet this said land is rich in comparison with that westward, from the Winterveld stretching behind the Newveld Chain [Nieuwveld] to the Sack River [in Bushmanland], and the Bree Berg. The extent is immense, and over it are thinly scattered weak springs as above described, where permanent dwellings have long been established. In the remainder are only to be found the beds of what are torrents in heavy rains, and stagnant pools, in search of which the farmers wander with their flocks, according as they think, or hear, that the rains have fallen.

"From this description of the land intruded on, you may conclude it to be my humble opinion ... that these resources are not of sufficient consequence to justify the above extension, if that extension were yet to take place, and that it would have been better for the Colonists, as well as for the Bosjesmen, if the farmer had never got into that country: but that these resources, now once possessed, are too important to be abandoned, and that evacuating the country, if it were possible, which I am bound in candour to deny, would be ruining vast numbers of families without benefiting the Bosjesmen in the least ...

"If the Government had had sufficient knowledge of the interior, and sufficient authority in it when the first settlers came to the chain of the Sneeuw and Newveld Bergen, and there had fixed the boundary, and there checked migrations inland, the Bosjesmen might have remained in peaceable possession of the country beyond; but when the farmers of those days, with their immense flocks, were once permitted to gain possession of the high lands just mentioned, no one with the least idea of the life of a grazier in a country like this would have maintained the possibility of keeping them out of the ... tracts beyond ...

"The first Sneeuwbergers [behind Graaff-Reinet], or Newvelders [Beaufort West], would subsist on these lands throughout the year as long as the country was new, grass and space plentiful, and the winters mild; but no sooner would settlers accumulate and unlimited pasturage be restrained than the approach of winter would force down the farmer into the warmer country to preserve his flocks, and to the south very good place would be beset by his fellow-adventurers, or followers, no alternative would be left but to encroach on the opposite direction.

"By the time the old Government began to abandon the system of extermination, the country along our northern borders had become useless to the savage. The occupation of the waters drove the game deep into the deserts, and peace having been made with some kraals of Bushmen, who acted as spies on the east, the mass of that people had followed the game. Consequently, when Colonel Collins in 1809 travelled through the Bushman country bordering on the Colony, he was surprised to find hardly any of those savages, though east of the Sea Cow River, no Boer had then been established beyond the old boundary.

"When Captain Bonamy and myself fixed the new line, and travelled through the whole extent of country from the Winterberg [Tarkastad] to the Sea Cow River [Seekoeirivier, Hanover District], we found no Bushmen whatever living separated from the Boors, except one kraal, in some rocks far from any spring or water, consisting of about a dozen men, women and children, all the rest whom we saw lived with the inhabitants who fed them and hunted for them to keep them on good terms, in return for which they assisted in herding cattle in as far as they pleased ...

"These people do not settle themselves near springs, make permanent residences, or cultivate land. They live in remote corners and rocks, and remove as often as they expect to find a part of the country more full of game. The springs are of no further use to them than to fetch their water at, and near them they lie in wait for a favourable shot at the game that come to drink. Consequently, when the Colonists settled among them they found it better to leave their haunts, and go and hunt and live with the intruders.

"I have to acquaint you that, hitherto, not one grant of the lands alluded to has been confirmed by legal title, but when we speak of occupation, there is not even a stagnant pool that keeps rainwater for any length of time which is not regularly occupied, so that, of course, no spring remains vacant, and for many of them there are three or four applicants, the whole population consisting (with solitary exceptions) of persons who have not another place in the world.

"When I say no spring remains vacant, I except the Torenberg, Van der Walt's Fontein, and Palmiet Fontein where a missionary establishment for Bushmen once existed ..."

Stockenstrom then discusses the permanent settlement of Bushmen, and advocates greater influence from the missionaries.

1836 August

Harris, W.C. (1839)

Graaff-Reinet:

"The village is sheltered on each side by high conical mountains decorated with perpetual verdure which is derived from the abundance of *speck-boom* [*Portulacaria afra*] that covers the rocky declivities. The serpentine banks of the river are lined with willows and acacias—many of these are overgrown with mistletoe, and both with evergreen creepers [probably *Jasminum angulare*] which, climbing to the very topmost branches, fall gracefully in festoons adorned with a profusion of fragrant white flowers not infrequently concealing the tree upon which they have entwined themselves.

"The District of Graaff-Reinet was formed in 1786 ...

On looking out of the window in the morning we saw the street carpeted with snow ..." [p. 18]

2 September — Left Graaff-Reinet and went over Sir Lowry Cole's Pass on the Sneeuberg:

"As we advanced through the elevated region of Sneuwbergh Proper, the vegetation became visibly more abundant and the air sensibly colder. That greatest of all rarities in South Africa, a real turf or sod, was to be seen interspersed with mat rushes." [pp. 24, 25]

1837 Harris, W.C. (1839; reprint 1963)

14 January — Crossed Orange River, headed for Colesberg:

"Not a blade of grass met the eye from this moment." [p. 281]

1839 Backhouse, J. (1844)

28–29 May — Up Great Fish River Valley towards Cradock:

"... we passed into a still more sterile country, regular karroo of bare earth besprinkled with mesembryanthemums and other little bushy plants. When we outspanned, our horses and cattle took shelter among the larger shrubs by the river-side; they browsed on the saline plants of the country. This we thought poor food for them but often after a time we were glad they could obtain such forage.

"The country over which we were travelling was dreary... We outspanned in the evening at a place called The Thorns near Cradock ... [p. 331]

? 31 May — "The country around Cradock ... has a barren appearance but there is said to be plenty of grass on the mountains, and sheep and cattle thrive, having a limited range... A round poisonous bitter melon *Citrullus amara* [*Citrullus lanatus*], about 5 inches in diameter, is abundant in this country. And an *Opuntia* bearing an edible fruit is quite at home among the rocks. Possibly it may be a naturalized plant but it abounds in this latitude for many miles westward." [p. 333]

5 June — Northwards from Cradock to the Little Brak River, c. 37 km north northwest of Cradock:

"Our journey today was over poor country with very little grass. Among the bushy saline herbage, a *Salicornia*-like *Mesembryanthemum*, a hoary *Atriplex* and a small *Statice* [*Limonium*] were prominent species."

6 June — Similar country "... but more extended plains and having short grass and rushes in some places." Came to Klein Brak River. [p. 336]

7 June — Grootfontein, 2 km north of Middelburg:

"We only came to one habitation, it was named Groote fontein, Great Fountain, and was near a large sheet of water which is a rare thing in this part of Africa ...

"A white fragrant *Massonia* [either *Massonia depressa* or *Daubenya comosa*] was in flower in sterile places, and a yellow gentian-like plant [*Romulea macowanii*] where water had stood in rainy weather. The species of *Massonia* have two large leaves spreading flat upon the ground, and a cluster of flowers just emerging above the surface between them. [p. 337]

9 June — In walking along the bed of a rivulet which was dry, except in one or two places... A species of *Thalictrum* [*Thalictrum minus*] was growing. The sight of a plant which had congeners in England excited emotions like those felt at the sight of an old friend."

10 June — From Grootfontein, *en route* to Colesberg:

"On some rough hills over which we travelled ... there was a little grass among the low bushes ..." [p. 338]

Lions "... were reported to be far from uncommon in this vicinity, inhabiting the rugged hills on which there is rarely a tree to be seen and but few small bushes. Here and there among the rocks a stunted olive [*Olea europaea* subsp. *africana*] or arborescent growth is to be seen, or a strong bush of some species of *Rhus*, sumach."

13 June — South of Colesberg. "We passed over a plain and through a defile among the hills in which there was a small stream of water. The country was covered with short dry grass." Arrived at Colesberg. [pp. 340, 341]

18 June — Colesberg:

"A species of *Huernia* on one side of the town, along with a remarkable *Aloe*." [p. 345]

19 June — Botha's Drift on the Orange River, 26 km north northeast of Colesberg:

"The banks are steep and support a few of the weeping willow of this country which line the banks of the Gariep with little interruption for upwards of 1 000 miles. This species had 10 stamens to each blossom. From the place it occupies on the banks of the Gariep it has obtained the name of *Salix gariepiana* [*Salix mucronata*].

"The country from Cradock to this place was destitute of trees. Shrubs were also infrequent except a trifoliate narrow-leaved *Rhus* scattered on some of the stony hills, and a small *Lycium* growing low and thick, like a sloe-bush, on the flats. The most common covering of the country was half-shrubby plants so far apart that a person might walk between them in any direction. Many of them were not a foot high. They might not inaptly be compared in general aspect to *Santolina chamaecyparissus*, the lavender-cotton of English gardens." [p. 347]

17 October — *En route* to Graaff-Reinet from the Orange River. Re-entered the Cape Colony at Duwenaars Fontein [Duiwenaarsdrift, 3 km north northeast of Herbert]:

"While we were at this place a herd of springboks attempted to cross the river from the opposite side to the growing corn on this. They were turned back by the firing of guns, the shouting of men and the barking of dogs. Had they got among the corn they would quickly have consumed it ... the bank of the Zwarte Rivier is steep on this side. It is clothed with willow, acacias, and other trees and shrubs. *Crinum riparium* [*Crinum bulbispermum*], a beautiful plant of the *Amaryllis* tribe was sparingly in flower among them. It had on each stem about a dozen large bell-shaped blossoms of a purplish-red colour with long tubes.

"A *Sutherlandia* [this variety is currently known as *Lessertia* (= *Sutherlandia*) *microphylla*] was also growing there. It was more slender in all its parts and paler in its blossoms than *Sutherlandia frutescens* [*Lessertia frutescens*], the scarlet bladder-senna of the vicinity of Cape Town."

18 October — Doornbult and then southwards:

"... we came upon an extensive saline flat of great extent which was destitute of vegetation except a few scattered mesembryanthemums, lyciums, and other plants of similar character."

19 October — Two hours to Sand Fontein, 58 km north northwest of Philipstown:

"The land was studded with small bushes ... a little grass." Three hours to Leeuw Fontein. [p. 477]

20–21 October — To Wolve Kop and on to Bokke Kraal. [p. 478]

22 October — About 7 hours to Modder Fontein over "... sandy plains of limited extent ... generally clothed with low bushy mesembryanthemums and other under-shrubs, and there was a little grass about the foot of the hills ...

"A few miles further ... we came upon an open elevated country from which there was a fine view of the surrounding mountains including the Sneeuwbergen in the distance ... this part of the country is called the Winterveld." [p. 481]

23 October — Came to Wash Banks and "... descending through a pass in the hills we arrived at Seven Fountains." [p. 483]

At Leeuwin Fontein, travelling between Read's Drift on the Orange River and Graaff-Reinet *via* Dassiefontein:

"The gay yellow *Rhigozum* [*Rhigozum obovatum*] still decorated some of the hills; others were covered with a purple *Mesembryanthemum*; several species of the last genus were now in flower. A translucent-leaved plant of the *Aloe* tribe was in flower in the crevices of a basaltic hill. Its leaves were buried to the tops in earth. *Stapelia hirta* [*Stapelia grandiflora*] bearing large hairy starfish-like flowers abounded in the crevices of rocks in this part of the country ..."

24 October — To Bad Fontein and Jagers Fontein.

25 October — Bontebok Kraal, c. 17 km southwest of Hanover, and on to Honger Fontein and Kaal Plaats. [p. 482]

26 October — Kraanvogel Valei "... where there were pools of water with moorhens upon them."

On to Paard Fontein at "... some tall rushes near a pool" while "... cattle were driven to an adjacent mountain named Tafelberg for forage [c. 30 km north of Richmond]."

28 October — Short ride to Krygers Fontein. "These places [springs] are generally surrounded by a wilderness of scattered bushes, mid-leg high, with a little grass in tufts browsed by sheep and larger cattle and by thousands of springboks.

We now entered among the hills of the Sneeuwbergen by an easy pass and came to Dasjes Fontein [Dassie-fontein, 48 km southeast of Richmond] at a farm" and later outspanned "…under a continuous cliff in a winding valley where we found water and a little grass." Red hares among the rocks. [p. 484]

29 October — Graaff-Reinet District:

Onward "… through a series of valleys to Klip Fontein near Zuur Plaats [52 km north northwest of Graaff-Reinet]" where "… among the rocks the pretty *Cyrtanthus rupestris* [possibly *Cyrtanthus macowanii*] was in flower. It has tubular crimson blossoms."

30 October — Over very high country, "… the most mountainous of any we visited." Near the Compassberg; outspanned at the Field Cornet's house, 'The Poortje', c. 62 km north northwest of Graaff-Reinet.

31 October — Sneeuberg:

"Flowers and grass were interspersed among the large stones on its most elevated portions. Among the former was *Myosotis sylvatica* the same species as the most delicate English forget-me-not ... it was growing in association with *Streptocarpus rexii* [probably actually *Streptocarpus meyeri*]. Within the last day's travel the bushes had become larger and ... at Oudberg [22 km north northwest of Graaff-Reinet ... vegetation assumed an aspect more like what it presents in the middle and eastern parts of the Colony. Outspanned near Graaff-Reinet."

1 November — The cattle and waggon were sent to Matjes Fontein 10 miles distant "… grass being more abundant there than near the town." [pp. 485, 486]

7 November — From Graaff-Reinet westwards *en route* to Beaufort West:

Crossed the Sundays River three times and a smaller stream once "... both were bordered with *doornbooms* [*Acacia karroo*] ... through Karroo country covered with mesembryanthemums which were now displaying a profusion of gay flowers of white, yellow, red, and pink of various shades.

"A small white *Dianthus* (pink) and a large *Opuntia* were growing among limestone rocks... This plant ... is common in the Karroo where it sometimes stands solitarily, 10 feet high. It occurs from Cradock to halfway between Graaff-Reinet and Beaufort [West] and keeps much to one parallel of latitude. It consists chiefly of large oblong joints, and has flowers of orange or yellow resembling roses ..." [p. 489]

8 November — Aberdeen to Beaufort West:

"We now entered the Great Karroo [near Aberdeen] by a road lying under the Camdeboo Mountain, which cannot be travelled in dry weather on account of the scarcity of water. We passed over some hills clothed with strong bushes and, at night had to dig for water in the bed of a periodical river. [p. 489]

9 November — "We traversed the margin of an extensive plain, passed through a small wood of *doornbooms* [*Acacia karroo*] and outspanned on the premises of a farmer on the Camdeboo River ..." [north of Aberdeen]. Travelled "... to some rain-pools in the bed of the mountain torrent among which there were tall bushy *doornbooms* [*Acacia karroo*] that proved a friendly shelter.

10 November — "Innumerable caterpillars were feeding on some of the species of *Mesembryanthemum* and *Atriplex*; they were very troublesome, crawling over everything that came in their way.

11 November — "... along the base of a range of cliff-crested picturesque mountains ... and in an arid valley met with *Gastronema smithiae* [*Cyrtanthus smithiae*] with spiral leaves and from two to six bell-shaped, lily-like, cream-coloured flowers. [p. 490]

12 November — "... over miserable country ... in many parts it yielded little but a few stunted spinous mesembryanthemums and euphorbias... In two places belts of *doornboom* and thorny *Celastrus* [*Gymnosporia* sp.] marked the course of the rain streams from the mountains ..." [p. 491]

15 November — Stellenbosch Vlei, 45 km southwest of Murraysburg. At a "… *doornboom* wood" on a branch of the Karreka [Kariega River]. [p. 492]

16 November — A valley leading to the Salt River, c. 45 km east of Beaufort West [Soutrivier]:

"At this place a *Crassula* with connate leaves abounded on a rocky hill on which there was also a plant allied to the *Stapelia* [probably *Tridentea parvipuncta*] with minutely

spotted flowers the size of a shilling, fringed with trembling hairs which were widest at the point most distant from the flowers.

18 November — "We outspanned among thorns by water in pools in the course of the periodical rain-torrent at Rhinosterkop [Renosterkop, 35 km northeast of Beaufort West]."

19 November — Westwards "… over karroo country... The mountains of the Nieuwveld were now on the right, and those of the Blydenberg [north northeast of Beaufort West] were just visible on the southern horizon. Belts of *doornboom* marked the lines of watercourses across the plain but most were dry... Outspanned near Beaufort." [p. 493]

27 November — At and around Beaufort West:

"On enquiring of some traders who had come from Cape Town what was the state of the Karroo, they answered that it was fine: all blossoming. My heart sank ... for I concluded that the blossoming was that of the *Mesembryanthemum* which, though gay to look upon, I knew would afford nothing for our poor cattle... If rain falls in the 12th or 1st month grass springs freely among the karroo-bushes but it speedily withers again and, unless it falls in these months, there is little grass to be seen throughout the year." [p. 495]

30 November — Beaufort West to the Nieuwveld Mountains:

Great heat all day. "... we came at a bushy valley in which there was a beautiful spring of clear water under a purple cliff. The water flowed a few hundred paces, filled some rocky pools and then sunk again into the earth. The cattle and horses enjoyed the freshness of the clear spring and the latter browsed greedily upon a short bulrush *Eleocharis* [Cyperaceae] which clothed the moistened earth in the bed of the river with a lovely green, a colour rarely occurring in the dreary Karroo... Aquatic plants were growing here. Some of these, particularly a species of *Aponogeton* [probably *Aponogeton junceus*], spring up quickly on rain filling a pool.

"In the afternoon we entered a kloof called Brandewyn Gat in the Nieuwveldbergen which we here commenced ascending." [p. 499]

2 December — From the base of the Nieuwveldberge northwestwards "… winding among the mountains, sometimes making considerable ascents and descents." At a spring with a crab: "… near this place we passed a large family of Bushmen, some of whom were drying a species of mint, *Mentha* [*Mentha longifolia*], for tea". [p. 500]

3 December — Top of the Nieuwveldberge. "The country was still Karroo." Outspanned under the Groene Berg:

Ascended the Groene Berg, 43 km southeast of Fraserberg, "… which is about 400 feet above the plain... The Nieuwveld is very elevated country... The vegetation of this mountain territory is chiefly low bushes.

5 December — "Two hours [from Groene Berg] brought us to Ratel Fontein ... well watered from two copious springs." [p. 501]

6 December — Drooge Voet Fontein [Droogvoetsfontein], 11 km southwest of Fraserberg:

"The country, though a little undulating, was still uninteresting Karroo... The best places for cattle in these deserts are those which are saline and afforded a shrubby *Atriplex* and other plants generally found on the sea coast. These are termed '*brak*-places' and such shrubs are called '*brak*-bushes'. When first our oxen were under the necessity of eating *brak*-bushes we felt a little dismay but now we looked out anxiously for a *brak*-place."

From Droogvoetsfontein to Moutonsfontein, 28 km west of Fraserburg. [p. 502]

9 December — Crossed the Kleine Riet Rivier, 41 km west of Fraserburg and went northward.

10 December — *En route* to the Groote Riet Rivier, passed Elands Rivier and Titus Fontein, 58 km north northeast of Sutherland.

11 December — At "… a chain of pools in the bed of a brook called the Bushmans River. [p. 503]

"The path on which we were travelling was so little known that when people gave us information respecting it for a short distance westward they usually concluded their observations by saying '*Verder is onbekend*'.

"By the Bushmans River I saw a bulbous-rooted plant [*Ornithogalum* (= *Albuca*) sp.] with a raceme of a few nodding reflexed greenish flowers an inch and a half across." [p. 504]

1843 **Cumming, R.G. (1850)**

September — Middelburg:

"The surrounding country presented in every direction endless chains of barren stony mountains; the bold range of the Rhenoster Berg [Renosterberg] ... to the westward; not a tree to be seen, except a few thorny mimosa [*Acacia karroo*] in some of the more favoured hollows of the hills and along the banks of the river: the country covered with grass and heaths, dwarfish shrubs and small thorny bushes." [1: 60]

October — Between Thebus [Teebus], Steynsburg District, and Colesberg:

"The farmer Strydom's revenue seemed principally to be obtained by manufacturing ashes with which he was in the habit of loading up his waggon and trekking many days into other districts where he sold them to richer Boers. These ashes are in great demand amongst all these Boers as being an indispensable ingredient in the manufacture of soap. Every Boer in South Africa makes his own soap. There is a low succulent green bush from which the ashes are obtained which is only found in certain districts, and in these desolate plains it is very abundant (Footnote: The manner of obtaining this ash is first to dig up the bushes and collect them on the plains. There they are left until sufficiently dry to burn, when, a calm day being selected, they are set on fire and the ashes are collected and stowed away in large sacks made of the raw skins of wildebeests and zebras, when they are fit for immediate use)." [1: 68]

27 December — Colesberg:

"The town is well supplied with water from a strong fountain which bursts from the base of one of these rocky hillocks above the level of the town, and by which the small gardens adjoining the houses are irrigated. Abundance of water is the only advantage that the situation can boast of." [1: 87]

25 December — Plains west of Colesberg, possibly in the Hanover area:

"I dismounted on an arid plain to breathe our steeds and dig up some bulbs of the waterroot [possibly *Fockea edulis*] for immediate consumption, my thirst being very severe. (Footnote: This interesting root, which has doubtless saved many from dying of thirst, is met with throughout the most parched plains of the Karroo. It is a large oval bulb varying from six to ten inches in diameter and is of an extremely juicy consistency with rather an insipid flavour.

"It is protected with a thin brown skin which is easily removed with the back of a knife. It has small insignificant narrow leaves with little black dots on them which are not easily detected by an inexperienced eye.

"The ground around it is generally so baked by the sun that it has to be dug out with a knife. The top of the bulb is discovered about eight or nine inches from the surface of the ground, and the earth all round it must then be carefully removed. A knowledge of this plant is invaluable to him whose avocations lead him into these desolate regions.

"Throughout the whole extent of the Kalahari desert, and the vast tracts adjoining thereto, an immense variety of bulbs and roots of this juicy description succeed one another monthly, there being hardly a season in the year at which the poor Bakalahari, provided with a sharp pointed stick hardened in the fire, cannot obtain a meal, being intimately acquainted with each and all the herbs and roots which a bountiful hand has provided for his sustenance. There are also several succulent plants, having thick juicy leaves, which in like manner answer the purpose of food and drink.

"Above all, a species of bitter water-melon [*Citrullus lanatus*] is thickly scattered over the entire surface of the known parts of the great Kalahari desert. These often supply the place of food and water to the wild inhabitants of these remote regions, and it is stated by the Bakalahari that these melons improve in flavour as they penetrate farther to the west. Most of these roots are much eaten by gemsboks which are led by instinct to root them out. The elephants also, apprised by their acute sense of smell of their position, feed upon them, and whole tracts may be seen ploughed up by the tusks of these sagacious animals in quest of them.)" [1: 117, 118]

31 December — Near Beervlei, 58 km north of Britstown:

"... I left this periodical stream whose name was 'Rhinoceros Pool' and held on for Beer Vley which I reached in about 8 hours ... over desolate barren country destitute of water. The country, though barren, was not destitute of game." Many herds of springbok. "Beer Vley, at the southern end of which I was now encamped, is a very extensive, low-lying level plain. Its length might be somewhat about 20 miles and its breadth from one to two miles. Through the entire length of this grassy vley runs, in the rainy season, a deep stream of water which meanders in a very serpentine course along the centre of the plain and, overflowing its banks, irrigates and enriches the surrounding pasture. At that season, however, this channel

was perfectly dry and the plain was covered with rich green grass. The country surrounding Beer Vley is extremely desolate and sterile consisting of low rocky hills and undulating sandy plains barely covered with dwarfish scrubby shrubs and small karroo bushes ..."

Moved camp 9 miles down the vley "... on the plain close to the bank of a dry channel with a fine large pool of running water in my vicinity." A great many springbok came there to graze. [p. 124]

1844 Cumming, R.G. (1850)

11 January — Beervlei to Renoster Pool and eastwards:

From Rhinoceros Pool trekked 10 miles east northeast across "... a barren extensive plain" to a well blocked with mud. Cleaned it out "... and presently had good water for myself and people." [1: 128]

17 January — About 30 miles north, approaching the Orange River at Duiwenaarsdrift [at Hopetown]:

"The country here assumed a less sterile appearance than that which I had occupied during the last five weeks being ornamented with a few ancient trees bearing a leaf resembling that of the willow and called by the Dutch 'olean-wood' [*olienhout*, *Olea europaea* subsp. *africana*]. There were also a few dwarfish thorn trees of a species of *Mimosa* [*Acacia karroo*]."

18 January — Arrived at the Orange River "...The queen of African Rivers". [1: 130]

"The breadth of the Orange River is in general about 300 yards. The whole of the banks are ornamented with a rich green fringe of weeping willow [*Salix babylonica*] whose branches dip into the stream, and also many other trees and bushes whose blossoms and pleasing foliage yielded the most delicious balmy perfume." Here he crossed into the Herbert District of the Northern Cape. [1: 133]

20 December — Between the Orange River and Colesberg:

"The country here was parched and arid, not a blade of grass for the weary oxen, but hopeless sterility stretched far around." [2: 81]

1848 Baines, T. in Kennedy (1961)

27 March — South of Shiloh:

"... outspanned not many miles from Shiloh at Een Doorn—the single thorn ..."

29 March — Heading north to Shiloh "... we passed through a long kloof between dry stony hills thinly clad with mimosa [*Acacia*] and sprinkled with zamias [*Encephalartos*], the stems of which were about 7 feet in height and nearly as thick as I could conveniently encircle with my arms, and crowned with long palm-like leaves consisting of a number of leaflets arranged like the fibres of a feather along each side of a central stem... Passing a long row of willow trees [*Salix babylonica*] shading the furrow by which the waters of the Klipplaat were led out to fertilise the lands of the Institution [Shiloh Mission], I entered the village." [p. 64]

31 March — Bholotwa River, 33 km east southeast of Queenstown:

"... crossed the Bolota, a beautiful stream of cool clear water shaded by thick mimosa trees [*Acacia karroo*]... [p. 68]

"I rode over the extensive mimosa-covered plains of the Bolota, sometimes called, from the gum exuding from the trees and of which so much is collected by the Kafirs that a single trader had purchased by retail in one morning enough to load four wagons, the Inthlaca—or Gum—Flats (Footnote: in-Tlaka, the Kafir word for the gum that exudes from the mimosa, *Acacia karroo* ...), and passing a small conical hill called Stael Klip—or the Rock of Steel—I attempted in vain to force my way through the thick fringe of mimosa, *Acacia*, and willow, to the river. Turning more to the south I reached a shelving cliff overhanging its head, but so sluggish was the stream that the chips I threw in did not enable me to decide which way it flowed, and, though I afterward found it to be the White Kei at 10 or 15 miles from the junction of the other branch ... [p. 69]

"... choosing a crystal pool in the recesses of a shady grove, richly festooned by a creeping plant with egg-shaped fruit varying in colour from pale green to the brightest scarlet, about 2 inches in length, and filled with bitter seeds, enjoyed our bath ..." [p. 70]

12 April — On Indwe River, near its confluence with the White Kei:

Describing the hills: "... dry loose soil in which a few small aloes and bushes of the *wagenboom*, finding but scanty nourishment, rather increased than diminished the air of desolation.

"Not wishing to return the way I came, I climbed with some difficulty a neck to the north-west and descended to the bed of the Indwe ... intending to follow its course toward the wagon [going west]. But, though I could myself have crossed the river or have made my way through the rocky gorge it entered, I was unable to find a path by which my horse could follow me; and recrossing the neck to ride ... through the wide-spreading forest of mimosas [*Acacia*] which here attained almost the dimensions of timber trees ..." [p. 78]

29 April — Wonderboomspruit; meets Stormbergspruit 5 km south of Burgersdorp:

Baines had been at the Kraai River: "... we turned more to the westward and, crossing a branch of the Stormberg Spruit called, from a single willow tree [probably *Salix babylonica*] upon its bank the *'wonder boom'*, we outspanned at the entrance to a poort among hills of grey stone interspersed with patches of dry grass of nearly similar colour." [1: 89]

18 May — Colesberg District:

"We now travelled with a glimpse of the broad willow-fringed waters of the Orange River on our right over a country scantily dotted with tufts of bush seldom more than three feet, every one of which was covered with a swarm of locusts ...

"The only fuel we could obtain was a small bush called by the Dutch Colonists *'brengt aan'* [*brengt aan* = bring on; possibly *Euryops subcarnosus*], the light and highly combustible leaves of which, first emitting a dense cloud of smoke, sent forth for a few moments a blaze which soared bright and clear above the wagon tops, and then, as suddenly subsiding, left the green and succulent branches almost unscathed by the translucent heat making it necessary every few moments to 'bring on' fresh supplies." [p. 97]

22 May — Colesberg:

"... we trekked towards the town which, as we turned the corner of a hill covered with detached rounded masses of rock of a reddish-brown colour [dolerite], almost painful to the eye in the dazzling sunlight, appeared in a long and narrow kloof upon our left. At the far end ... with conical heaps of rock partially covered with the green *brengt aan* bush and a bright yellow-flowered shrub [*Rhigozum obovatum*]. [p. 99]

23 May — "After a ride of 15 miles we came in sight of the magnificent river swollen till the large Babylonian willows on its banks were immersed nearly to their branches, and apparently not less than 400 yards in width [the Orange River]." [p. 100]

29 May — Travelling from Teebus, south to Cradock and Bedford:

"As we proceeded to the south the country began to assume a less desolate appearance, and, following the course of the Great Fish River through groves of mimosa [*Acacia*] and other thorns, some still of a refreshing green while others were tinged with the rich hues of autumn and covered with the red berries of the parasitic plant (apparently a kind of mistletoe [*Viscum rotundifolium*]).

1 June — "... we halted on ... rather less than a mile from Cradock... On the eastern side [of Cradock town] the country was bare and open, the red soil being dotted only by small Karroo bushes, and more to the south ... appeared the broad stream of the Fish River, bordered by rich and mellow autumnal foliage and overhung by picturesque crags of ferrugineus sandstone ... [pp. 103, 104]

12 June — "... passed through Cradock and, twice crossing the Fish River owing, as before, to the projection of immense cliffs, we skirted the mountain on its eastern side, tracing its course for many miles by the dark green line of willows and acacias winding through the dried red grass of the valley beneath us. On Wednesday, crossing Daggaboer's Neck [47 km south southeast of Cradock], a less elevated portion of the range, and descending into the valley of the Baviaan's River, we again entered, as it were, upon a new country.

"The flowering cactus [*Opuntia*], the brilliant *Aloe*, and the light stem of the *wittegatboom* [*Boscia albitrunca*] mingled with the dark green of the mimosa [*Acacia*] bushes, the tender shoots of which afforded nourishment to innumerable goats, while flocks of sheep studded the more open pastures. The mountains to the north, seen under the rays of the midday sun, presented a most singular appearance; the herbage upon their summits almost a silvery whiteness... Immediately below these [cliffs] ran a belt of the dry reddish-purple grass to which we had of late become accustomed, and the base of the hills was covered with a mantle of the richest green, sloping gently down towards the river or losing itself in the groves that filled the valley.

15 June — "Passing the farm of Mr Stokes (near the drift) fenced by the most magnificent cacti I have ever seen, we crossed the Baviaans River. And toward the evening of the fifteenth, turning the angle of the forest-clad Kaga Berg at the foot of which lies Maestrom [Maastrom] the residence of Sir Andries Stockenstrom." [Bedford town was founded on portion of Maastrom Farm.] [p. 106]

1850 Baines, T. in Kennedy (1964)

15 February — Between Kromme River and Tarka River, south of Cradock:

"Saddled off at Blue Krantz Drift... The Fish River had entirely ceased running and only a few muddy pools remained ... at the drift where there was a small sprinkling of young grass ..." The wagon went along the east bank of the Fish River on a new road and "... outspanned under a huge headland crowned with a circular layer of rock and with another parallel layer about half way up. Its sides were thickly clothed with *Euphorbium* and *spekboom* but all below so dry and parched that the oxen would rather lie down than attempt to eat." Reached the Tarka River. [p. 7]

16 February — Two hours north northwest: "At one point the road led us very near the banks of the Fish River, the course of which, though the water was not visible, was indicated by a double line of mimosa thorns [*Acacia karroo*] ..."

South of Cradock, red stony mountains on both sides "... though sprinkled with withered aloes out of flower, destitute of even, as far as we could see, a single blade of grass ..." Later entered Cradock. [p. 9]

18 February — East of Colesberg:

"... I found the people had gathered a quantity of the fruit of the cactus or prickly-pear [*Opuntia*]. These are excellent eating but are so covered with little clumps of minute and almost invisible spines that a person is almost sure to get his fingers full. The best way is to cut off both ends and make a longitudinal slit in the rind which may then be turned back on each side, and the seeds and pulp laid bare." [p. 11]

1862 Dobie, J.S. (1945)

17 October — From the White Kei to Bholotwa and Imvani, 22 km southeast of Queenstown, and then to Queenstown:

"This plain is like the other, surrounded by the same picturesque outline of hills." Shot at springbok. "Then through thorn wood and up a branch valley among kraals and mealie patches to a mission station on a little river called Bolota, very bare of feed [St John's Mission]. [p. 45]

"On up-valley to the ridge, but could get no decided view of the plains... Going down other side into valley of Imvani ... the first farm we have seen. The thorny-bush well out in leaf and bushy."

18 October — Passed Imvani. "Then through a thorny-bush and over ridge. Had a good view again of other flats and ranges ..." Reached Queenstown. [p. 46]

1863 Dobie, J.S. (1945)

3 August — Districts of Maclear, Elliot, Indwe, Barkly East, Dordrecht and Molteno:

Written whilst camped on the Umzimvubu River, between Insizwa Mountain and Mount Frere District: "Met a man, Hulley. Tells me there is much finer country than Adam Kok [Mount Currie, East Griqualand] has got lying about 30 miles from here, and extending from the Umzimvubu to the Stormberg [in Molteno]... There are no Kafirs in that fine country under the Berg." [p. 103]

15 August — Bholotwa to Queenstown:

"Camped in thorns beyond mission where water scarce and like *cafe au lait*, very warm... Some of the thorn trees bore a parasite with yellow and scarlet flowers [probably *Moquiniella rubra*] having a seed of very glutinous character which Skunguin pickled in a potful to made bird-lime... Down that smooth broad road ... to the thorns of Imvani, now bare of leaves, their big thorns showing like sprinkling of snow." [p. 110]

24 August — Queenstown westwards to Tarkastad:

"... camped on Hermanus Kraal River among the thick thorns where road turns off to Bushmans Hoek of last year. Oxen have got dreadfully poor since we spelled at Queenstown. Here, feed very short. Thorns a regular hoary lot."

25 August — On to Klaas Smits River:

"We are now in the District of Cradock and have seen Karoo. [Wrong; they were still east of Tarkastad.]

26 August — "Road lay over a plain, dotted and divided by those remarkable kopjes or sugar-loaf clumps and ridges of broken trap... Must be a pretty country in summer when all is green and the thorny bush in full foliage. [p. 116]

28 August — "View of valley across from *hoek* very pretty, though among the thorns near dam it is nothing but bare red earth and Karoo bushes." [Still east of Tarkastad.] [p. 117]

29 August — Left Tarkastad for Cradock:

"The water courses running through [poorts] edged with rocks and thorns and willows... Beyond these passes, the hills on either side of the narrow valleys were a mass of stones and broken rocks, sprinkled with a mixture of Karoo and other bushes in colour and general appearance something like heather, and grass. [p. 118]

"Forward over an open Karoo veldt ..." [p. 119]

30 August — Approaching Cradock from Tarkastad:

"Now in genuine Karoo veldt which has a dismal appearance compared with grass; the Karoo bush is about the size of heather, growing more or less thickly together, and is of a dark dusky green ... looks as if the whole country had been recently burnt and just recovering ... (into Fish River Valley)."

Cradock:

"Along the open water *sluit* that supplies the city, a fine row of thorns growing large, and sweeping to the ground... Bed of river now barely running." [p. 120]

11 September — Up out of Baviaans River and over into the Tarka River valley, c. 45 km north of Bedford:

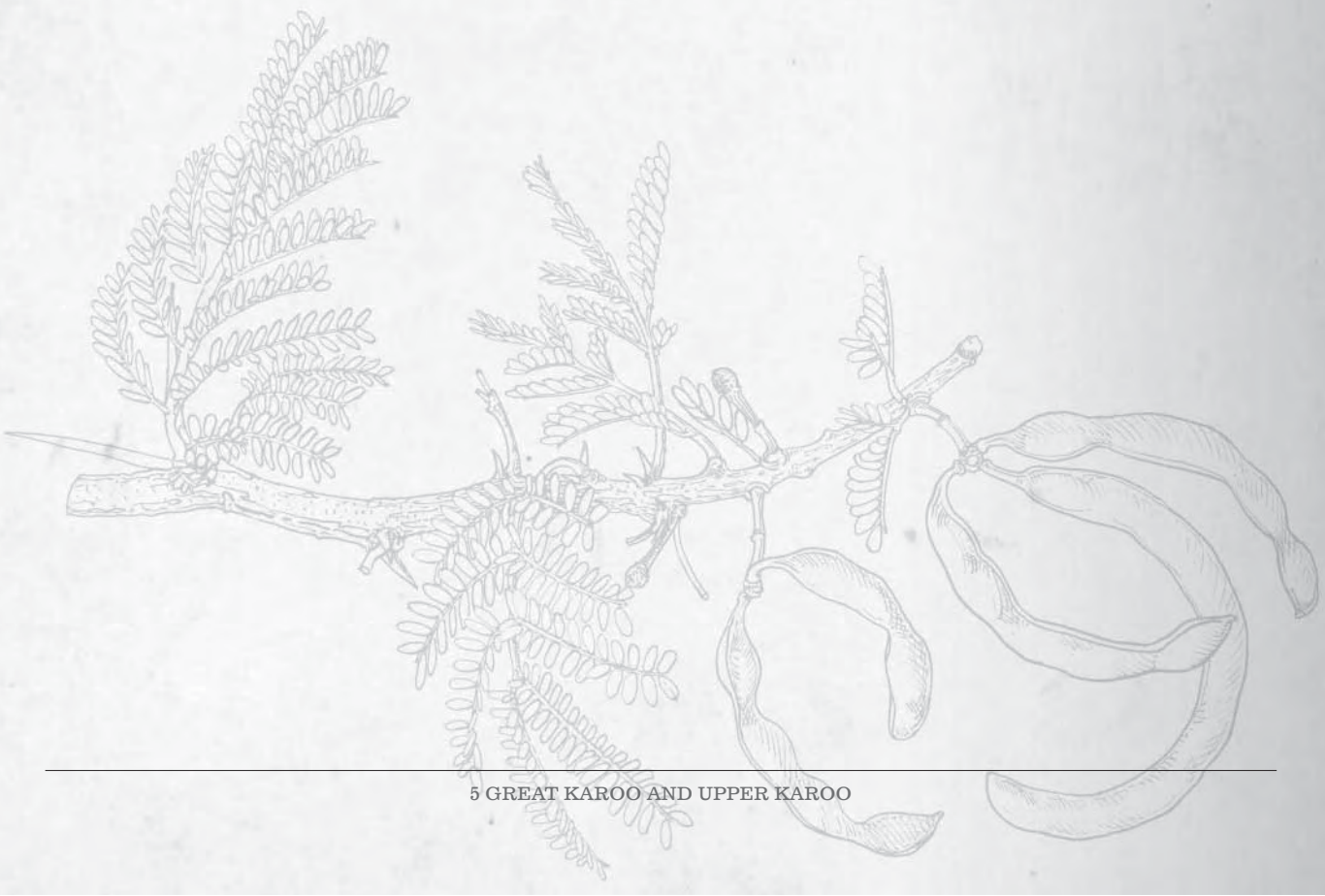
"Over range by foot-track and through a high 'neck' and then down into the watershed of Tarka, fine short-grassed hills and valleys warmer in temperature, but bare of bush." [p. 129]

Heading for Tarkastad village "... down valley between bare sandstone hills and then crossed the Tarka, a fine strong-running stream edged with willows, etc. ... Saw Martha and Mary [twin hills 11 km south southwest of Tarkastad]... The foreground [of his sketch] shows the beginning of the Karoo veldt mixed with grass and other bushes." [p. 130]

1864 Dobie, J.S. (1945)

11 July — Tarkastad District:

"... rode by footpath up hill and down into Gan Hoek [Gannahoek] on the Tarka, very rough and stony, and Tarka valley very rough and rugged ... all Karoo veldt ..." Proceeded e*n route* to the Baviaan's Valley, as far as Wienand's farm, 16 km northwest of Bedford, past Glen Lynden in the southern part of the valley." Road good considering, and fine grassy country on top." [p. 174]



6 LITTLE KAROO

1772 Thunberg, C.P. (1793)

From Slaghoekberge, 25 km west of Worcester, and southeastwards towards Robertson and Montagu *en route* to Swellendam:

9 October

"The *Mesembryanthemum edule* [*Carpobrotus edulis*] grew here in abundance, and especially in the sandy plains, and was called hottentot figs (*hottentots vygen*), the fruit when ripe and peeled tasting tolerably well; it varies greatly in the colour of its blossoms which are sometimes red, at other times carnation yellow, or white... The prickly bush of the *Arduina spinosa* [*Muraltia* (= *Nylandtia*) *spinosa*] now bore ripe berries which were said to be eaten by the Hottentots. [1: 163]

"The *Zygophyllum morgsana* [*Roepera* (=*Zygophyllum*) *morgsana*], a handsome shrub, now adorned the hills with its blossoms and appeared to be very proper for arbours.

"In these parts where there was plenty of wood, the kraals were inclosed by felled trees consisting of *Mimosa nilotica* [*Acacia karroo*] and *Arduina bispinosa* [*Carissa bispinosa* and *C. haematocarpa*], the most prickly of almost all in Africa. These fences keep off wolves, foxes, and other beasts of prey, as well in consequence of their breadth, as by their prickles ... [1: 164]

"The antelopes eat the leaves of the *Mimosa nilotica* [*Acacia karroo*], and frequently the prickles of it run into their feet without doing them an injury. [1: 165]

"The *Viscum capense*, a parasitic plant, was seen disseminated everywhere on the branches of trees (especially of the *Rhus*) by means of its berries which the birds are fond of... The branches of the wax-shrub (*Myrica cordifolia*) [*Morella cordifolia*], the berries of which are covered with a fat substance resembling bees-wax, were put whole into a pot of boiling water in order to melt and skim off the wax. It resembles grey impure wax, is harder than tallow, and somewhat softer than wax. The farmers use it for candles, but the Hottentots eat it like a piece of bread, either with or without meat." [1: 166]

10 December

Ganse Kraal, halfway between Uniondale and Oudtshoorn, George District:

"The *Lycoperdon carcinomale* grew here on the anthills, the brown powder of which was said to be used in cancers. (Footnote: A Gasteromycete fungus *Podaxis pistillaris* (Tulostomataceae), often found growing on termite mounds. It has a woody texture and at a distance resembles a snake's head.)" [1: 211]

December

Little Karoo, Oudtshoorn District:

"We now had a dreadful, long, dry and barren plain to cross ..." Travelled mostly at night because of heat. [1: 212]

"Here we saw quickset hedges of the *Aloe succotrina* [actually probably *Aloe arborescens*]." [1: 213]

1773 Thunberg, C.P. (1795)

30 October

Over Hex River to Cogman's Kloof, 3 km southwest of Montagu:

"The field was here of the Carrow kind, and the sheep were said to feed on those succulent plants the *Mesembryanthemum* (*vygebosches*) which were supposed to render the dung of these animals unfit for manure. Now likewise, the farther we advanced, the more hilly the country grew." [2: 35]

Cogman's Kloof:

2 November

"*Mat-ware* (*matjesgoed*) is the name given here to a kind of rush that grew in the river, and for which mats were made that were used by the husbandmen for the tilts of the wagons, and also to lie on. These mats were soft and pliable, and the rushes from which they were made, were a species of grass, which I called *Cyperus textilis*, about four feet and more in height, almost as thick as a tobacco-pipe, and hollow within." [2: 37]

From Cogman's Kloof, through the Langeberge to Swellendam:

3–5 November

"The country here began to be very hilly, and abound with grass and at the same time had a sufficient number of rivulets, and some wood in the clefts of the mountains." [2: 40]

10 November — Hex River, Worcester to Swellendam, via Cogman's Kloof:

"In the whole tract of country through which we had passed all the way from Hex Rivier, I observed that the banks of the rivers were planted with the very prickly tree called *Mimosa nilotica* [*Acacia karroo*]." [2: 45]

21 November — Near Klip River, immediately south of Oudtshoorn:

"The land between the mountains was many times broader than Roode Zand [Tulbagh], very dry like the Carrow [Karoo] and much higher than Houtniquasland [George] that lay on the other side of it. That piece of land which lay on the other side of the mountains to the left was called Kankou [Cango]." [2: 53]

Kammanassie, 50 km east of Oudtshoorn:

28 December — "The Hottentots called by the name of *nenta*, a plant *Zygophyllum herbaceum repens* [actually *Adromischus mammillaris*] which was said to be poisonous to sheep, as also another, a shrub of the same genus *Zygophyllum sessilifolium* [in this case another *Adromischus* sp., or possibly *Cotyledon* or *Tylecodon*]. [2: 97]

29 December — "The broad tract over which we travelled was Carrow field all over, exhibiting a few bushes, no grass and very little water. *Kon* was the name given by the Hottentots to a shrub that grew here, *Mesembryanthemum emarcidum* [*Sceletium emarcidum*], and was famous all over the country. Hottentots come from afar to get this, root, leaves, and all, to make a sort of chew-tobacco from it. The word *kon* is said to signify a quid [of tobacco]; the colonists call it canna-root." [2: 98]

1774 Thunberg, C.P. (1795)

Near Verkeerde Vlei, 54 km east of Ceres:

"The leaves of the *Indigofera arborea* [probably *Psoralea* sp.] were boiled ... as a remedy against gravel and stone." [2: 181]

1775 Sparrman, A. (1786)

October — Saffraankraal [Saffraan River is 25 km southwest of Oudtshoorn]:

Mentions a plague of flies, and a type of bush growing there which exudes a kind of tarry substance to which flies stick.

"There is another shrub, frequently found in the Carrow, which grows here likewise and is called *canna-bosch* [*Sceletium emarcidum*], whence the whole tract of country hereabouts bears the name of Canna's, and not Canaan's Land as Mr Mason [sic, Masson] has called it in the *Philosophical Transactions* ... [1: 296]

"Having examined the same canna-shrub I found that in strict propriety it formed a new species of *Salsola* for which reason, in my manuscript description of plants, I have called it *Salsola caffra* [*Salsola aphylla*]..." Described. [1: 297]

Crossed Moeras River [20 km southwest of Oudtshoorn] to Canna River [? Kandelaars River], called by some the Klein-Dorn Rivier [Kleindoring River]. "All the verdure our oxen and horses could find here consisted only in a small quantity of a reed *Arundo phragmites* [*Phragmites australis*] still left in the above-mentioned river, the greater part of it having been previously consumed by the cattle belonging to former travellers." [1: 298]

1778 Gordon, R.J. (1992)

8 December — North of Ashton:

Methods used by a Khoe sorcerer on a youth: produced various ingredients and after smearing mutton fat on the boy's leg he rubbed the rest over himself. "After this he took some roots (from thorn and mimosa trees) which were hollow and tied them together and filled with stones that rattled inside." [p. 67]

1797 Barrow, J. (1801)

Hex River Valley, 30 km northeast of Worcester:

Crossed the Breede River into the Hex River valley. "The mountains on each side of this pass were wild and naked but the kloof itself abounded with large frutescent plants ..." Numerous baboons; snow on the mountains. [p. 74]

1800 Somerville, W. in Bradlow (1979)

5 October

Near Hex River:

"During nearly the whole year, oxen are subject to the strangury which generally proves fatal, supposed by the inhabitants to proceed from some poisonous plant ..." [p. 55]

1811 Burchell, W.J. (1822)

5 July

Southern entrance to Hex River Kloof:

"At the entrance to the pass I met with a common shrub [*Carissa bispinosa*] 8–10 feet high armed at all points with exceedingly strong branched thorns. It produces little bunches of small white flowers which have both the form and scent of jasmine and are succeeded by berries resembling that of the berberry [barberry]. The Hottentots call the shrub *'num'num* (or noomnoom agreeably to English orthography) each syllable preceded by the guttural clap of the tongue. They ate the berries, but I always found them very insipid. At the same place I first saw *Euphorbia mauritanica* growing in bushes, as they might be called, from 3 to 4 feet high. The milky juice of its branches form, when inspissated [thickened] a frequent ingredient in the poisonous composition which the Bushmen (or Bush-Hottentots) apply to their arrows." [1: 191]

Hex River Kloof:

"On each side the mountains rose in majestic and bold forms, clothed with numerous plants among which the arborescent species of *Cotyledon* [*Tylecodon paniculatus*] was curious and remarkable. In growth it resembled a small tree having a disproportionately thick fleshy trunk. It was called the *boterboom* (butter-tree) probably from the soft fleshy nature of its trunk and branches. [1: 192]

"Frequent large trees of rich foliage adorned the scene and softened the rough features of the frowning rocks." [1: 193]

Hex River Valley, at Buffelskraal:

"... large trees of *Lycium* some 10 feet high indicated the difference in climate ..." [1: 194]

6 July

Hex River Valley:

"In this sheltered and enclosed valley the weather was very warm, and various symptoms of a different soil and climate became more observable. Our road now abounded in trees of the Cape acacia [*Acacia karroo*] the colonial name of which is *doornboom* (thorn tree). It is also called *wittedoorn* (white thorn) and *Karrodoorn* (Karroo thorn). The name of *Acacia* is correctly applicable to the tree on account of its great affinity and resemblance to the true *Acacia* of the Ancients, or gum-arabic tree of Egypt. It is very different from that which in England is commonly, but improperly, called *Acacia*. This was the first spot in which we met with it but I was told by Hottentots that in the following part of our journey it would be one of the most frequent and often the only tree we should see for several days. Its height here did not exceed 20 feet.

"Innumerable straight white thorns, from 2 to 4 inches long cover every branch and twig, and the foliage is so fine and thin as to afford a remarkable example of a tree furnished with abundance of leaves being neither dense nor umbrageous. They generally grow in sandy soil on the banks of rivers, along the dry beds of periodical streams, or in hollow spots that receive water in the rainy season. It is certainly the most abundant and widely-disseminated tree of the extra-tropical part of southern Africa." [1: 195]

North of Hex River Valley:

The soil was sandy. "*Galenia africana*, a small bush growing in great abundance here, is a very common plant in hot, dry karroo-like places and affects the same soil and situations as the *doornboom*; a very pretty kind of *Cythia* [*Cyphia*] was observed twining about its branches. Different species of *Hermannia* and *Selago* grew by the roadside together with a variety of plants not seen before and of which I added to my list thirty two. We continued the while always travelling over a level monotonous country covered generally with rhinoceros bush [*Elytropappus rhinocerotis*]." [1: 196]

1816 La Trobe, C.I. (1818; reprint 1969)

30 April

Entry into what seems to be the Little Karoo from Eseljag Rivier in the upper Langkloof in the east:

"... the road was very rough until we emerged from the kloof and got into the Karroofield, so called from its resemblance to the Great Karroo. We had now the mountains on the north side of the Oliphant's River in view with other ranges of higher or lower hills.

"After a tedious ride through a flat country covered with rhinoceros-bushes [*Elytropappus rhinocerotis*] and here and there with aloes and *wageboom* (*Protea grandiflora*) [*Protea nitida*] we arrived on a farm called Plaisir." Heading towards Doorn Rivier. [p. 255]

3 September — Of the Western Cape mountains generally: shallow soil, steep slopes and the strong run off of water in rains. "The bushes covering a great part of the waste preserve by their shade some moisture on the ground and are providentially furnished with roots of disproportionate thickness which, imbibing the water, give them sustenance and maintain their verdure in the dry season ..." [p. 337]

1838 Backhouse, J. (1844)

25 October — Into the Little Karoo after having passed over the Langeberge from Swellendam:

"The country is called the Little Karroo, or Kannaland from its producing a bush abounding with soda, called *kannabosch*, *Caroxylon salsola* [*Salsola aphylla*].

"We pursued our route over the Little Karroo. In some places the country resembled dry salt-marshes and was besprinkled with a shrubby whitish orach [orache], *Atriplex,* a bushy *Salicornia*, salt-wort, *kannabosch*, and various species of *Mesembryanthemum*.

"We crossed some dry stony watercourses overgrown with a white-thorned verdant acacia, *Acacia hebeclada* [*Acacia karroo*], the *dornboom*, thorn-tree of the Colony. This tree forms a striking contrast with the general sombre hue of the vegetation of this desert ...

"Two species of *Haworthia*, small plants of the *Aloe* tribe, were growing among the roots of some of the bushes of the Karroo." Stopped at Klip River to dine [? c. 15 km south of Ladismith]. "In a kloof ... a large *Stapelia*, a low succulent plant with a star-like flower of considerable size, and several species of *Cotyledon* were growing. The *Cotyledons* have thick succulent leaves and stout soft stems; some of them are arborescent shrubs of about 8 feet high. They are called in the Colony *boter-booms*, butter trees [*Tylecodon paniculatus*]. Two handsome climbing plants of the *Geranium* tribe, *Pelargonium peltatum* and *angulatum* [*Pelargonium tetragonum*] were growing among the bushes near the fountain. Among a tribe of other shrubs we noticed a curious *Aitonia capensis* [*Nymania capensis*] bearing large oblong red bladdery fruit." [p. 112]

From Roodebergen [23 km southeast of Ladismith] to the Swartberge *en route* to Zoar:

"Between this place and the Zwartbergen we came at no water ... but on the hills there was a considerable quantity of *Portulacaria afra*, or *spek-boom*, a tree with succulent leaves that are slightly acid, which supply both food and moisture to the horned cattle. Many other succulent shrubs of this inhospitable country are also eaten by different animals, even the shoots of a leafless *Euphorbia* [*Euphorbia mauritanica*], having numerous smooth stems the thickness of a finger, are topped by the sheep. Some of the hills ... have arborescent aloes upon them rising to about 8 feet in height."

Arrived at Zoar Mission and later returned over the Langeberge *via* Plattekloof to Jonkersfontein. [p. 114]

17 November — From George, over the mountain to Olifants River, presumably near Oudtshoorn:

"... we set out for Dysals Kraal [Dysselsdorp, 23 km east of Oudtshoorn], now called Dysalsdorp ... we crossed the mountains by rugged Cradock's Kloof ... we travelled along a rough road through bushy karroo country to the place of our destination ... near some springs about a mile from the banks of the Olifants Rivier and between two series of bushy hills of red sandstone belonging to the Roodeberg range. Some of these springs are so strongly impregnated with sulphate of iron that copper ash crystallizes along the margins of the ditches that carry off the water. The surrounding country is karroo ... [p. 135]

19 November — "In the neighbourhood of Dysals Kraal there are several little copses of *doornboom*. This species of *Acacia* [*Acacia karroo*] forms a small tree but it is generally branched to the ground. It has long straight hollow white thorns and globular heads of flowers of a golden yellow and elegant bright-green foliage... It abounds also on the margins of the Olifants Rivier where it is intermixed with *Salix gariepiana* [*Salix mucronata*], the elegant weeping willow of South Africa. This being the only species of *Salix* common in the country I shall henceforth, in this volume, call it simply willow." [p. 137]

1838 Bunbury (1848)

29 March — Little Karoo:

"Between Saffraan-kraal and Groot Doorn River ... the country is of a Karoo-like character. It is destitute of grass, heath, large shrubs, and trees, but produces a great variety of low-growing succulent plants, of the genera *Mesembryanthemum, Euphorbia, Crassula* and *Cotyledon*, thinly covering the hard dry ground." [p. 104]

1838 Krauss, F. in Spohr (1973)

6 December — Cogman's Kloof near Montagu:

"... to the hot springs of Kogman's Kloof which borders on the Karoo.

7 December — "We rode further into the hilly Bosjesveld on the hard, dried out, and often gaping clay ground sparsely overgrown with low bushes, of which *rhinoster bosjes*, *Stoebe rhinocerotis* [*Elytropappus rhinocerotis*] are typical; so are *Euphorbia,* aloes, mesembryanthemums and other Crassulaceae. The Breede River was in flood on the banks of which I met for the first time the thorny trees of *Acacia horrida* [Acacia *karroo*] ..." [p. 24]

1839 Krauss, F. in Spohr (1973)

14–19 January — Little Doorn River, upper Langkloof, behind George mountain:

"Through narrow valleys you came to the Little Doorn River where the main route branched off eastwards through the broad Langekloof... Near this river the dried-out yellowish-red shale ground, together with mimosas [*Acacia*], *Arduina* [*Carissa*], *Cacalia* [*Othonna* or *Senecio*], *Mesembryanthema* and several aloes, among others the 10–12 foot thick *Aloe perfoliata* [actually *Aloe ferox*], already announced the vicinity of the arid Karroo."

Kammanassie River:

"I crossed the dry bed of the Kammanassie River." Krauss was then near the Roodewal Hill. "This chain of hills falls steeply from the northwest to southeast towards the river and was furrowed with deep gorges where for the first time I found ancient plants of *Testudinaria elephantipes* Linne [*Dioscorea elephantipes*].

"I reached the Grobbelaars River which was full of water... The riverbanks were overshadowed by mimosas [*Acacia karroo*], and I passed through a narrow valley as far as the Cango Poort. In some places the valley was boggy and there were plantations of bamboo which the farmers use for their long whip handles... Within two hours I had to cross the river 25 times on horseback... The valley, overgrown with trees and high bushes, was lovely... [p. 35]

"The banks of the Olifants River were very steep and were overgrown with *Acacia*." [p. 36]

1840 Backhouse, J. (1844)

12 April — From Worcester:

"Our road lay over a fine grassy plain called the Goudinne [Goudini, 17 km west southwest of Worcester], over the Breede Rivier and through a low pass in the mountains to Brand Vlei [11 km south southwest of Worcester] where there was a strong spring of hot water. The thermometer rose to 140 degrees the moment it was plunged into it... Planted poplars, with grass, sedges, a *Caladium* [probably a cultivated *Colocasia* sp.] and *Zantedeschia aethiopica* grow close to the hot water.

"By the side of the Breede Rivier a pink heath was in blossom among the rushy herbage. Being spread in extensive patches it revived pleasantly the recollections of an English commonage. The valleys in this part of the country are extensive, grassy, well supplied with water. In sandy places they are bushy, producing heaths, proteas, and other striking shrubs, with various species of *Oxalis, Hypoxis* [*Spiloxene*], *Gladiolus, Antheri-cum* [*Chlorophytum*], etc., which render these less fruitful spots more gay than those of more value." [p. 612]

7 OVERBERG

1497 **Da Gama, V. in Colvin (1912)**

3 December Mossel Bay:

Hottentots came down to the beach. "It is the custom of this people for the young men to remain in the bush with their weapons. The older men came to converse... The natives having accepted the bracelets, took Martin Affonso who had been trying to barter the bracelets for an ox and 'pointing to the watering place asked him why he had taken away their water, and simultaneously drove their cattle into the bush.' Fearing treachery a shot from a bombard was fired and the Hottentots rushed into the bush and continued their flight to the top of the hill driving their cattle before them."

1595 **De Houtmann, C. in Raven-Hart (1967)**

August 6 Mossel Bay:

"There I was sent to examine the land which indeed offers a fine prospect adorned with sweet-smelling shrubs and flowers. We went about half a [Dutch] mile inland." [p. 17]

1601 **Van Caerden, P. in Raven-Hart (1967)**

July Mossel Bay:

"We found it a lovely land without many trees but with deer and elephants. Apart from water we got little refreshments apart from mussels, and therefore have called it the name of Mossel Bay." [p. 21]

1689 **Schrijver, I. (1689; reprint 1931)**

25 January Attaquaskloof, 30 km northeast of Mossel Bay:

"This kloof is a cluster of many mountains separated one from another by small kloofs and lesser mountains. Through these we found an elephant path which was covered by dense brushwood [fynbos]... Through this we had with great toil and trouble to break for more than an hour. [p. 219]

"Amongst this a *kreupelboom* [*Leucospermum*] here and there showed itself." [p. 221]

1710 **Cnoll, Commissary (1710)**

23 January Caledon:

"There are no trees here, nor in the neighbourhood, but, as along the entire route, there are only dry stony moors." [p. 87]

1761 **Borcherds, P.B. (1861)**

Swellendam:

Petrus Johannes de Wit owned a farm at Swellendam. "In 1761 he produced the first sample (two hundred pounds weight) of Cape aloes [*Aloe ferox*], extracted on his farm at Swellendam. This was purchased by the East India Company to send to Holland. The medical practitioners declared it to equal the *Aloe socotrina*, if not superior to it. In 1763, again, 200 or 300 lbs were exported. And in 1764, 1 000 lbs at the rate of 30 stivers per pound were purchased from him." [p. 16]

1772 **Thunberg, C.P. (1793)**

October Leeu-rivier, 11 km west of Swellendam:

"We came to the Keureboom's Rivier which is so named from the trees (*Sophora capensis* [*Virgilia oroboides*]) which grow near it in abundance."

An infusion of the root of A*sclepias undulata* [*Asclepias crispa* and/or *Xysmalobium gomphocarpoides*] was used as a remedy for colic.

Swellendam:

"The acrid berries of the *Fagara capensis* [*Zanthoxylum capense*] were used both here and in other parts of the country in the colic." [1: 167]

Buffelsjagrivier, 10 km east of Swellendam:

"The plains now began to abound more in grass, and looked something like meadows... In the same proportion the herds of cattle became larger and occurred more frequently ..." [1: 168]

Grootvadersbosch, in the Langeberg, 15 km northwest of Heidelberg:

"Grootvader's Bosch ... which particularly furnishes [the Company] with large timber... The forest was very thick and lofty, but unfortunately the trees at this season had neither blossom nor fruit on them to satisfy my curiosity." He then lists various species and their uses: *camassie-hout* [*Gymnosporia buxifolia*], *stink-hout* [*Celtis africana*] and *geel-hout* or yellow wood [in this context refers to *Cassine crocea*, although the name yellowwood is now familiarly applied to *Afrocarpus* and *Podocarpus* spp.]. [1: 169]

"A species of pepper (*Piper capense*) that was found in abundance in the wood here was called by the country people *staart-pepper* (or tail pepper) and used by them as a spice [*stertpeper* or *bospeper*; Smith 1966: 438]." [1: 170]

23 October — Between Grootvadersbosch and Vet River:

"In these plains the aloe tree (*Aloe perfoliata*) [actually *Aloe ferox*] from the leaves of which the gum aloe distils, grew in greater abundance than I ever observed it to do in any other place.

"The sheep here were feeding on various poisonous plants such as *Rhus lucidum* [*Rhus lucida*], *Lycium afrum*, etc." [1: 171]

28 October — Heuningklipkloof, 'near Attaquaskloof', 7 km southeast of Herbertsdale:

"The wood of the olive tree (*Olea capensis*) which was very white and heavy, served to make chairs ..." [1: 172]

"The leaves of the *Atragene vesicatoria* [*Knowltonia vesicatoria*] were used by the country people in this and other places instead of *cantharides*." Used to treat blisters; roots also used for drawing pus. "This plant grew chiefly near the precipices of mountains. [1: 174]

"Of the bark of the *Anthyllis* [unidentified Fabaceae, possibly *Dipogon lignosus*], the Hottentots have the art of making ropes by means of which they ascend trees, as by a ladder, when they want to get honey out of them. For this purpose they first tie a noose around the trunk, in which they put one foot, then they fasten another noose higher up, and when mounted in that, untie the former and so on." [1: 176]

20–21 December — Grootvaderbosch:

Re-visited "... Grootvadersbosch, where various sorts of trees are felled for the use of the company, I hoped now to find several trees in blossom but the season was not yet far advanced enough. The *Calodendrum* [*Calodendrum capense*], however, was then in blossom, the honey juice of which I perceived beautiful butterflies sucking without my being able to reach either the one or the other. But by the help of my gun which I leaded with small shot and fired among the trees, I got some branches with blossoms on them." [1: 213]

26 December — Soetmelksvlei, just east of Riviersonderend, c. 60 km east of Caledon:

"The country was already growing very arid in consequence of the scorching summer heat, and the high and drying winds."

Psoralea pinnata (*pinnwortel*) was considered to be a great weed in gardens because of its deep roots. [1: 214]

"Wild chestnuts (*Brabejum stellatum*) [*Brabejum stellatifolium*] are so eagerly devoured by wild boars that they seldom or ever leave one on the ground to spring up unless it should chance to fall between stones." [1: 215]

1773 Thunberg, C.P. (1795)

November — Grootvadersbosch:

Swellendam had been started as a fort to protect the Colony, but, when the Hottentots moved out, the fortifications became unnecessary. "Instead of this a grazing farm is now established there, and the soldiers are employed in the wood called Groot Vader's

Bosch ... in felling, for the use of the Company, different sorts of timber for joiner's work, etc., of which timber a waggon-load is sent to the Cape every three months, besides what the people of the Colony ... are allowed to carry away and fell themselves." [2: 41]

13 November — Between Duiwehoks River and Gouritz River, 36 km west of Mossel Bay:

"The whole of this tract produced aloe trees [*Aloe ferox*] in abundance, which in some places entirely covered the hills and the sides of the mountains where they appeared at a distance like a numerous army. The trees are of the height of a man, with their stems quite bare below, and a crown at the top of broad, thick, and fleshy leaves.

"I observed everywhere the slaves busy tapping and preparing gum aloe, the virtues of which in medicine are well known." A farmer named De Wett was the first to prepare aloe gum and he was given the exclusive right of delivering it and selling it to the Company. Other farmers then started. The method employed in collecting the juice is then described. [2: 49]

1774 Thunberg, C.P. (1795)

14 January — Grootvadersbosch:

Returned to collect flower specimens, but was no more successful than on previous visits. Thunberg found woodcutters there taking timber on behalf of the Company. Oxen pulled the trees from the forest. As he did not expect to call here again he collected leaves, etc. and pressed them. He gives a list of plants and the uses to which they are put:

Black ironwood (*zwarte yzerhout*, *Gardenia rothmannia*) [*Rothmannia capensis*]—axle-trees and poles of waggons.

Yellowwood (*geelhout*, *Ilex crocea*) [*Cassine crocea*]—planks and beams in houses, tables, doors, cupboards, window frames and butter-churns.

Camassie wood (*camassiehout*) [*Gymnosporia buxifolia*]—a shrub used for veneering, for borders of furniture, and for making planes and other delicate tools.

Red pear-tree (*roode peer*) [*Scolopia mundii*]—bodies, under and upper axle-trees, and the lower parts of waggons.

Bucku-tree (*bucku-hout*, *Olea capensis*) [*Olea capensis*, ironwood or *witte boekenhout* and/or *Rapanea melanophloeos*, *rooi boekenhout*]—waggon-wheels.

Red alder (*roode els*, *Cunonia capensis*)—waggon-wheels, the naves of wheels, and chairs.

Ash (*essenhout*, *essenboom*, *Houtniquas essen*, *Ekebergia capensis*)—for tools and implements.

Stinkhout. Two sorts: white (*Celtis africana*) and brown (*Ocotea bullata*)—the latter used for clothes-presses, desks, chairs, tables, and other costly kinds of furniture. When it is first cut down it stinks, but this vanishes.

Olive tree (*olyvenhout*, *Olea europaea*) [*Olea europaea* subsp. *africana*]—chairs; construction of mills.

Wilde catjepiring (*Gardenia thunbergia*)—hard, used for clubs.

Witte essen (white ash, *Platylophus trifoliatus*)—for planks, waggon-racks, boards in waggons, boards for shoe-makers to cut leather on and sometimes for cupboards.

Zwart-bast (*Royena villosa*) [*Diospyros villosa*]—for waggon bodies and as yokes for draught oxen.

Keurhout (*Sophora capensis*) [*Virgilia oroboides*]—wheels and bodies of waggons [applies equally to the westerly *Virgilia oroboides* and to the easterly *V. divaricata*].

Almond tree (*amandelhout*) [*Brabejum stellatifolium*]—for heels of shoes and shoemakers lasts.

Assagay boom (*assagay* tree, *Curtisia faginea*) [*Curtisia dentata*]—for waggon poles and shafts for Hottentot's javelins.

Dorn-hout (*Mimosa nilotica*) [actually *Acacia karroo*]—for lock-shoes to put under wagon-wheels, as likewise for the bows of yokes for draught oxen, and for making charcoal.

Waageboom (*Protea grandiflora*) [*Protea nitida*]—for fuel and charcoal.

Kreupelboom (*Protea speciosa*)—bark used by tanners for dressing the tanning leather.

Leepelboom [*lepelboom*] (*Cassine peragua*)—made into spoons and wooden bowls.

"The largest trees in the African woods, as well in this as in others, were:

"*Geelhout*, *Ilex crocea* [*Cassine crocea*]; *bucku*, *Olea capensis; Tarchonanthus camphoratus & arboreus* [*Tarchonanthus littoralis* and probably *Brachylaena neriifolia*]; *roode-else*, *Cunonia capensis; witte-else* [*Platylophus trifoliatus*]; *stinkhout* [*Celtis africana*]; *assagayhout*, *Curtisia* [*Curtisia dentata*]; wild chestnut, *wilde castanien*, *Brabejum stellatum* [*Brabejum stellatifolium*]; wild fig, *wilde vygeboom*, *Ficus capensis* [*Ficus sur*]; *Mimosa nilotica* [*Acacia karroo*]; and *esse-boom*, *Ekebergia capensis*.

"On the hills grew *Ornithogalum altissimum* [actually *Drimia capensis*] which was now in full blossom and decorated the plain with its long and crowded spikes of flowers. It was said to be common every fourth year and, in the intervening years, hardly to be seen." [2: 108]

20 January — Tigerhoek [Tierhoek], 4 km north of Riviersonderend:

"... in the adjacent woods a quantity of timber is felled for making all kinds of implements for the Company's own use.

"The workmen are at liberty to cut down and fell some wood and timber by way of assisting to support them, but no husbandman is suffered to fell any here. In Houtniquas [George] and other woods, indeed, the husbandman is at liberty to cut timber but in some places, not without the special permission of government and paying a contribution of 5 rix-dollars." [2: 113]

Zoete-melks Valley [Soetmelksvlei], just east of Riviersonderend:

At the Company's post "... twenty-four men and a sergeant are kept for the sole purpose of felling timber in the adjacent woods. From this place the Company receives the greatest part of its ship and common timber, of which three large waggon-loads are sent every month to the Cape. The labourers here also are permitted to cut a reasonable quantity and fell it on their own account. The large pieces of timber such as beams, etc., are dragged out by oxen, and, it must be confessed, not without the greatest difficulty.

"To the smaller pieces such as wedges, handles for axes, gun-stocks, wheel-timber, axletrees, etc., the form is given before they are carried out of the wood. When a large tree is felled it is left for some time to split of itself; then it is cloven and cut up." [2: 114]

1775 Sparrman, A. (1786)

26 July — Hottentots Holland Mountains, Somerset West:

"It was as yet very bare of plants." [1: 125]

July — Bott [Bot] River and environs, 21 km west of Caledon:

Rode on horseback "...over plains, hills, and dales. The whole of this extensive tract was, by reason of the default of water, left uncultivated and uninhabited." He saw now for the first time large herds of plains-game and ostriches. [1: 129]

Caledon:

Found several kinds of *Iris* [*Moraea*]; the bulbs are eaten and called *uynties*. [1: 148]

August — Tierhoek:

Tygerhoek was a government farm which did not grow corn. "Their most considerable income is timber which is fetched from a wood on the other side of the Rivier Zonderend where the Company keeps a party of woodcutters which is under the inspection of a corporal... He is likewise to superintend the grassland and dairy ..." [He did not visit this wood because it was not flowering season] [1: 179]

Riviersonderend, 47 km east northeast of Caledon:

The Hottentots use the "... different species of *Diosma* [and/or *Agathosma*], called by the Hottentots *bucku* and considered by them as possessing great virtues in curing disorders." One species near the Gourits River [near Mossel Bay] is so valuable that a thimbleful is given in exchange for a goat. [1: 184]

6 September — Grootvadersbosch:

There were many beautiful and tall trees but, being out of season then, they were not in bloom. [1: 235]

"Beams, planks for flooring, and timber for the construction of wagons are fetched from hence both by the government and by the farmers. Many sorts of shrubs and bushes in some places, particularly by the side of the wood, fill up the interstices between the larger trees, and render the forest impervious. Among these, several sorts of prickly Asparaguses deserve to be remarked, as well as a new species of *Calophyllum* [probably *Scutia*

myrtina], which from its catching, like the thorn-bush, fast hold of the traveller with its hooked prickles ... is commonly called here *wakt-een-beetje*, or stop a bit. [1: 236]

"The country round about was extremely dry and arid, and scarcely a vernal blossom was to be seen. The reason for this was the universal want of rain which was everywhere complained of that spring. At this place there had been no rain for several days before, and yet the trees in Groot Vadersbosch had, as forests usually do, attracted vapour from the clouds, and rain sufficient to water them." [1: 237]

September — Near Mossel Bay:

Describes the various veld types in the country and mentions that the colonists divide grazing into sweet and sour. The Karoo (Carrow), classed as sweetveld, is dry and arid with very little rain or grass in the summer. [1: 246]

Succulent plants occur, e.g. mesembryanthemums, crassulas, cotyledons, stapelias, euphorbias. "All these, nay, the very tops of the euphorbias, are eaten by the sheep which even grow extremely fat on them but, as in summer, they have nothing else to support themselves with, they content themselves with browsing on the shrubs and bushes, and ... do not by any means fare ill." Cattle cannot manage; they seek reeds and other green vegetables in the rivers.

Nearer the sea, the sourveld gets more rain and "... abounds in grass. The different sorts of grass here are likewise perennial and coarser than those of the former [sweetveld]." Cattle chew thongs, bones, etc., exhibiting a condition of pica or deficiency, and they chew each others horns. "This circumstance which seems to denote an acid in the stomach of the cattle may, probably, have given occasion to the appellation bestowed on these plains."

The colonists consider that although the sweetveld produces less milk than the sourveld, it produces more butter, "...although in these latter places the cattle get fatter." The Karoo is best for sheep, and the sourveld less so. [1: 247]

Between Swellendam and Gouritz River, 36 km west of Mossel Bay:

Sparrman had been told "... without a shadow of doubt that such places as before abounded in grass and were very fertile in corn ... are now fallen off considerably, so that it is feared that they must in a short time be given up. The rhinoceros bush (a species of *Stoebe* [*Elytropappus rhinocerotis*]), a dry shrub which otherwise used to thrive on barren tracts of lands, now begins to encroach more and more on such places as have been thoroughly cleared and cultivated." Asked why this was so, the colonists said they were to blame; they did not know how to look after the soil. Whereas the Hottentots kept their cattle on the move, the colonists grazed them on the same ground year after year. The colonists also had many more cattle which caused overgrazing and "... the grasses and herbs which these animals most covet are prevented continually from thriving and taking root while, on the other hand, the rhinoceros-bush which the cattle ... leave untouched, is suffered to take root free and unmolested and to encroach on the place of the others."

Despite knowing this and seeing it around their farmhouses, the colonists refused to leave their homes, whereas the Hottentots "... on the least panic, move their huts and cattle to another place so that the grass is nowhere eaten off too close." Time and rest will restore the pasture grass if the colonists move out. "It is also not improbable that the game, finding more security from the sportsmen here than formerly, may resort hither in great numbers, and it is well known that, in feeding, they make a more equal division between the grasses and bushes than the ordinary cattle do... The animals which occur in Africa are, in my opinion, as much designed for the plants peculiar to this climate, as the plants are for the animals." He then makes comparison with animals and plants of Europe. "Induced by these examples [of conservation in Europe] the African colonists ought to take it into serious consideration whether, by extirpating the game, they are not in reality laying waste their country, and rendering it a mere desert." A farmer burnt the renosterbos in order to get rid of it, but afterwards it came up all the denser. [1: 250]

Duiwehoksrivier, at Heidelberg:

"... at Duyvenhoeks-rivier we first saw the *dorn-boom*, a tree called *Mimosa nilotica* [*Acacia karroo*] which produces a gum arabic." [1: 243]

Kafferkuils or Palmietrivier, at Riversdale:

"Kafferkuyls- or Palmit-rivier was still tolerably broad at the upper ford and overgrown with palmiets [*Prionium serratum*]." [1: 244]

14 October — Through Attaquas kloof:

"The vale ... is reckoned among the districts which are cold and sour in the highest degree and at the same time is considered as unfit to be inhabited. Here, there is said to grow a herb, called by the colonists p-grass (? piss-grass) and which, as far as one may

trust to their description of it, is probably a species of *Euphorbia* [probably *Euphorbia erythrina;* Smith 1966: 371.] When cattle are brought in from elsewhere they get an often fatal stoppage of urine flow and in the urine as well as the urethra ... a substance resembling little lumps of cheese has been observed." [1: 295]

1776 Sparrman, A. (1786)

Mossel Bay to Duiwehoks River, at Heidelberg:

Aloes [*Aloe ferox*]: "... in certain spots hereabouts, and that chiefly on the declivities of the mountains, these plants formed groves (as it were) of small palm-trees." Mentions juice-tapping. [2: 330]

1782 Le Valliant, F. (1790)

27 January — Mossel Bay area:

"Large woods on the mountains in this canton." [1: 160]

1798 Barnard, A. in Robinson (1973)

12 May — Soetmelksvlei, just east of Riviersonderend:

"This same Sweet-milk Valley does not at all answer my expectations. I was told of charming woods where the greatest variety of choice timber was to be found—stinkwood, ebony or blackwood, satinwood, the wild olive, which resembles tortoise-shell when polished, and many others; but I saw not a tree. I learnt afterwards that there is a deep glen between the rising ground and the mountains, which is wooded all over—this may be very useful, but does not beautify the country very much ..."

13 May — South-east of Swellendam town:

"Passed through a stony river ... a quantity of wild thorns now grew everywhere, sometimes they met so close as to endanger our eyes ..." [pp. 126, 127]

14 May — Jacob van Reenen's farm Slangrivier, 8 km west of Heidelberg:

"The soil, like all the rest of the country, seemed good, waiting only to be tried to prove itself so. The heath fattens the cattle well ..." [p. 130]

18 May — Near De Kelders, 20 km southeast of Hermanus:

"We passed through a low brushwood afterwards, the trees so close that they met over the backs of the oxen who butted their way through it—to the left there was a good deal of the same; this is a harbour for wild boars, of which there are a quantity here, and some tigers [leopards].

"When we had pierced through this and travelled a few miles further, we met with our fresh oxen, and soon plunged into a pathless world, sandy but covered all over with evergreens of various descriptions, breaking down our way as we went by the mere weight of the waggon... The brushwood seemed to me to be of a more brittle nature than what I was accustomed to see in England, which would not have given way so easily." [p. 114]

Near Swellendam:

"The mountains rise nobly at a couple of miles distance or so ... greenish hillocks rose between us and them—'tis between them and the mountains, in a glen, much the same as at Sweet-Milk Valley, the woods are to be found which have been reckoned so luxuriant but they are of no use to beautify the country as their highest branch does not rise above the surface of the earth ..." [p. 138]

1798 Barrow, J. (1801)

Mossel Bay:

"The general landing place is a sandy beach at the head of a small bay into which runs a rivulet of water slightly impregnated with salt. This stream does not appear to be capable of filling above a dozen butts of water in a day ...

"Great quantities of the common aloe [*Aloe ferox*] grow upon the plains that surround Muscle Bay. The inspissated juice of this plant was once an article that afforded a considerable profit to those who were at the trouble of collecting and preparing it, but the price is now reduced so low, about threepence per pound, that it is no longer considered as an object worthy the attention of the inhabitants. Three pounds are as much as one person can collect and prepare in one day." [p. 347]

5 January — Gourits River, 36 km west of Mossel Bay:

"This river may properly be called the Sink of the Colony. All the waters that have their origin within a distance of 150 miles to the eastward, and as far to the westward, upon the Great Karroo, and mountains to the northward of it, meet in one immense chasm of the chain of mountains nearest the seashore and are discharged through the channel of the Gauritz River. The sudden and copious inundations of this river are almost beyond credibility. The ruins of a house are still to be seen that is said to have been destroyed by the swelling of the river, though the site cannot be much less than 100 feet above the level of the channel; at this time all its numerous branches scarcely supplied it with water sufficient to cause a current." This shows that heavy floods came down the river even before man interfered seriously with the Karooveld.

6 January — Gourits River to Kafferkuils River at Riversdale town:

"The surface of the country interjacent between the rivers was very irregular, the soil was dry clay and chalk, and was fit for little else than sheep pasture. It produced a great quantity of shrubs among which was one called the *guarrie bosch* (*Royena*?) [*Euclea undulata*] from whose berries and those of the *Arduina* [*Carissa bispinosa*] some of the farmers had made a sweetish wine not unlike that which in Europe is procured from the alder." [p. 348]

January — Grootvadersbosch:

"The forests of Plettenberg's Bay and the Anteniequas land [George District] had ceased to clothe the feet of the mountains from the point directly north of Muscle Bay.

"Another clump now appeared about 20 miles to the eastward of the Drosdy of Swellendam, called the Grootvader's bosch. This wood, in the early stages of the Colony, contained as great a variety of large timber trees as the others but, being so much nearer the Cape, is now stripped of most of the wood that is valuable.

"From Grootvader's Bosch a beautiful valley stretches along the feet of the mountains as far almost as the Drosdy ... [p. 349]

"Zwellendam affords no great supply of cattle to the Cape market, and still less so of sheep. Horses are brought up for sale in considerable numbers. The revenues of the farmers are principally derived from timber, grain, butter, soap, and dried fruits. To a naturalist the district is the least interesting except in botany and in this department it offers an ample field. Of the number of those who have made that branch of science their particular pursuit, and who have visited the Colony, none have sufficiently attended to the native forest trees so as to be able to assign them their places in the prevailing system of arranging the vegetable part of the creation.

"Few antelopes, except the reebok, steenbok, and duyker are now remaining in the District of Zwellendam." [p. 350]

1803 Lichtenstein, H. (1815)

6 December — Zoetemelksvalley [Soetmelksvlei]:

"The valley of Zoetemelk is a place which in earliest times, on account of its excellent grass, had been used by government for resting and recruiting the cattle bought of the distant Hottentot tribes and destined for slaughter in the town. [p. 195]

"The spot is plentifully watered by a number of rivulets, nor is there any reason ever to apprehend the failure of this supply since large trees which strike deep roots grow in these gulleys, a plain proof that the moisture cannot have failed for a long course of years. Some miles further towards the east, the gulleys are much larger and grown up with woods which have furnished, and may furnish again, very good timber for building; at present the best trees have been cut down, a few excepted which grow in situations where it is not easy to get at them. But African trees grow so slowly that it must be some time before timber can be cut down here again. The post holder at Zoetemelksvalley is also overseer of these woods and without express permission of the government, no more can in future be cut down.

"Among the many healthy and aromatic plants which render this place so excellent for feeding cattle, I found the *Euphorbia genistoides* [more probably *Euphorbia erythrina*] in great abundance.

"The nearest heights were ornamented with a variety of beautiful heath-plants but most of them were already out of bloom." [p. 196]

December — Essaquas-kloof [Hessekwaskloof], c. 20 km west southwest of Swellendam:

"These were the first heights on which we found the *Aloe perfoliata* [actually *Aloe ferox*]. The tall upright stems of these plants growing to the height of a man gave them when seen from a distance, the appearance of a man." [p. 199]

Swellendam:

Visited "…a woody ravine called the Duivelsbosch" behind the town. "But alas I found few plants in flower: the favourable time of the year for collecting them had past. I was therefore more assiduous in collecting seeds for the benefit of the governmental botanical gardens at Cape Town and of my friends in Europe. The stream which flows from the Devil's Bush is called the Klip-river and which runs through the valley of Zwellendam ..." [p. 201]

Buffelsjagrivier, 9 km east of Swellendam:

"In the afternoon we passed through a country where we found the *Mimosa nilotica* [*Acacia karroo*] standing in the open field, spreading wide around the delightful fragrance of its full-bloom flowers. Hitherto we had only seen this tree on the banks of the Karoo rivers. These were beside much finer trees than any we had seen before; they were tall in the stem, and threw out large branches; the foliage was more luxuriant, and the thorns were neither so large nor so thick about the tree; yet it did not appear a different species from the other."

Just east of Buffelsjagrivier:

"Everywhere on the heights hereabouts we met also *Aloe perfoliata* [actually *Aloe ferox*]." [p. 203]

Duiwehoks River, Heidelberg:

"No point of the Colony, indeed, is better supplied with building material than this. Timber in plenty grows in the neighbourhood." [p. 204]

Kafferkuils River, Riversdale:

First saw here juice being extracted from aloes and describes the method of tapping. This is done during August, September and October each year. [p. 207]

Gourits River to Mossel Bay, a distance of 36 km:

"The nearer we approached to the coast the more level the country became and the greater the abundance of grass ... notwithstanding the soil grew evidently much more sandy." [p216]

In the caves of Cape St Blaize, Mossel Bay:

"On the walls of those caves, particularly of the upper one, I found a vast number of lichens hitherto unknown to me; some people assert that from these, as well as many other sorts of this species, excellent materials may be drawn for dying. They appear to me, from some trifling resemblances, to be between the *Lichen parellus* and the *Lichen roccela*. The postholder, at my request, promised to send me a quantity to Cape Town, my friend, Poleman, an able chemist there, having long wished to make experiments upon them ... [The promise was not fulfilled.]

"The influence of the sea air (united with the low situation of the country) upon vegetation is here very striking. It is particularly luxuriant in the parts that lie from 100 to 150 feet above the level of the sea. These parts are thickly grown over with bushes and shrubs. The *Arduina spinosa* [*Carissa bispinosa*], several sorts of *Zygophyllum* [*Roepera*], *Pelargonium, Royena* [*Diospyros*], *Rhus*, and others, grow wild promiscuously among each other, some of a considerable size, and the leaves quite fresh and green ..." [p. 221]

1803 Van Reenen, D.G. in Blommaert & Wiid (1937)

Swellendam:

"Suitable pasture for sheep is not found there, for the veld consists of sour grassland on which good grazing for sheep is scanty." [p. 45]

1804 Lichtenstein, H. (1815)

September

From the top of the Hottentots Holland Mountain to Houhoek, near Grabouw and west of the Palmiet River:

"This eastern side of the hill is more naked than the western" which he attributed to its having a more northerly aspect and therefore affected by a greater heat from the sun. "Further down were many single shrubs of which this valley seems to be the most chosen abode…*Retzia spicata* [*Retzia capensis*], *Tenaea formosa* [?*Brunia abrotanoides*], *Erica gnaphaloides* and *acuminata, Protea erosa* [*Leucospermum grandiflorum*] and many others equally beautiful and rare." [p. 147]

Palmiet River, at Grabouw;

"... we reached a more considerable stream called Palmiet River. It has this name from the abundance of *palmiet* reeds, *Acorus palmita* [*Prionium serratum*] which grow about it; they are indeed common about all the streams in these parts." [p. 148]

4 September Houhoek Pass at Great Houwhoek, not the smaller pass called Houwhoek:

"Further down [the pass] in rents made by the waters, the rocks were grown over with many sorts of bushes. I saw here for the first time the *Taxus* now called *Podocarpus elongatus*, the *Protea pinifolia* [*Aulax cancellata*], the *levisanus* [*Leucadendron levisanus*] and many other beautiful sorts of this species upon the average not less than 15 to 20 feet high. Among them grew in tolerable abundance a higher sort of tree which, alas, was not in blow [bloom]: the fruit has the same kind of angular form as the nut of the *Cupressus* and the leaves are long, narrow and pointed in the form of a lancet... The *Brabejum stellatum* [*Brabejum stellatifolium*] also grows here as it does in most chasms where the declivity runs down to a plain and where water is standing the whole year through." [p. 151]

Crossed the Bot River, 19 km west northwest of Caledon on to a 'very sandy' plain:

"Several sorts of [*H*]*elichrysum* forms its most beautiful ornament; the principal are *sesamoides* [*Edmondia sesamoides*], the *vestitum* [*Syncarpha vestita*] and the *imbricatum* [*Helichrysum cochleariforme*]. The colonists call all these species seven-year-flowers because, if gathered when in full bloom they will last for a long time with their beauty unimpaired, seven years according to popular belief. The houses of the colonists are every where decorated with them. They are sent as presents to Cape Town and they are even made an article of traffic by speculating Europeans. While the English name, everlastings, and the French *immortelles*, refer to the imperishable nature of their beauty, we Germans are pleased to call them paper-flowers or straw-flowers to designate in truly prosaic terms the dryness which prevents their fading... Next to the *Erica* and *Protea* these are some of the most characteristic plants of the country and belong almost to this alone, at least as far as concerns the species [*H*]*elichrysum* and the greater part of *Gnaphalium*." [p. 152]

September Riviersonderend:

"... banks are richly overgrown with shrubs. The *Halleria lucida* and *elliptica* were distinguished above the rest by their beautiful red flowers." [p. 156]

From Genadendal (Baviaanskloof) to Zoetemelksvalley, at a place somewhere northwest of Riviersonderend village:

Crossed many streams *en route*. "In the ends of some of these which consist of small loose stones the *Erica urceolaris* [*Erica urceolata*] grows in great abundance, rising sometimes to a very extraordinary height, even from 12–15 feet. I remarked some little difference between the leaves and flowers on these plants and those of the same species which are to be found in the clefts of Table Mountain, particularly in Kirstenbosch, but this may probably be occasioned solely by the different height of the places where they grew." [p. 157]

7 September Travelling down Sonderend River going east, c. 50 km east northeast of Caledon:

No rain had fallen during the past five winter months and the drought was severe. "Close to the neighbourhood of the river Zonderend where the ground was low, the vegetation was tolerably flourishing. Large streams of land running between the little copses were covered with the *Galenia africana*, a plant which furnishes the most wholesome food for horses, but the horned cattle do not like it." [p. 160]

September Duiwelsbosch, behind Swellendam:

Found "... some beautiful sorts of the low species of *Blaeria* [*Erica*] which is properly at home in this country: the heaths which I had found on the Breede River, though so nearly related to them, were not to be seen here. The *Erica* is generally speaking the property of the little southwest corner of Africa, but some of the sorts are to be found about Tulbagh and Zwellendam. With this species may also be mentioned some *Struthiola*, *Passerina* and *Phylica* which seem properly to belong only to the neighbourhood of Cape Town. Among the *Blaeria* were several new sorts, an event which, in the sequel, has been determined a new species of *Sympieza* [*Erica*]." Then went into a well-watered valley between mountain ridges. "Among the rushy grass growing in the hollow, many single low shrubs were strewed about, particularly *Podaliria buxifolia* [*Podalyria buxifolia*], *Podaliria myrtillifolia* [*Podalyria myrtillifolia*], and a new sort; *Polygala virgata, Polygala oppositifolia, Aspalathus thymifolia* [*Aspalathus cymbiformis*], *Aspalathus nivea*, several *Liparia, Rafnia, Cleomea* [?] and other species, almost all of the family of papilionaceous flowers." [p. 163]

Then *en route* towards a forest "...I was saluted, even before I arrived at the wood, with the camphor-like smell from the flowers of the *Diosma* which were growing on the

banks of the streams, and the first thing that met my eyes on coming to the wood was the *Barosma serratifolium* [*Agathosma serratifolia*], taller than the ordinary height of a man with its brown and slender branches covered with bright green leaves and thinly-spread white flowers... Several sorts of *Cluytia* [*Clutia*], as the *pulchella, alaternoides, tomentosa* and *gnidioides* [*Clutia rubricaulis*] shared the humid spot.

"Among them grew (where with us grow the *Mentha* and *Veronica*) *Agathosma serpyllaceum* [*Agathosma serpyllacea*], *linifolia* and *pubescens* [*Agathosma elegans*], the two first of which were quite new to me.

"In drier parts were *Ornithogalum, Anthericum* [possibly *Chlorophytum*], *Bulbine, Adenandra uniflora* and *villosa*, *Diosma pectinatum* [*Diosma hirsuta*], *obtusatum* [*Acmadenia obtusata*], and *graveolens* [*Agathosma pulchella*], with several *Lachenalia*.

"Further up in a place where the wood was less thick and where there was consequently more light, I found abundance of *Myrsine africana* (which is very like *Vaccinium* in our country) in company with *Anthospermum aethiopicum* and *Cliffortia juniperina* covering a considerable tract of stones and growing at the roots of the first large trees. [p. 164]

"The next shade presented me with the dark leaves of the *Laurophyllus capensis*, and farther in towered trees of various sorts as *Scleroxylon* [*Ilex mitis*], *Ekebergia capensis*, *Euclea undulata, Podocarpus elongatus*. Many a space between these was occupied by low shrubs as *Royena* [*Diospyros*], *Bryonia* [unidentified, possibly *Kedrostis*] and *Cluytia* [*Clutia*]. The higher branches of the trees were entwined with the woody wide-spreading runners of the *Cynanchum obtusifolium* [actually *Secamone alpini* is meant]... The colonists call the plant monkey's cord since the monkeys often make use of it to get from tree to tree. Of the thick stems which are wound around the branches of the trees, and which are often 2–2½ inches in diameter [walking] sticks are made which, on account of their pretty twining appearance are much bought up by the gentry of Cape Town where they are called Esculapian sticks [Aesculapius was the Greek god of medicine. His symbol was a staff with a serpent twisted round it, an item featured on all badges connected with medical institutions, corps, etc.]." [p. 165]

Some of the forest plants growing in the mountain forests there are like those growing "... in German groves... Among them may be mentioned a sticky kind of plant *Galium glabrum* [*Galium tomentosum*] which very much resembles our *Galium aparine*, or goose-grass, and is not less adhering in its nature. A plant which is now very much cherished in our conservatories, the *Plectranthus fruticosus* was here in very great abundance ..." It had lily-white flowers. There were also "... *Antirrhinum macrocarpum* [*Nemesia macrocarpa*], *Pharnaceum galioides* [*Adenogramma diffusa*] and *Hebenstretia dentata* but nowhere were any genuine grasses, or any sappy kind of plant to be seen, nor any shrubs with fleshy berries, no *Protea, Erica*, or *Gnaphalium*—no plants of the Syngenesia family [Asteraceae], nor any of the *Ranunculus* tribe.

"Higher up the chasm were the *Silene ornata* [*Silene bellidioides*], *Ornithogalum parviflorum* [possibly *Bulbinella trinervis*] and several sorts of *Oxalis* already in blow [bloom], and the *Crassula sylvatica* [*Crassula strigosa*] rooted in the hard stone. Higher up still rose a gigantic *Polypodium*, with several ferns and mosses, things very rare in this country." [p. 166]

Mentions a plant in the stream "...having a sort of grasslike appearance with very small stalkless leaves growing to the height of about two feet ... perhaps it may be a sort of freshwater alga of a wholly new species ..."

On the side of the mountain "... I found some pelargonia and the *myrrhifolium* among others, *Hermannia cuneata, Erinus serpyllaceus* [*Zaluzianskya* sp.], *Indigofera erecta, Borbonia ruscifolia* [*Aspalathus crenata*], *Stilbe cernua* [actually probably *Stilbe albiflora*], *Gnidia polygalaefolia* [*Gnidia parviflora*] ..." [p. 167]

John Andrew Auge, a well known Dutch botanist who had gone blind and was living in Swellendam, asked Lichtenstein: "Is my *Heliconia alba* alive? Is my *Corallodendron* as fine a tree as ever?" These he had collected at the end of the previous century. In a footnote Lichtenstein explains: "He meant *Strelitzia alba* and *Erythrina caffra* which are still two of the highest ornaments to the Cape Town gardens. The first he brought, as he now informed me, from the country of the Namaaquas, the other from the Caffer country." [He is mistaken in the former as *Strelitzia alba* does not grow in Namaqualand; the latter could be correct]. Lichtenstein replied that the plants were in good shape at Cape Town and added that Thunberg, the Swedish botanist, had "... called a species of plant after him *Augea capensis*." [pp. 170, 171]

Hessekaskloof, c. 20 km west southwest of Swellendam:

"The shrubs consisted principally of *Malva capensis* [*Anisodontea*, probably *A. scabrosa*], *virgata* [probably *A. scabrosa*] and *trydactilytes* [*Anisodontea fruticosa*], *Hermannia candicans* [*Hermannia althaeoides*] ... *Aspalathus, Athanasia, Relhania, Arecotis* [possibly *Arctotis* is meant], *Sarcophyllum carnosum* [*Lebeckia carnosa*], *Ulex rigidus* [probably *Aspalathus* sp.], *Polygala hamosa* [possibly *Polygala fruticosa*], etc.

"In the low parts nearer the river were *Diosma*, between melancholy *Lycia* of several sorts, *Stavia* [sic, *Staavia*] *radiata*, and three or four species of *Zygophyllum* [*Roepera*] and *Warmben* (sic) *campanulata* [identity unknown] about which climbed the *Asparagus triacanthos* [*Asparagus capensis*]. Nowhere was *Erica* to be seen but many plants of the lily tribe, and one of the greatest ornaments of the fields *Echium spicatum* [possibly *Echiostachys incanum* is meant]; of this there was very great abundance." [p. 173]

September — Caledon:

"Here are again a variety of heaths; five or six of the most beautiful sorts... Near the hot springs [Caledon town] also grows very abundantly a sort of *Eucomis* [*Eucomis regia*] without a stem; the large, almost beehive-formed flowers of which, with the leaves lying flat on the ground, puzzled me very much. These leaves correspond very well with the description of the *Eucomis nana* ..."

Refers to "... a plant exceedingly abundant in the Black Mountain [Swartberg], the wax-tree, or *Myrica cordifolia* [*Morella cordifolia*]. It is here seldom more than two feet high, has a thick woody stem and is covered with flowers and berries... The berries ... it is well known, yield a vegetable wax ... this wax is collected in considerable quantities by putting the berries into large iron vessels and setting them over a fire till an oil is seen swimming at the top, which is then left to cool and harden. The substance thus obtained might with as much propriety be called fat as wax. The facility with which it is melted by only 20 degrees Réaumur [c. 27°C], its smooth rather than glutinous quality, the facility with which it may be converted into a palpable tallow, seem rather to identify it with fat rather than with wax." The berries have to be collected with great care, November being the best month and the process is further described. [p. 179]

1811 Burchell, W.J. (1822)

9 April — Palmiet River:

"Most of the rivers which we passed ... are choked up with the plant called *palmiet* [*Prionium serratum*]. Burchell likens the plants to *Ananas*, or pineapple plants. "They have very much the growth of dragon-trees (*Dracaena*) or of some palms from which latter resemblance they have obtained their name." [1: 91]

Houhoek:

Passed many laden wagons, some of which were carrying farm produce to the Cape, "...some bringing timber from Auteniqua-land [George]." [1: 92]

10 April — The Hot Baths at Caledon:

"The country is hilly and abounding in low bushes; the *Rhus villosum* [*Rhus laevigata* var. *villosa*], both here and in other parts of the district passed through in this excursion, forming one of the lightest and prettiest little trees that adorn the landscape. The *Chilianthus oleaceus* [*Buddleja saligna*] grew in the hollows and, in growth and foliage, bore a resemblance to the European olive tree."

Recorded the temperature of the water in the hot spring at 118°F; 38.2°Réaumur and 47.77°C. [1: 95]

"The water seemed to posses no quality hurtful to vegetation, and *Cliffortia odorata*, which is a shrub frequent in wet places, grew in it as luxuriantly here as in other rivulets. I gathered *Pelargonium grossularioides* on the very edge of the warm rill which was decorated also with the elegant *Restio verticillatus* [*Elegia capensis*] of the height of 6 feet together with various Lobeliae and many other flowers. On the drier ground *Athanasia trifurca* was a conspicuous shrub being at the time in bloom." [1: 99]

11 April — From Caledon to Genadendal, round the western end of the Swartberg:

"The face of the country was open and its surface varied with smooth hills covered almost exclusively with a neat pale bushy shrub of the height of 3 or 4 feet called *rhinoster bosch* (rhinoceros bush [*Elytropappus rhinocerotis*]) and said to have formerly been the food of the huge rhinoceros till those animals fled before the colonists as they gradually advanced over the country where the shrub grows." [1: 101]

12 April — Genadendal, 16 km north northeast of Caledon:

"... our cottage ... ceilings ... were formed of a reed, called by the colonists *Spaansche riet* (Spanish reed). (Footnote: *Arundo donax* ... cultivated very generally by the Boors, and applied to a variety of useful purposes.) [1: 105]

13 April — "The women here earn a little money by the sale of mats which they manufacture from a kind of rush very common in the rivers of this district [*Cyperus textilis*]. These rushes are sometimes so long as to admit of being made into mats of 6 feet in width ..." [1: 114]

Riviersonderend:

"Firewood is an article generally very scarce in the vicinity of a Hottentot settlement, and in all the grazing parts of the Colony it is rendered much more so by the wasteful and destructive practice of annually setting fire to the old withered grass as the means of clearing the pastures." Describes the desecration by fire at Donkerbosch near Baviaanskloof, Genadendal. [1: 116]

14 April — *En route* from Genadendal to Brandvlei, Worcester:

"On the road ... we passed some large trees of *wagenboom*, *Protea grandiflora* [*Protea nitida*], so called by the colonists because wood has been found suitable for making the fellies of waggon-wheels... It is the largest growing tree of the proteaceous tribe in this part of Africa. It is found growing in dry rocky places with a trunk often a foot or more in diameter, and is remarkable for its exceedingly blue foliage ... flowers of a pale yellow colour which, though 4 inches wide when fully expanded, are still inferior in size to those of *Protea cynaroides*. Another proteaceous tree, *Brabejum stellatifolium* sometimes exceeds *wagenboom* in the extent of its branches but is smaller in the trunk. We passed many other species of the same order and a great variety of shrubby plants ... but which were overtopped by the *bezem-riet* (broom reed) a large kind of *Restio* which grew abundantly in many places. An elegant willow-leaved shrub *Capraria lanceolata* [*Freylinia lanceolata*] was common in the beds of small rivulets."

At Brandvlei Burchell measured the temperature of the water in the hot spring at 100°F; 49,5°Réaumur and 62.5°C. "The pond is sheltered by a small clump of white poplars which thrive perfectly well although growing at the very edge of the water and bedewed with hot steam which ascends to their highest branches. No plant, it seems, can grow in the water itself but the margins of the bank are thickly covered with sedge (Footnote: particularly *Cyperus fascicularis* (*C. polystachyos*, Linn. et Rh.)); *Royena glabra* [*Diospyros glabra*], a *Rhus*, and a variety of plants, stood within the influence of the heat." [1: 123]

1816 La Trobe, C.I. (1818; reprint 1969)

15 January — Sergeant's River, southwest of Greyton:

"... surrounded by the same dreary country as before. Very few shrubs and low bushes enclose the Sergeant's River in the valley ..." [p. 57]

24 January — Swartberg:

Towards the summit "... innumerable flowers and shrubs of great variety grow among the rocks and the botanist finds here a great variety ... plants, here and there luxuriantly growing between the stones on a very thin covering of earth ..." On the way down "... along the south side of the Zwarteberg. The country is mostly barren without a tree or bush to clothe its brown surface. Not a green spot is seen excepting where, in the bed of some torrent, a little moisture has been left behind." [p. 78]

2 February — Riviersonderend:

"The Sonderend flows in the vale but its waters in this dry season are hid from view by large shrubs, brush-wood, broom, and reed-grass growing in its very bed. The view of the mountains is grand, and makes amends for the melancholy appearance of the plain." [p. 87]

Gaense Kraal [Ganskraal]:

"We admired the oaks growing on these premises. They are an additional proof that had the first settlers been attentive to the growth of timber, both for their own and their childrens' sake, they would now have had timber and fuel sufficient and not been under the necessity of fetching the former from Plettenberg-bay and the Zitzitkamma, and of stripping the country of its bushes to procure the latter. I am convinced, from the experience made at Gnadenthal [Genadendal Moravian Mission], and many other places, that whole forests of oak and other useful timber might be reared in a short space of time wherever the soil retains moisture. But it appears as if neither the first settlers nor their descendants had the least notion of providing for posterity." [p. 91]

From Ganskraal to Soete-melks Valley [Soetmelksvlei]:

Mountains there "...full of kloofs and chasms within which, upon but a scanty portion of soil, trees grow to a considerable height." [p. 92]

7 March — Bock River [Bokrivier, just west of Riviersonderend]:

"Near this place we first met with the great thorn-bush, a mimosa [*Acacia karroo*] with which many parts of the country are nearly covered. It has thorns from four to six inches long. They are placed two and two in an obtuse angle of about ninety degrees; out of

the inner centre of which proceeds, from a bud, a number of small pinnated leaves resembling the acacia. The flower is yellow and consists of a great number of small leaves placed in a globular form. The shape of the tree is very elegant.

"After a hot ride we pitched our tent upon a waste called Storm's Valley near the banks of the Sonderend, without a tree to screen us by its shade from the burning rays of the sun. Before us appeared some of the lower class of hills through which a gap admits the river Sonderend to unite with the Breede Rivier" whose banks "… are covered with wood and bushes ..." [p. 123]

9 March — Buffelsjagrivier, Swellendam:

"The bushes covering both banks near the ford consist chiefly of the mimosa [*Acacia karroo*]. Having crossed the river, we turned to the left out of the main road under a hill the ascent of which was covered with a profusion of large aloes [*Aloe ferox*]. This was the first time we had seen this singular plant growing in such abundance.

"The vale of the Zuurbrack [Suurbrak] is, at its entrance from the west, narrow and full of wood." [p. 128]

Suurbrak Valley:

"... the water rushed forward between steep woody banks in the deep head of overspreading trees... To the left rose a dark gloomy forest ascending a deep kloof between perpendicular rocks ..." [p. 129]

Arrived at "… the farm of Mr Van Ass in Groot Vaders Bosch:

"The Groot Vader's Bosch is a forest retained by the Government, the trees growing chiefly in the kloofs and valleys which intersect the high range of mountains... The low hills are covered with aloes [*Aloe ferox*] and the vales rich in bushes chiefly the mimosa kind [*Acacia karroo*]." [pp. 130, 131]

11 March — Vet River, east of Duiwehoks River:

"We passed through several pretty vales full of shrubs and low wood in which the thorn-bush and milk-bush (*Ficus*) [almost certainly milkwood, *Sideroxylon inerme*], a tree not unlike a Portugal laurel, were most abundant. The hills are low and heathy... About noon we arrived at Zeekoegat on Vat (sic) Rivier, a large farm belonging to Mr Cobus Du Prees." [p. 133]

14 March — Mossel Bay:

"The coasts of the bay are bushy, and aloes [*Aloe ferox*] grow in great abundance on the surrounding hills. Formerly the extract of aloes, used in medicine, fetched a price sufficiently high to make it a lucrative trade; but at present, since the article has become more common, and the price fallen, it appears to be not worth the farmer's while to attend to it, as we were informed by several persons inhabiting the neighbourhood.

"... we left Mossel Bay and went on to Hartenbosch. The road was bad and led through a forest of large bushes of various kinds among which we started some wild peacocks and a bushbuck antelope; but it was impossible to follow them, the great quantity of thornbush, Indian figs, and other prickly plants rendering the thicket almost impenetrable. We passed by another farm ... lying between low round hills clothed with aloes and low wood." [p. 139]

15 March — Hartenbosch to George:

"We entered a kloof between hills moderately high, intersected by charming little glens and coves filled with luxuriant bushes and many aloes. A pleasant brook ran winding down the vale… From the hills we descended into a grassy plain with a ridge of higher mountains before us... After fording the Little Sout Rivier [Little Brak River] in two places we halted on the banks of the Great Brak Rivier ...

"The vale in which we had halted ... we were informed that in the rainy season it is turned into a lake by the over-flowing of the river. In all directions the scenery is beautiful. Towards the estuary the low hills consist of white sand, their tops covered thick with bushes ..." [pp. 140, 141]

3 May — From Groot Paerdekraal south to Haage Kraal [Hagelkraal]:

Through Attaquas pass: "The road from the Groote Paederkraal led through a very rough country to the Haage Kraal. That part of the mountains which will admit of any verdure is well covered with it. *Wageboom* is frequent and in other places the sugarbush (Note on p. 397: *Zuykerbosch* [suikerbos], *Protea mellifera* [*Protea repens*]), being now in full flower, adorned the slopes of the hills with great splendour." [p. 260]

4 May — Hagelkraal:

"The Haage Kraal farm lies pleasantly on a green, surrounded by low hills and watered by a large brook." [p. 261]

Left Haage Kraal. "After a ride of three hours through a dull and naked country we descended into a glen called Hunycliff Kloof." [p. 262]

Gouritz River:

"The shores of the Gowritz River are covered with bushes for about two miles in breadth. Many large aloes [*Aloe ferox*] mixed with and rising above them showed their magnificent radiant crown of scarlet flowers to great advantage ..." [p. 263]

11 May

La Trobe was shown "... a singular plant called *vlachdorn*, or flat-thorn [*Arctopus echinatus*]. Its leaves lie horizontally close to the ground forming a kind of star. They are studded with small thorns or prickles. From the centre issues a naked stem, ordinarily about a foot in length, with a small flower. Its root, like the roots of many plants and bushes in this country, is disproportionately thick and strikes deep into the ground, like a carrot. A decoction of it is considered an efficient remedy against the stranguary in cattle, a distemper of which many die at a season of the year when a certain herb, ripening among the common grass, is supposed to be the cause of it. Brother Schmitt knew it as used by the Hottentots in the cure of similar disorders in man, but Mr Van Helsland told us that he had saved 20 oxen last year who must otherwise have died of that terrible disorder."

14 May

Palmiet River:

Crossed the bridge [possibly the first bridge to be constructed in South Africa] "... which is of wood and the only bridge in all South Africa. It rests upon stone piers, though sufficiently strong to resist the force of the stream which sometimes in the rainy season becomes extremely rapid and fierce, but was not nearly hid among palmite plants [*Prionium serratum*] and low bushes in its bed. To prevent the woodwork from being washed off the piers in great floods the timbers are fastened to them by strong chains on the side of the water's descent. The bridge is furnished with railings and, on the floor-planks, the thick spungy stalks of the palmite plant are laid in abundance, partly to afford an easier passage for the bullocks' feet and partly to deaden the sound of the wood, by which they are apt to be frightened." [p. 292]

1819 **Moodie, J.W.D. (1835)**

"... crossed the Palmiet River, a considerable stream over which a wooden bridge had been constructed where we paid a small toll ... [1: 65]

"The surface of the country from the time we left Hottentots Holland Kloof [at Somerset West] had been gradually improving and was better covered with grass. There were more springs ... the sombre hue of the grass which was still of a dry and coarse quality and closely eaten by the numerous cattle and flocks of sheep.

"To our right, at some distance from the mountains, the country was of the most uninteresting description and had a cold forbidding aspect being without wood... This part of the country, like the greater portion of it is exceedingly deficient in wood which is only to be found in the deep and sometimes inaccessible ravines among the mountains." [1: 70]

1820 **Moodie, J.W.D. (1835)**

From Genadendal eastwards towards Riviersonderend:

"Throughout the day we passed over a varied country in which the great fertility of the farms where the owners had running streams at command, formed a striking contrast to the aridity of the intervening pasture-grounds; but still there was much, even in the bleakest parts of it, to interest the mind. The endless succession of luxuriant plants and shrubs of the most novel and singular appearance and manifold hues, gave me the idea that I was wandering through a vast garden of rare exotics. Anyone can enter into this feeling who has observed how distinguished a place African plants occupy in the English hothouses and gardens: not a foot of ground is lost or unproductive of something belonging to the vegetable kingdom adapted to the soil or situation; and, if we believe that nothing was created in vain, what an ample and delightful field for reflection does a journey through a country like this afford! [1: 84]

"Were I a botanist I could give my readers a catalogue of exotics that would excite the astonishment of the initiated and fill their minds with the most strange and indescribable ideas of this country. But a knowledge of that science is, I believe, by no means necessary to enjoy in the highest degree the contemplation of the rich and infinite production of nature. The botanist may describe the varieties of the different species of plants and point out their habitations, but it is principally to accident that we are indebted for the discovery of the useful qualities of the vegetable world.

"And it is only after these qualities have been ascertained that botanical science becomes really useful in perpetuating and extending this knowledge, however it may be attained." [1: 85]

Swellendam area:

Moodie's brother, farming at Grootvadersbosch, took a waggon to George forests "… with a view of bringing back a load of yellowwood planks which are generally used for house building throughout the Colony, this kind of timber not being found in the forests at Swellendam." [1: 342]

Swellendam eastwards to Grootvadersbosch:

His road skirted the base of the mountains, the finest he had yet seen on his journey from the Cape. Having already remarked on the progressive improvement in the grassveld the further east he had come: "The tract between Swellendam and Groot Vaders Bosch suddenly assumed a new character and the grass that clothed the narrow valley between the mountains and a lower range of hills to the right of the road, though far inferior to that of our English pastures, was of a fresher green and more succulent description than any we had yet seen." Crossed the Buffel Jagt River: "… a fine stream ... [1: 91]

"We now entered the valley following the windings of the river by a narrow footpath in the face of a steep bank over-hanging the deep pools... The opposite bank was beautifully fringed with small trees and shrubs, tangled and matted over with vines and creeping plants in all the wild luxuriance of nature ... we were occasionally not a little incommoded by the sharp-pointed leaves of the aloes [*Aloe ferox*] that delight in these dry rocky places." [1: 92]

Zuure Brack [Suurbrak], 20 km east of Swellendam:

Continued for 8 miles along the river. "The valley, after forming several verdant peninsulas bounded by the steep banks of the rivulet fringed with brushwood and jungle... Above the point where the steep ascents approached the mountains appeared high rounded hills densely wooded to their summits." [1: 93]

Grootvadersbosch, his brother's farm:

"A narrow tract, from a mile to a mile and a half in breadth in which Groot Vaders Bosch is situated extends along the southern base of the mountains ... [Then a description more agricultural than ecological.] [1: 109]

"Proceeding towards the coast, high, rounded, grassy hills succeed, intersected by long ravines with small clumps of wood and jungle in the hollows. The soil is a clay lying on sandstone or clay-slate... No constant springs are to be found, the inhabitants depending on natural ponds remaining in the beds of the periodical streams... As we approach the coast the country becomes flatter ... and we have extensive plains with scarcely any herbage... It is a fact worthy of observation that the land which in England would suffer most from drought, is, at the Cape, most capable of enduring it ..." [1: 110]

An appreciation of the veld in the Cape Colony:

"The small number of cattle the pasture lands in this country will support, in proportion to their extent, is principally owing to the heat and dryness of the summer during which the grass in most parts of the Colony loses its nutriment, or is almost entirely burnt up. Yet, notwithstanding the deterioration in the pasture, Nature has furnished a variety of shrubs and succulent plants in the most arid tracts of the interior which afford great nourishment to the flocks during the driest seasons.

"A stranger, in travelling through the most uninviting parts of the Colony, where during the summer scarcely a blade of grass is to be seen, is often surprised at the fat and thriving appearance of the herds of cattle and sheep, and is at a loss to conceive how they obtain their sustenance until he sees them browsing on the tender twigs and leaves of the bushes which, in these arid tracts, often cover the surface of the ground while they neglect the withered tufts of grass which are scattered here and there around the roots.

"Were we to judge by the appearance of the herbage, we should often be deceived as to the capability of the land for supporting or fattening cattle, for this depends much more on the quality than the quantity of grass or nutritive shrubs.

"There are three gradations of quality into which the grasses of the country are usually divided—sweet, sour, and mixed. And a new settler would do well, before he fixes on any spot in the way of purchase or otherwise, to ascertain from the experienced Dutch colonists to which of these general divisions the land may belong. For he will find that his previous knowledge of the European grasses will be of little use to him in this Colony. Very few British settlers ever attain to the sagacity of the natives in judging of this most important consideration, for there are various kinds of sweet, sour, and mixed grasses, so that it is difficult, if not impossible, to lay down any general rule for their guidance.

"One observation, however, I have always found to hold good—that the quality of the same grasses, as well as the prevalence of the different kinds, is entirely dependent on the degree of fertility or poverty of the soils on which they grow, and if the colonist can obtain a correct knowledge of the latter particular he cannot mistake much as to the former.

"Excepting the more arid tracts of the interior, for the purpose of stock-farming it is always better to select a dry sweet place, in preference to a verdant spot where the pasture is sour. The pasture of mountain tracts is always sour, and the land poor. The valleys at their base are of the kind in grass and soil; and the country towards the coast improves in these qualities.

"The deep valleys skirting the banks of the rivers in these less hilly parts, and a strip of country varying in breadth according to other circumstances close along the seacoast, are generally sweeter." [1: 128]

Farm of a Mr Botha, near Grootvadersbosch:

Describes the deep chasm of the river here with precipitous sides "... several hundred feet in height." A pool in the river bed was "... overhung by trees and shrubs which had taken root in the crevices of the rocks... The sides of this valley are so high and steep that the only way the valuable timber it contains can be got out is by rolling the logs into the bed of the stream where they remain until they are floated out when the river is swelled into a torrent after heavy rains." [1: 152]

Duiwehoksrivier area, 36 km west of Mossel Bay:

Leaving the Grootvadersbosch area in the mountains: "As we quitted the valleys ... the soil, though rich and productive in its nature, became more arid. When we came to the Duivenhoeks River, which is a rapid and constant stream, the country assumed a new character.

"The soil which was clay was of an exceedingly bright red colour, but very dry. Yet notwithstanding the aridity of the ground and the scantiness of the grass, it was almost everywhere covered with low bushes on which the cattle and sheep were browsing, and they were the fattest cattle I had yet seen in the Colony.

"This kind of red clay is generally called 'karoo' by the Dutch ..." [1: 343, 344]

From Duiwehoks River eastwards to the Vet River, between Heidelberg and the Gourits River:

"On the second day of our journey we passed through a very arid country for many miles. Part of our road lay across an extensive plain, the soil of which was very rich but so exceedingly dry that it produced hardly any grass, but it was thickly covered with bushes and crowded with aloe [*Aloe ferox*] plants. Here, we found several waggons, and whole families employed in extracting the juice of the *Aloe* which yields some profit to the farmers where the plants are abundant." Describes the collecting method. "The price of aloes at Cape Town is now exceedingly low, from the great quantity prepared by the colonists, but it is still worth their while to employ their leisure time in preparing this drug which would be otherwise unproductive." Arrived at Vet Rivier, at the farm of Du Pre.

"After leaving Vet River we passed through a good grazing district having, however, the same arid character as that which we had already seen after quitting the base of the mountains near Groot Vaders Bosch." [2: 6, 7]

1838 Backhouse, J. (1844)

2 October — Near Houhoek, Caledon:

"We outspanned at a place where there was some muddy, fresh water, having previously passed a little streamlet by the roadside that was salt and had on its margin a *Samolus* and two species of *Statice* [*Limonium*], plants generally found near the sea. The pools of fresh water in this part of the country are covered with *Aponogeton distachyon* [*Aponogeton distachyos*], a plant resembling the floating ironwood, but having fragrant white flowers.

3 October — "We reached Caledon after travelling over a more undulating country bounded by mountains and clothed with short green herbage." Outspanned near a rivulet 800 metres from the town and saw Cape weaver-bird nests *Ploceus capensis* "... depending from the extremities of tall bushes of *Psoralea aphylla*, a shrub resembling the broom and bearing blue flowers. The margins of this stream were ornamented by a species of *Tritoma* [*Kniphofia uvaria*] bearing a dense spike of tubular flowers, opening red and becoming yellow on a stem 4 feet high rising among broad grassy leaves." [p. 92]

5 October — *En route* from Caledon town to Hemel-en-Aarde Leper Mission:

32 miles and over an intervening range of mountains with the highest point called Babylons Tower, 16 km southwest of Caledon. "The lower hills on both sides of this range are covered at this season with green herbage and decorated with various species of *Erica, Protea* and *Helichrysum*. The flowers of one species of *Protea* formed a head as large as an artichoke and the large scales that enclosed them were of a beautiful pink colour." [p. 93]

8 October — From Caledon to Genadendal Mission:

"The road lay across a low part of a range of sandstone mountains gay with proteaceous shrubs and *Helichrysum proliferum* [*Phaenocoma prolifera*]. This was succeeded by low hills clothed with herbaceous and suffruticose plants and a little grass, common features in this part of Africa ..." [p. 96]

11 October — From Elim Mission to Caledon village:

"On a sandstone ridge which we crossed, proteaceous shrubs and heaths were abundant. Among the latter were some of the beautiful species with jasmine-like blossoms. *Pelargonium cucullatum*, one of the original stock of geraniums of English greenhouses, abounds in shady places at the foot of this mountain. The country on both sides of this ridge is undulating downs covered with little bushes interspersed with a variety of plants, and a little grass." [p. 100]

12 October — Neighbourhood of Caledon village:

"... I walked to the top of a hill on which *Helichrysum proliferum* [*Phaenocoma prolifera*], a beautiful crimson everlasting, was growing in profusion among the low rocks of ferruginous sandstone. The plants were about the size of gooseberry bushes, covered with flowers and as fine as I ever saw them when cultivated in an English greenhouse. This is not generally the case with wild shrubs; they are broken by storms and cattle, and overgrown one by another in the situations where they grow naturally, but when cultivated they are carefully protected from injury. At dinner we partook of the boiled flower-stems of *Aponogeton distachyon* [*Aponogeton distachyos*] which were very palatable; they are called in the Colony, *water uyentjes*, water onions." [p. 101]

14 October — Near Riviersonderend:

"From an adjacent hill we could trace the windings of the Zondereinde, and see beyond it a range of steep mountains having woods in their kloofs. The trees of these woods were the first we had seen in a natural state since leaving the neighbourhood of Cape Town." [p. 102]

16 October — Along the Riviersonderend River:

"The margins of this river are choked in many places with the remarkable rush, *Juncus serratus* [*Prionium serratum*] called in the Colony, 'palmit, palmetto'. It has broad, keeled, and sharply-serrated leaves and a stout rootstock or trunk which sometimes attains 5 or 6 feet in height and 1½ feet in circumference." Outspanned for the night at Hessequas Kloof, 23 km southwest Swellendam. [p. 103]

17 October — Breërivier, between Hessekwaskloof and Swellendam, 7 km southwest of Swellendam:

"The bank of the river was shaded by the weeping willow of the Cape country, *Salix gariepiana* [*Salix mucronata*], so called from growing along the banks of the Gariep or Great Orange River.

"A *Cicindela* [unidentified], somewhat resembling *C. hybrida*, but distinct from that species, was sporting on the sandbanks by the waterside. Some species of *Crassula* among which was the singular *C. perfoliata*, the old leaves of which turn round upon the stem, and *Cotyledon orbiculata* were growing among the dry rocks at this place." [p. 104]

18–19 October — Swellendam:

"We passed through Zwellendam ... and outspanned a mile beyond it in a grassy hollow affording water ... [p. 104]

"Zwellendam ... is situated in the part of the Colony called the Grass Veld, Grass Field, which is hilly and verdant." [p. 105]

20 October — From Swellendam to Suurbrak:

"The road lay over grassy country intersected by streams from the Langebergen... The name of the place signifies sour brake and is so called on account of the bushy ground by the side of the river and the prevalence of sour grass which characterizes some of the more humid African pastures... Arborescent aloes [*Aloe ferox*] and a variety of shrubs grow on the sides of the lower hills. A considerable stream flows through the valley ... A species of *Clematis* [*Clematis brachiata*] was running over some of the bushes by the stream. [pp. 107, 108]

23 October

"The Hottentots at Zuurbraak, and at many other places, manufacture mats that are in use for various purposes in this country and are sold at from 3 to 7 shillings each. They are formed of the stems of a species of *Papyrus* [*Cyperus textilis*], a rushy plant found in marshy ground and on the borders of streams. These stems are strung parallel to each other by means of several lines of cord formed from the bark of a species of *Acacia* by chewing and twisting."

Passed Grootvadersbosch "... a considerable forest running up the kloofs of the mountains... In the evening we ascended some hills on one of which some crested aloes were in flower ..." [p. 110]

Passed Jonkersfontein and crossed the Langeberge. "North of the first range of hills the country is hilly and grassy, and there are several farms on a small river, the course of which is broad and grown up with *palmit* [*Prionium serratum*]... In making a short cut over a stony hill covered with low bushes I noted, in blossom in the fissure of a rock, the elegant *Pelargonium tricolor*. This was like recognising an old forgotten acquaintance ... for the existence of this old, but elegant and delicate inhabitant of English greenhouses, had quite passed from my mind till, scarcely raised above the stone on which it grew, a large cluster of its pure-white blossoms shaded into blackish-crimson, met my eye... The scene from the top of the Langebergen was novel and striking. A vast series of low hills, barren or scantily covered with small shrubs ..." [p. 111]

29 October

From Suurbrak to the Vet River:

"The country over which we travelled ... was remarkable for a series of flat-topped hills lying south of the Langeberge... An arborescent aloe [*Aloe ferox*] abounded on the drier sides of the hills, the general clothing of which was the little rhinoceros-bush [*Elytropappus rhinocerotis*] which often covers the ground for a great extent." Water was very scarce except at the Vet River. [p. 119]

1 November

From Kafferkuils River, over Valsch Rivier, c. 20 km east northeast of Riversdale:

Eastwards "... over dry hilly and more bushy country abounding with arborescent aloes. Some of them had been partially stripped of leaves to obtain the viscid juice from which the drug called Aloes is prepared. The leaves are placed in concentric circles with the base downwards over a piece of skin, or a calabash, sunk in a hole in the ground. The juice which drains out is collected from these receivers and boiled down to the consistence of a solid extract. The quantity of Aloes exported from Cape Town in 1838 amounted to 75 963 pounds valued at 851 pounds 10 shillings, and from Port Elizabeth 21 857 pounds valued at 306 pounds.

"The scarlet geranium, *Pelargonium inquinans*, of English greenhouses was growing among the shrubs near the descent to the Gaauwrits River... A beetle of the Buprestis tribe ... was feeding in bushes of a species of *Lycium* near the river; another ... of the Cerambyx family was feeding among the fragrant yellow flowers of the *doornboom* in the bed of the river... Among the bushes in this hollow [of the Gouritsrivier] a fine trifoliate jasmine, *Jasminum capense* [*Jasminum angulare*] with fragrant six-cleft blossoms was in flower." [pp. 120, 121]

3 November

Little Brak River to Mossel Bay:

"... large species of *Buddleia* ... and ... blossoms of a large white and ochre-coloured *Ornithogalum* [*Ornithogalum dubium*] in many places on the road by the side of which, in the poorer parts of the country especially, there were some gay-flowered mesembryanthemums, and some handsome low species of *Hibiscus*." [p. 122]

4 November

Mossel Bay:

"... the cliffs are much covered with the orchall lichen, *Roccella tinctoria*. A few years ago some attempts were made to collect it but the value of labour proved too high to leave the speculators a profit... The stony and rocky hills about Mossel Bay are covered with aloes, euphorbias, *Chironia baccifera*, etc. An orange-flowered *Opuntia* which seems to be naturalized here, and is called Turkish fig, is common in some sandy grounds, intermingled with bushes among which a leafless *Sarcostemma* [*Sarcostemma viminale*] entwines its slender cylindric green branches ..." [p. 123]

1838 Bunbury, C.J.F. (1848)

23 March

From Sir Lowry's Pass to Palmiet River:

"The sugar-bush *Protea mellifera* [*Protea repens*] and many others of the same genus are abundant on the mountains as well as beautiful heaths and everlastings." [p. 92]

From Houw Hoek Pass to the Zonder-Einde:

"…wide plains and low round hills uniformly covered with stunted bushes, without trees or cultivation." Bunbury complains of the poor vegetation in the Colony: "... there is little

grass and most of the shrubs which make up the great mass of the vegetation have either leaves so minute, and of a substance so dry and juice-less, that they give no verdant effect to the land-scape, or else are covered with a whitish wool or down which entirely hides their green. In this latter class is to be ranked the prevailing *rhinoster bosch* or rhinoceros bush *Stoebe rhinocerotis* [*Elytropappus rhinocerotis*] which literally covers leagues and leagues together in the Districts of Zwellendam and George. It is a low, half-shrubby, grey, cottony plant, in form resembling a miniature cypress or juniper." [p. 93]

24 March — Sonderend Valley:

"This river ... is thickly fringed, and in some places half filled, with the *palmiet*, *Juncus serratus* [*Prionium serratum*], a large and curious rush, the foliage of which looks very like that of the pineapple.

"It was in the course of this day's journey ... that I first saw the white-thorned acacia *A. horrida* [*Acacia karroo*], called by the Colonists *doornboom* or *wittedoorn* which in the more eastern parts of the Colony is one of the commonest of plants, but does not appear nearer to Cape Town than this point. It grows on the banks and in the stony channels of streams, and here does not grow into a tree, but forms a large bush." [p. 96]

25 March — Swellendam:

"I walked towards the mountains to botanise ... on account of the drought I did not find many plants in flower... Ascending the course of a clear stream which flowed through a quiet little valley, really green, I entered one of the wooded ravines of the mountains where the vegetation was far more luxuriant than I had yet seen it in this Colony, and even partook to some degree of a tropical character. A beautiful arborescent fern, *Hemitelia capensis* [*Cyathea capensis*] put me in mind of Brazil. This is the largest and most beautiful fern that is known in the Cape Colony though inferior in size to several of the S. American and Indian species, as it does not exceed in height 12 feet. It is not peculiar to Zwellendam ... but also grows in some of the ravines on the eastern side of Table Mountain ... (Footnote: It has also been found, by Mr Gardner, on the Organ Mountains in Brazil.)" [p. 98]

26 March — Buffeljagrivier, Swellendam:

"... Its banks are richly ornamented with the white-thorned acacia, *A. horrida* [*Acacia karroo*], which, in its mode of growth and the colour of its foliage much resembles our hawthorn as it appears in spring when first coming into leaf. From hence, eastward, this handsome shrub is very general along the banks of streams ...

"... in Zwellendam and George Districts it occurs, as far as I observed, in such situations only, whereas in the eastern part of the Colony, and still more in Caffer-land, it is universally diffused. [p. 99]

"We afterwards crossed in succession the Slange, Duyvenhoeks, Krombeks, Vet, and Kafferkuyl Rivers and spent the night ... on the banks of the last-named stream.

"On the hills between these rivers I saw the first aloes [*Aloe ferox*], that is to say of the true *Aloe* kind, for what is commonly called the American aloe is of another genus (*Agave*) and very different in its properties as well as in the structure of its flower.

"This *Aloe* is a strange uncouth-looking plant with its thick columnar stem from 5 to 10 feet high crowned with a bunch of large sharp spearlike leaves, and clothed below with the black and rugged remains of its foliage. The flowers are of a very rich orange-red, closely crowned, forming extremely thick and long spikes with the stamens projecting considerably beyond the petals. These flowers contain much honey. This is the most important medicinal plant in the Colony; the people collect its leaves and extract the juice by boiling till it is of the consistence of glue, in which state they send it to Cape Town and it forms a considerable export from thence to Europe. The estimated value of the exports of Aloes from the Cape in one year amounted to 2 794 pounds. [p. 100]

27 March — "I observed these aloes again today in great abundance in the Bush country near the Gauritz River... Here, a traveller proceeding eastward first meets with many of the singular forms of vegetation which characterise that province, such as the succulent, leafless, thorny *Euphorbia*, the *spekboom Portulacaria afra* which is the favourite food of the elephant, the *boerboontjes*, *Schotia speciosa* [*Schotia afra*], a leguminous shrub with beautiful scarlet flowers growing in clusters out of the old wood; the *nojeboom* [*nooieboom*], *Cussonia spicata* a small tree of very singular appearance. Many of these do not occur again until we cross the Camtoos. The wild rough shrubbery of these plants which forms a belt of some miles wide on both sides of the Gauritz is much less dense than the eastern Bush ..." [p. 101]

28 March — Through Attaquas Pass, west of Robinson Pass:

"... the road winds among huge green hills... proteas are remarkably abundant on these mountains, some very beautiful, in particular the *P. cynaroides*, and *P. longiflora*. The

largest kind, *P. grandiflora* [*Protea nitida*] is very common here; it is called *wagenboom* on account of its wood being used for the naves of wheels, etc. It grows as large as an apple tree and has very green leaves." [p. 103]

23 June — Gourits River:

"... we crossed the Gauritz River at some distance below Hell Drift where we had passed it in going up the country. It was here a muddy stream, barely fordable, probably as much as a quarter-mile from bank to bank but more than half of this width was dry sand; the banks very high and steep, in some places precipitous... The bushy country near the river was at this time very gay with the scarlet flower-spikes of the aloes." [p. 180]

1838 Krauss, F. in Spohr (1973)

5 December — Genadendal (Baviaanskloof Mission):

"I climbed in good weather the Genadendalberg, the highest mountain in the region. As the vegetation was poor at the time I collected only some *Erica,* Compositae, particularly Elychriae and orchids ..." [p. 23]

12 December — Caledon Springs:

Describes the springs, but not the vegetation, besides noting: "There is rich vegetation near the springs ..." [p. 25]

14 December — Near Walker Bay and Danger Point:

"The whole area was rich in good pasture and farmers sent their oxen down to fatten them. On December 14th we reached the mouth of the Klein River where my worn-out oxen could graze and have a rest ..."

There were large wheatfields on a farm there. "The vegetation had been refreshed by the rain and on the sandstone hills grew beautiful low bushes of different kinds of *Protea*." Came to Sout River in 3 hours and from there turned southeast towards Cape Agulhas. "First we went over a wide sandstone hill with rich vegetation amongst which I enjoyed finding 12 different kinds of still-unknown proteas and 8 kinds of *Erica*. Then we went down again into the valleys in which restiaceae mostly grow. The nearer we got to Elim the more the land levelled out into a plain." He did not stop at Elim. "If the oxen had eaten the plants there, they might have suddenly become lame, fallen down, and died. I myself have not seen any poisonous plants around there and therefore I believe rather that what was so harmful was the standing in rusty iron-containing water ..." [p. 28]

17 December — From Elim to Zoetendalsvlei *en route* to Nieuwe Jaars River and Struis Bay where there are freshwater lakes and saltpans. "The latter originate from the ocean and near them grow plants which love salty soil such as *Statice*, also *St. kraussiana* Buching [*Limonium kraussianum*], *Samolus campanuloides R.Br.* [*Samolus valerandi*], *porosus* Thunb. and others." These saltpans dry out in the hot summer and farmers collected the salt.

Reached Prinskraal, c. 40 km southeast of Caledon:

"The homestead was in a vast plain overgrown with low bushes ...

20 December — "We took a hunting trip to Honingnest River which is very much like a lake during the rainy season and has lots of sea fish... These hills rise to about 300 feet a.s.l., just as at Kars River, and are overgrown with bushlike composites, *Pelargonium fragrans* Willd., *P. abrotanifolium* Jacq., *Erica discolor* Andr., *Erica pulchella* Houttyn, *Leucadendron*, *Aloe*, *Crassula ramosa* Thunb. or *ciliata* L., Euphorbiae ..." [p. 29]

25 December — De Hoop Farm, Bredasdorp District:

"... to the farm 'De Hoop' in Zoetendalsriver Valley. The farm extends from the foot of the Potberg nearly to Prinskraal and belonged to Veldcornet Lourens Cloete. He was chiefly a cattle farmer, owned more than 400 horses, a few hundred oxen and several thousand sheep.

"The farm was situated on very young marine limestone about 30 feet above the valley. A long lake formed during the rainy season [probably De Hoop Vlei] but dried out in summer and was used as grassland.

"There were some puddles of water where I found *Typha latifolia* L. [actually *Typha capensis*]; *Potamogeton marinum* L. [*Potamogeton pectinatus*]; *Scirpus maritimus* L. [*Bolboschoenus maritimus*], and so on.

"On the limestone hills nearby live lots of *klipdassies Hyrax capensis*, and mongooses (*Herpestes atilax paludinosus* Cuvier Wagner) and *H. caffer* Licht. [*Herpestes ichneumon cafer* (Gm.)] and on the plain, fowls were to be found, *Francolinus* and many ostriches. The latter were shy, and so I could not manage to shoot one of them. Altogether I got a few *dassies* and some birds ... [p. 30]

30 December "Between the Kars- and Breede Rivers I also found waterless hills of slate-clay with a sort of *Aloe* [*Aloe ferox*] growing about 5–6 feet high the sap of which is collected. There were mimosas [*Acacia karroo*], *Lycium kraussii* and other sorts of Karroo plants as well. As I was in a hurry I travelled on that day until nearly midnight and had to outspan in the open veld without having found grass or water." [p. 31]

1839 Krauss, F. in Spohr (1973)

1 January Between Swellendam and Buffelsjagsrivier:

"... I again had the strange experience of seeing a bushfire... In the fields and on the slopes of the mountains the farmers set fire to the dead bushes and the dry sour restiacean grass to make way for fresh grass to grow again. It was lovely to watch the strips of fire running in all directions into the ravines of the mountains.

"Only in the Slange River did I find a little puddle with dirty yellowish-green water; in the Duyvenboks (sic) River the water was brownish coloured and when we reached the Kafferkuils River we found some dirty water standing in a few holes." Oxen: "Their food consisted only of desiccated plants." A severe drought was current.

4 January Soetmelk River, Mossel Bay District:

"Once we crossed the Soetmelk River the surroundings began to look a bit more friendly; plants grew more abundantly in the valleys and had not been burnt as on the way to Swellendam.

5 January "On these hilltops one finds a rich vegetation of *Rhus, Cluytia* [*Clutia*], *Euphorbia, Aloe*, *Polygala*, etc." [p. 32]

Gauritz River:

"The hills slope down again towards the coast and the green bushes of *Schotia tamarindifolia* Afz. [*Schotia afra*] with their carmine blossoms made the whole landscape look much more friendly." [p. 33]

1874–1895 Sim, T.R. (1907)

Grootvadersbosch:

16 February 1874 "Mr Tilney, the Civil Commissioner, Swellendam reported…'I estimate the forest to be about 450 morgen [385 ha] in extent ... entirely surrounded by private property'."

1895 In 1895 Conservator Hutcheons estimated it at 471 morgen [403,1 ha]. [p. 13]



8 KNYSNA FORESTS

Phillips, J.F.V. (1931)

Knysna forests were known to Europeans since 1711, but no early literature on them is known. They were visited by Thunberg in 1772. The first Dutch settlers arrived in Plettenberg Bay by 1778 and immediately started exploiting the timber. The Tsitsikamma Forest had no through waggon roadway until the 1880s.

1630 **Axelson, E. (1960)**

Plettenberg Bay:

Portuguese ship "…'S. Goncalo' wrecked there. Survivors spent enough time there to build boats with which to put to sea, to build huts, a church, and to lay out gardens, from which came the first crops to be sown and reaped by Europeans in South Africa.

"The survivors described their surroundings with the fervour of an estate agent. The countryside was pleasingly varied in elevation, the hills were clad in forest, the valleys were carpeted with green grass and with plants and herbs, every part was well watered. They noted the seasons, the wild animals, the birds, with all the intensity of those saved from death and living at one with nature. They had ample time for nature study because it took eight months to build the vessels. These they caulked with benzoin from the (wrecked) ship's cargo, mixed with oil of seals clubbed to death on Beacon Islet. One of their last actions was to plant on a hill-top an inscribed stone and a cross." The stone was sent to the South African Museum in Cape Town in 1860.

"The survivors of the 'S. Goncalo' had demonstrated that it was possible to live easily off the land in South Africa. Knowledge of their experience doubtless inspired the survivors of the Haarlem, and so helped the Netherlands East India Company to establish a refreshment station at the Cape of Good Hope." [p. 201]

1630 **De Sampaio, A.P. in Raven-Hart (1967)**

Plettenberg Bay:

Of Khoekhoe there: "They cultivate nothing. They invited our men to eat cake which appeared to be made of root-flour kneaded with the dung of the oxen... The soil is excellent without any rocks, although with various hills. These and the valleys have many herbs and plants ... as also sweet-smelling flowers. The trees are many and large. Rich river water is everywhere and abundant, and lovely springs ..." [p. 133]

1772 **Thunberg, C.P. (1793)**

October George District or Outeniqualand:

"The country here, in general, consisted of extensive plains full of rich pasture interspersed with hillocks and valleys that abounded in wood and water. The trees in the woods were large and tall but for the most part crooked and misshapen, and at the same time covered with moss, like those in the northern regions. [1: 177]

"In many places I observed the land to have been set on fire for the purpose of clearing it; though in a very different manner from what is done in the north. Diverse plains here produce a very high sort of grass which, being of too coarse a nature and unfit food for cattle, is not consumed, and thus prevents fresh verdure from shooting up, not to mention that it harbours a great number of serpents and beasts of prey. Such a piece of land as this, therefore, is set on fire to the end that new grass may spring up from the roots.

"Now if any of these places were overgrown with bushes, these latter were burned quite black, and left standing in this sooty condition for a great length of time afterwards, to my great vexation as well as that of other travellers who were obliged to pass through them." [1: 179]

2 November Crossed Quaimans Drift [Kaaiman's River, c. 13 km east of George].

3 November After crossing the Krakakou, Ao, Koukuma and Neisena Rivers: "The woods we passed through were narrow and full of prickly bushes. We could find no other passage through them than the tracks of the Hottentots, so that we were obliged to creep on all fours and lead our horses by the bridle." Thunberg had sent his waggons through Attaquas

Pass, 38 km northwest of Mossel Bay into the Little Karoo, and then eastwards into the Langkloof. He continued his journey eastwards along the coastal strip on horseback until he met his waggons later in the Langkloof. [1: 183]

Outeniqualand and Mossel Bay:

"From the woods of the Houtniquas the peasants who live near the District of Muscle Bay fell both rough and cut timber notwithstanding the length and roughness of the road; but from hence the farmers have nothing else to carry to market except oxen for slaughter and barter. If any kind of navigation were set on foot, either from this coast or from Muscle Bay, the carriage would be easier, and the commodities, especially the timber, cheaper; but this has as yet not been thought of, or else, perhaps, it has not been deemed of any use." [1: 196]

5 November — Piesangs River, Plettenberg Bay:

Jacob Bota's farm: "This farm, which was entirely a grazing farm, was situated not far from the sea-shore and a whole society ... of more than 50 Hottentots were in the service of the farmer... The harbour here was very wide and beautiful." [1: 189]

November — Plettenberg Bay:

Resting for 3 days "... I visited the seashore and the adjacent mountains which were covered with shrubs and bushes of various kinds and particularly with the *Arduina bispinosa* [*Carissa bispinosa*] so that in some places they were impenetrable; and in these I was frequently so much entangled that I was obliged to crawl for a long way on the tops of the stiff bushes ..." Feet and hands were torn by the thorns. Notes seals sleeping on flat rocks at Robberg. [1: 190]

"Robbeberg is a singular mountain ..." Describes the geology of it. "The strelitzia [*Strelitzia reginae*], with its yellow flowers and blue nectarium grew near this spot, and was one of the most beautiful plants, of which the bulbs were procured to send to Europe. The Hottentots were said to eat the fruit of it." [1: 191]

10 November — Keurbooms River, 30 km east of Knysna:

"At Keureboom's Rivier, Houtniquas-land terminated on this side [the eastern end], a land abounding in grass, wood, and buffaloes." [1: 197]

Over Duiwels Kop, 30 km northeast of Knysna [probably Perde Kop—Duiwels Kop is behind George], into Langkloof:

At a farm in the Langkloof "... they made soap from a ley prepared from the canna bush (*Salsola aphylla*)." [1: 199]

1775 Sparrman, A. (1786)

September — Houtniquas Land [George]:

"Houtniquas land, which is a woody tract of country, is supposed to commence to the eastward of the Groote Brakrivier and to extend to Keurebooms River [32 km east of Knysna] which empties itself into Algoa Bay [Sparrman means Plettenberg Bay and mentions the Langeberge separating this region from the Langkloof]. Along the side of these mountains runs a wood, to the trees, herbs, and general properties of which the description I gave of Groot Vaders Bosch is equally applicable.

"On the western side of Keerom-rivier [a small river entering the Kaaiman's River 8 km east of George] or the hither side of the Houtniquas, between the wood just spoken of and the seashore, there are extensive plains of indifferent grass. There was likewise in the vales near the shore some woody tracts of land and streams of fresh water." Two farmers had settled there and they have no difficulty in making a living "... in the same way as the other farmers do who have set themselves down in the upper and more extensive side of the forest by felling of timber" and sowing corn and rearing cattle for their own needs. [1: 260]

Mountain behind George [Cradocksberg in the Outeniqua range]:

"I went through the wood with the intention of ascending the mountain whence I might have a view of the Lange Kloof, but found the foot of the mountain everywhere so thick beset with high and stiff perennial grasses and bushes as to be absolutely impenetrable." [1: 281]

From Kaaiman's River to Plettenberg Bay:

"The tract of country lying between Keerom [at Kaaimans River] and Keurbooms-rivier [at Plettenberg Bay] constitutes the internal part of the Houtniquas and is said to be almost entirely covered with woods. [He did not have the chance to visit there.] Keerom-

rivier (or Turnabout-river), in which the smaller rivers Zwart-rivier and Trakudiku meet, has obtained its name from ... the person who first travelled this way, having been obliged to turn back at this river on account of the dense and almost impenetrable forests that grew everywhere by the side of it.

"Keurebooms-rivier is perhaps so called after a tree of the same name (*Sophora capensis* Linn.) [*Virgilia oroboides*]. On this kind of tree is found a great quantity of gum resembling that of a cherry tree but not so adhesive. I have hardly ever seen a tree of this kind anywhere else excepting a few at Bay Falso [False Bay] and in Constantia District." [1: 261]

The expenses of farmers and woodcutters in the Outeniqua and other forests are so high that the work was to be hardly worthwhile. This also raised the cost of building at Cape Town so that much of the timber at the Cape was brought from Batavia. If Plettenberg Bay could have been used as a harbour the timber could have been transported more cheaply. [1: 263]

Tsitsikamma, Humansdorp:

"The interior moiety of Sitsicamma is said to consist of an impenetrable forest. Two Hottentots who wished to penetrate through it from the Houtniquas side [from the west] were said to have been obliged, after having made a fruitless attempt during ten or twelve days, to turn back. They perceived a great number of elephants, with several broad beaten tracks made by these animals, but which extended only from north to south so as to terminate and lose themselves in thick woods, either near the shore or at the range of mountains which separate Sitsicamma from Houtniquas. They likewise met with buffaloes there in great number." [1: 346]

1783 **Le Vaillant, F. (1790)**

Outeniqualand:

"The great Brakke River [18 km northeast of Mossel Bay] divides the District of Mossel Bay from Outeniqualand." [1: 227]

Travelled eastwards under the mountains:

"We left Outeniqualand ... and soon reached its eastern boundary the Kaiman River [Kaaimans River]." [1: 233]

1797 **Barrow, J. (1801)**

December He had ascended the Outeniqua Mts from the northern or Uniondale side via Duiwelskop [26 km northeast of George] and descended into the George District:

"The descent of Duyvel's Kop was much more gradual than had been the ascent, and the smooth grassy surface of the northern side was now changed into an extensive shrubbery, among which the most conspicuous plants were heaths and proteas of amazing sizes; one of the latter, having a round thick leaf with a purple margin, bore a flower that measured very nearly 10 inches in diameter. Several species of the *Ixia*, of the *Iris* [probably *Dietes iridioides*], of the *Morea* [*Moraea*], and *Gladiolus*, now in full bloom, adorned the sides of the hills, while the Cape *Sophora* [*Virgilia*], and the *Arduina* [*Carissa*], with its jessamine-like smell, perfumed the whole country." [p. 337]

Forests of George, Knysna and Tsitsikamma:

"At the feet of this chain of mountains runs a belt of wood, extending with little interruption near 200 miles in length; and consisting chiefly of a great variety of forest trees, many of which are found of a prodigious magnitude ..." [p. 338]

Barrow lists 44 species of trees, gives their height and diameter; their quality; their uses; their 'Linnean names' with his remarks. [pp. 339, 340]

"It may be observed that the sizes marked in the above list are, as nearly as could be guessed, such as they run in general, but both of the *geelhouts* [yellowwoods, *Afrocarpus* and *Podocarpus*] may be met with abundance of trees from 70 to 90 feet in length, and very proper for ships' masts, spars, and other timber used in shipbuilding.

Between the foot of Duyvil's Kop and Plettenberg's Bay, the latter of which is about 50 miles [in reality about 43 miles] to the eastward of the former, the country is beautifully wooded, and intersected with numberless rivulets issuing out of the forests; there are also several broad deep rivers over which it is necessary to pass in boats. Some of these terminate in large sheets of water forming beautiful lakes whose margins are finely fringed with wood." Mentions Groenvlei as being fresh, and as having no outlet to the sea. [p. 341]

"The surrounding hills are clumped with forest trees, and their sloping sides are clothed with shrubbery down to the water's edge... The lake is studded with a number of flat islands covered with verdure... The whole country is boldly marked, and most magnificently clothed, and may be considered beyond comparison as the grandest and most beautiful part of southern Africa." [p. 342]

Neighbourhood of Plettenberg Bay:

"The intention of the Dutch government was to form an establishment here for the purpose of deriving from it a supply of timber to answer their demands for that article at the Cape. Strong prejudices, however, have long been entertained against the Cape timber, though perhaps without grounds for them.

"Few woods will withstand the effects of alternative exposure to heavy rains, dry winds, and a scorching sun; where such exposure has been guarded against, one of the slightest of the woods, the *geelhout* [yellowwood, *Podocarpus*] has been known to remain for more than a century without showing any symptoms of decay.

"In the forests near this bay, a creeping plant grows in great plenty, whose interior bark, drawn off in fibres of forty or fifty feet in length, seems to be an excellent substitute for hemp. The Hottentots twist these fibres into very strong cordage.

"The bark of another native plant, a species of *Hibiscus* [*Hibiscus diversifolius*], made very excellent hemp. The leaves of the plant were deeply divided like those of the *Cannabinus* [*Hibiscus cannabinus*], a species of the same genus cultivated in India, for the purpose of obtaining hemp from the bark; but the stem of the African *Hibiscus* had small spines, and the flower was large, and of a sulphurous colour.

"Among the useful trees of the forests we noticed a species of wild fig [*Ficus sur*] that grew to a very considerable size and bore a fruit resembling in shape and appearance the bergamot pear [Indian species of fig with pear-shaped fruits from which oil is extracted]. It had a pleasant subacid flavour and was greedily devoured by the birds. The leaves were oblong-ovate.

"A species of *Salvia* [identity uncertain], or sage, grew wild, and was much esteemed for its healing qualities when applied to green wounds.

"A species also of *Solanum* [probably *Solanum giganteum*, *geneesblaarboom*] was much esteemed for the same purpose. The leaf resembled that of tobacco, on which account it was known by the name of wild tobacco; the upper side of the leaf was dark green, and smooth; the underside white, and woolly; the stem woody and prickly. The woolly side of the leaf, applied to a swelling or gathering, quickly brings it to a head, and the green side afterwards as quickly heals it. I had the opportunity of seeing these effects in more than one instance.

"Not far from Plettenberg's Bay, along the banks of a small rivulet [Groot River, 19 km east northeast of Plettenberg Bay] I met with a whole forest of the *Strelitzia alba*, whose tall and tapering stems, like those of the areca nut, or mountain cabbage, were regular and well-proportioned. Many of them ran to the height of 25 to 30 feet without a leaf. It is sufficiently remarkable that the three strelitzias of Africa should be found in three distinct situations, and at great distances from each other; and what is still more remarkable, that the white species should grow so very abundantly along the side of one stream of water, and not a single plant be found near the rest in the same neighbourhood. From the great resemblance of this plant to the banana tree, the peasantry call it the wild plantain. [p. 343]

"But the most elegant plant that occurred in the whole forest was the native vine of Africa [probably wild grape, *Rhoicissus tomentosa*]... This creeper ran to the very summits of the highest *geelhout* trees [yellowwood] and bore a fruit in size and appearance not unlike the morelle cherry, seldom more than 2 or 3 to a cluster of a very agreeable and delicate subacid flavour. The leaves of this vine are shaped like those of ivy, dark green, and smooth on the upper, and rather woolly on the under surface; not deciduous, but evergreen." [p. 345]

1797–1798 Barrow, J. (1801)

Kaaimans River:

"The Kayman's River separates the division of Plettenberg's Bay from the Outiniequas land, a tract of country which the Dutch government kept exclusively for its own use, both on account of the grand forests that were easily accessible and the excellent pasturage it afforded for cattle at all seasons of the year.

"The mountains here, being near the sea, attract the vapours and cause a greater quantity of rain to fall than in any other part of the Colony.

"This division is terminated by the Great Brakke River which rises in the forests above mentioned and, running, directly south, discharges itself into Muscle Bay." [p. 346]

1799 **Barrow, J. (1804)**

Outeniqua, Knysna and Tsitsikamma areas:

"The extent of the forests, beginning at Mossel Bay and running eastward parallel to the sea coast is at least 250 English miles and the breadth from the feet of the mountains to the sea is ten, fifteen, and in some places twenty miles.

"A great part of this tract is composed of large and beautiful plains intersected by numerous rivers, and abounding in lakes full of excellent fish ..." [p. 77]

Tsitsikamma:

"Sitsikamma commences at Plettenberg's Bay and continues along the coast to the Gamtoos River. It is chiefly covered with impenetrable forest, on the east of which however, there are extensive plains equally good for the cultivation of grain and the grazing of cattle.

"No direct road has yet been made through these forests along the seacoast so as to be passable by waggons but the inhabitants are obliged to go round by the Lange Kloof ...

"In the forest of the Sitsikamma are elephants, buffaloes, and rhinoceroses, and on the plains are hartebeest and koodoo, antelopes [? eland], besides an abundance of small game." [p. 368]

[The term Tsitsikamma, even in 1799, covered the whole stretch of coastal plain south of the mountains from Keurboom's River at Plettenberg Bay to the Gamtoos, a stretch of about 150 km. Of this, the forested Tsitsikamma area occupied only 50 km, the remaining 100 km being open fynbosveld with the Tsitsikamma River crossing the plains about 35 km southwest of Humansdorp town. This distinction between the forested Tsitsikamma and the openveld Tsitsikamma must be understood because the differentiation is not widely appreciated, the forested portion normally being regarded in the public mind as the Tsitsikamma proper. The area from Plettenberg Bay to the Groot River at Nature's Valley, a distance of about 20 km, falls within the Knysna District, whereas the remaining country from Groot River to the Gamtoos River falls within the Humansdorp District.]

Near Plettenberg Bay:

"The District of Plettenberg Bay is in fact a rich field for the naturalist... The greatest part of the forest trees still remain unexamined... The Plain of Hartebeests abounds with that noble species of the antelope tribe from which it takes its name ..." [p. 83]

Footnote on plain of hartebeests, 22 km east northeast of Knysna, near present Uplands by H. Thesen of Knysna (in litt. 1968.08.07). Mr Thesen and his family have had considerable experience in the Knysna forestry business:

"This is the first actual reference I have heard as to the existence of hartebees in this area in the old days. The name is quite new to me and to others I have asked, and is certainly not in common usage here. Including Kaffirskop which has open patches of veld, the flat plains stretching from the edge of the forest to Plettenberg Bay, would very likely be the Hartebeest-vlakte referred to. If hartebees occurred here in the old days, as indeed so it seems, then they would undoubtedly have occurred on all plain areas from the Tzitzikama flats to beyond above the Wilderness and right through beyond George to Mossel Bay, the Suurveld plateau under the Outeniqua Mt.

"In the vicinity of the Wilderness, the forests come down close to the sea, and here the open plain areas lie a little to the north where they are an extension of the plateau which runs from George right through to Nature's Valley, a distance of some 50 miles. From Storms River it is all broken forested country almost down to the sea, but once again the southern slopes of the Tzitzikama Mountains consist of grassy veld and would be the open veld passageway along and down into the Humansdorp area.

"The map (Barrow 1801) seems basically accurate to me and the Hartebeestvlakte is the area which you described and which does, in fact, embrace most of the flat land between Knysna and Plettenberg Bay, and the plains to the N.E. of Plettenberg Bay under the foothills of the Outeniqua Mountains. This is all sourveld scrub and in the old days was probably more grassy. It is interesting to see these open spaces marked on the old maps before the Great Fire of 1869. Reports of the fire have, to my way of thinking, become somewhat exaggerated. I believe the flames were confined largely to the 'fynbos' protea thickets along the verges of the forest, although smaller patches of the forest itself may have been burnt. So many people assume that the heavy indigenous forest embraced the entire area from the Outeniqua Mountains to the sea. Today, as in the old days, there would be free passage along the continuous strip of open grass land plain from beyond George to Cape St Francis, either along the southern foothills of the Outeniqua Mountains, or in places along the southern fringes along the coast. In short, there are definite open grassy areas as opposed to the '*eilande*' in the main forest itself."

1803 Lichtenstein, H. (1815)

December

South of the mountains to the sea, from Grootbrakrivier to George:

The general countryside: "... even in summer there is always abundance of rain and, the whole year through, the ground is covered with fresh plants, but the soil is poor and is of that description that belongs to the sour-fields [*suurveld*]. The different sorts of rushes and liliaceous plants exhaust all the nourishment and prevent the growth of wholesome grass... In this, as well as in some other districts that partake of the same soil, it is common to burn the lands every year, by which means they are manured and the foundation laid for a wholesome vegetation. But this must be done with great caution lest the fire should spread too far and catch the bushes by which means it might be communicated to the forests when incalculable mischief would ensue.

"The principal object by which the inhabitants of this country gain a livelihood is felling timber in the forests for building and transporting to other parts ..." Permission to cut timber had to be obtained from the government "... but trees have been so much cut down that it is now difficult to find any which will furnish sound and strong beams less than 30 feet high, except by going so deep into the clefts that they cannot be felled without extreme difficulty and some hazard." [p. 228]

Still in George District. "The number of bushes, brambles, and other climbing plants which opposed our way did not deter me. Among these the *Cynanchum obtusifolium* (a species of secamouny) [actually *Secamone alpini*] was particularly abundant. This plant is here called *pavianentau* (monkey's cord) and was running about in every direction all over the forest [*pavianen*, *bavianen*, *bobbejaan* = baboon; *tau*, *tou* = rope; hence baboon-rope or monkey-rope].

"Many sorts of *Asparagus* were also among the plants which we had to break through; these are called by the colonists *wagt-een-beetje* (wait-a-bit)."

He saw oaks "... and a tree that is called here *stinkholz* [*stinkhout*, *Ocotea bullata*]. A terrible enemy to the forest here is a moss, a sort of lichen or *Usnea* which covers whole boughs, particularly the lower ones, and in the course of years injures them so that they no longer bear leaves ..." [p. 231]

22 December

Swart River [Swartvlei], 27 km east southeast of George:

"The fields hereabouts afford abundance of grass, but not wholesome for cattle ... [p. 239]

"The inhabitants of this district live principally by felling wood and sawing it out into planks which are sent by the Long-kloof [Langkloof] to Boventande [presumably Boven landen or inland] or even to Plettenberg Bay whence they are forwarded by sea to Cape Town."

Eastwards from Swartvlei towards Knysna:

"The farther route varied very much and very agreeably, being sometimes through pleasant woods, sometimes over open heights when we had often fine views towards the sea. From one of these we saw a part of the Green-lake [Groenvlei, 8 km east of Swartvlei] thus called from the tint of its waters. The colonists believe the tint proceeds from its having a subterraneous communication with the sea, though it is separated from it by a pretty considerable tract of land [c. 1.5 km] and the water is perfectly sweet and free of salt. The principal ground on which the opinion is defended is that it has a periodical rising and falling resembling in some sort of ebb and flow of the sea. But the lake lies considerably higher than the sea, and this appearance, if it be not a deception, proceeds probably from some secret cause which may be discovered by future naturalists who have leisure to remain longer in the country than I could do." [p. 240]

December

East of Daukamma [Gaukamma], about 10 km west of Knysna:

"The road lay along the morassy bank of the river among high trees. An immense quantity of the *Cynanchum obtusifolium* (monkey's cord) [more probably *Secamone alpini*] was twining about in all directions." [p. 241]

Plettenberg Bay:

"The woods begin at not more than a quarter-hour's distance from the postholder's house. They run northwards towards the mountains and are so rich in natural rarities that I earnestly recommend them to visiting naturalists ..." He collected heavily in the three days he was there. [p. 250]

Piesangs River, near the postholder's house:

"... we crossed a stream called the Pisang-river. It has this name from the profusion of wild *pisang*, as it is here called, *Strelitzia alba*, that grows upon its banks. It should appear, therefore, as if this was the native country of the beautiful plant so much admired in Europe under the name *Strelitzia reginae*. I was not fortunate as to find any of the latter wild; I only saw it in blow [bloom] in some gardens at Cape Town.

"The soil is not less fertile about Plettenberg's Bay than in Outeniqualand though the fields are almost all sour... On the high hills sweet grass grows in tolerable plenty and some of the farms there feed a considerable number of cattle. From Mossel Bay we saw no more aloes, they cease where the woods and sour-fields begin, they are again, however, to be found on the naked hills to the north of Plettenberg's Bay but of a sort scarcely good for anything as to the sap they yield. The *Aloe perfoliata* [actually referring here to *Aloe ferox*] is exclusively an inhabitant of Zwellendam and some spots in other remote districts." [p. 251]

Outeniqua Mountains, 30 km north northwest of Plettenberg Bay *en route* to the Langkloof on the north side of the mountains:

"On the heights we found again different sorts of *Protea*, particularly the *grandiflora* [*Protea nitida*] which is here deformed in a very extraordinary manner by the sting of an insect to as bad a degree as where gall-nuts are formed: the branches break into knots from which twigs and leaves come out without number, but exceeding small. At a distance, these trees appear as if they were covered with mistletoe, or some other parasitical plant, but when examined nearer it appears to be a ball of little plants exactly of the same nature as the large bough. Several sorts of *Brunia* and *Phylica* were now in flower." [p. 254]

1803 Van Reenen, D.G. in Blommaert & Wiid (1937)

Plettenberg Bay:

"The surrounding forest-clad country is an agreeable sight for those who see it for the first time. The pasture is very good for cattle; it would also be so for horses if horse-sickness were not so often prevalent. For sheep, as I have already remarked, it is not good, all the more because the country is very bushy and there are hardly any plains. In the event, we arrived at Plettenberg Bay. [p. 67]

"The pasture is as good as at the Knysna and is suitable for cattle, but it seems to me that the veld is even more sour." [p. 69]

1809 Collins, R. in Moodie (1860)

Tsitsikamma:

"The Districts of Zitzikamma and Kromme River are exceedingly unfavourable to cattle and a great portion of the land there is in consequence unoccupied, although some is well watered by rivulets and the whole is regularly visited by rains. In the first they are subject to a disease called by the farmers the *teering* [tuberculosis] and in the latter to the *lam siekte* [botulism].

"On the country between Plettenberg Bay and Zitzikamma there was no better information. A few Marroon Hottentots had traversed it some years before I went there but the white people of either extremity had not gone further than its skirts which they had occasionally visited for the purpose of hunting or seeking for servants who had absconded.

"The distance from Robbe Berg east to Pic Formosa does not, I conceive, exceed 40 miles. It contains 17 streams having mouths to the sea of which several are of magnitude. They are mostly remarkable, like those on the western side of the bay, for flowing through precipices, but some may be made to serve for irrigation. [p. 27]

"For about 12 miles east of Keurbooms River the country is almost covered with wood. Two large streams called the Salt and Shipwood Rivers, flowing through this extent, may be entered by boats, the former to a considerable distance. Excellent timber may be found near both, particularly between Shipwood and Kranz (Precipice) River, a few miles to the east ...

"About a mile beyond Kranz River the country opens near the sea and presents a plain of coppice and sour grasses exceedingly well watered by the Horee, Swellendam, and Dole Rivers, and in some places affording tolerable pasturage for horned cattle. The woods continue under the mountains to a considerable distance farther to the east.

"Soon after we had passed the Dole River we found the former residence of a Marroon slave, a native of Malabar, who had been brought from it to his master only a few weeks before, in the hope of a reward, by the Caffres whom we were in search of."

This man had built a rough hut in the forest, had made a garden, and was in hiding. He had committed no crime. "About 10 miles beyond this spot, which we called Damon's Fontein from the name of its late unfortunate possessor, we arrived at the Storm River whose broad deep bed, full of large loose stones, bears strong marks of winter torrents. Through this a carriage passage would be difficult, and its banks being more distant

from each other and its streams more rapid than at Kranz River, a bridge would not there be so easily constructed; but either might I think be effected with due labour. This river is almost lined with large timber but the country beyond it through which the Mooiy and Eland Rivers is again open to Erst River meander which is the boundary of Zitzikamma and which contains some very fine wood about its banks, particularly on the sources at Witte Els and Pic Formosa [in the Tsitsikamma Mountains].

"It is not a little extraordinary that the tract just attempted to be slightly described, comprising an extent of 14 leagues of coast, should have remained in a state of nature in the midst of a country inhabited by Europeans during nearly half a century. Its occupancy would be a public benefit, not only by completing the communication along the coast between the extremities of the Colony, but also by preventing Marroons from taking refuge in it and by the assistance that might thereby be afforded to such navigators as might unfortunately be wrecked on this dangerous coast.

"This country should, I conceive, be given out to industrious Europeans or Chinese who might gain a good livelihood by the cultivation of corn and the felling of wood ..." He suggests, too, the growing of flax and hemp.

"A more favourable opinion than formerly seems to be now entertained of Cape woods, but the price of them is exorbitant. It would not, however, be worth the inconvenience to make any alteration in the mode of procuring the small quantity that is at present brought from Plettenberg Bay, but if circumstance should require timber to be exported from the Cape to England, I am convinced that there might be very considerable saving from government taking the whole concern into their own hands ..." He then discusses building of roads, etc.

FOOTNOTE: Possible explanation of the above place names by Mr DF Bower, Warden of the Tsitsikamma Coastal National Park, *in litt.* to CJ Skead 1981.03.09, after consultation with members of the Whitcher family, long associated with that part of the Tsitsikamma:

"The present Soutrivier was always Salt River. This river may be entered by boat but the stream at present is not navigable. The Shipwood River, which appears to be the Groot Rivier at Nature's Valley, is navigable by boat for a few kilometres. The next river of any importance is the Bloukrans River, abbreviated to Kranz by the writer. The Horee, Swellendam and Dole Rivers would in all probability be the present Lottering, Elandsbos and Kleinbos Rivers. (A Swellendam Point is in the region of the Elandsbos River.) Damon's Fontein is unknown here. Mooiy Rivier is probably the Sanddrift River. Elands River and Erst [Eerste] Rivier correspond with the present rivers' names."

As a guide, the positions of these streams would be roughly as follows:

Salt River (Soutrivier) 3 km west southwest of Groot River at Nature's Valley. Kranz (Precipice) River, the Bloukrans River, 8 km east of Groot River at Nature's Valley. Horee River, probably Lottering River, 3323DC, 92 km west of Humansdorp. Swellendam River, probably Elandsbos River, 3323DD, 90 km west of Humansdorp. Dole River, possibly the Kleinbos River, 3323DD, 84 km west of Humansdorp. Storm(s) River, 3423DD, 80 km west of Humansdorp. Mooiy River, just east of Storm's River, 3423DD. Elands River, 3423AA. Erst [= Eerste] River, 3424AA, 64 km west of Humansdorp.

1816 La Trobe, C.I. (1969, reprint)

15 March

Southern George District:

"On each side of the road are deep glens. Down that to the left, a broad brook hurried swiftly amidst rocky shores and impenetrable thickets which rose to the brow of the hill. A smaller stream glided more gently down the righthand deeper glen in which a considerable quantity of large timber shaded its dark recesses ... with rocks richly clothed with beautiful creepers, the crevices affording nourishment to their roots and to those of a vast variety of shrubs and trees ...

"Having gained the summit we arrived at an extensive grassy plain with an extensive view of the mountains of George to the north and east. The Plain is called Groenland." [p. 142]

Turned and "... crossed another grassy plain intersected by two narrow and rocky glens" towards Hoogte Kraal [Pacaltsdorp]. [p. 143]

18 March

Just east of George on the eastern side of Kaaimans River:

"Our road now lay through a thick wood in which many a mighty tree seems to have yielded to the axe. Bushrope, or *bavianstau* [*Secamone alpini*], a species of creeper resembling a rope, grows here in abundance and nearly envelopes some of the loftiest trees to the destruction of their growth and beauty. In the woods a number of Hot-

tentots and slaves were busily employed in sawing and preparing planks, beams and shingles. In about an hour we arrived at Trekata'kou, the second grand defile [on the Kaaiman's River]." [p. 152]

22 March — Knysna, just after leaving Melkhoutkraal, George Rex's farm, going east:

"The road was uneven but presented charming views of the surrounding country and of the woods which partly crown the summits and partly adorn the sides of the hills. For some miles the forest extends from the range of high mountains forming the northern boundary of the bay to the sea coast. This region is called the Port." [p. 159]

Samson's River, which runs into the Keurbooms River, *en route* to Plettenberg Bay:

Many brooks here. "On the banks of one of the abovementioned brooks we found the larger species of *bukku* [buchu, *Agathosma*] one of the most aromatic medicinal plants in the country and justly esteemed for its healing properties. Its leaves steeped in brandy or vinegar, and the bottle placed in the heat of the sun, emit an unctuous juice by which the fluid is rendered as thick as honey and applied particularly for the healing of contusions, sores, and all external complaints. The Hottentots also use it for inward hurts by mixing a spoonful of it with warm water. Its leaves are lancet-shaped and serrated.

"After leaving the woods we passed over an uninteresting barren country ..."

To Jackal's Kraal, northwest of Plettenberg Bay, where a Hottentot named Jackal had once lived:

"... through long grass and bushes, over stony or marshy ground" and camped "... near a grove of tall trees. [p. 160]

"A broad path made by woodcutters afforded a passage into the kloof" the sides of which "... rise steep to a considerable height and are clothed with a romantic wood of every species of tree growing in the country, innumerable flowering plants and shrubs covering the ground." [p. 163]

Had a view of Plettenberg Bay from the hills above Jackals Kraal.

At this place "... noticed here a gigantic species of plant, from its singular form properly called the chandelier (*Brunsvigia multiflora*) [*Brunsvigia josephinae*]. The specimen I obtained had twenty shoots proceeding in a direction nearly horizontal from its centre, each a foot long with a beautiful scarlet flower at its points. Its root is a bulb. A smaller species [probably *Brunsvigia littoralis*] is common all over the waste. [p. 165]

"... much good land fit for gardens and pasture... A vast quantity of *palmiet* [*Prionium serratum*] covers the banks of the rivulet which is always considered a good sign of rich and good soil but it is very difficult to eradicate, having a strong taproot running deep into marshy ground ..."

La Trobe did not go into Plettenberg Bay village. [p. 166]

24 March — Left Jackal's Kraal towards Perdekop on the mountains *en route* to the Langkloof; crossed Wittedrift on the Bitou River and outspanned at a farm:

"Here grows that valuable wood called *eysterhout*, or ironwood (*Olea undulata*) [*Olea capensis*] so hard and likewise so tough that an axle-tree made from it will bear more than an iron one of twice its thickness."

From this elevated part of the range, with ranges of lower hills intersected "... by numberless kloofs in parallel lines... These kloofs are partly naked, partly filled with bushes, or lined on each side with rocks." Two hours later they reached Perdekop. [pp. 168, 169]

Perdekop was very steep and stony. "Many of them [trees] are clothed with a lichen of bright vermilion colour... The soil produces a variety of bushes, flowering shrubs, and aloes between the stones." [p. 170]

1819 Burchell, W.J. (1822)

Forests near Plettenberg Bay (In Report before Select Committee, London, from Annual Register for 1819):

Question to Burchell: "Does not the Colony derive their fuel from Plattenburgh Bay?"

Answer: "No, their demand for fuel is got nearer; the resources of timber in that country are scarcely known; they are very great and it will be a great while before they are exhausted."

Q. "What is the description of timber?"

A. "Not any timber we know in this country; to use the language of carpenters, it is a kind of yellow wood, more resembling fir than anything else."

Q. "Is there any wood fit for shipbuilding?"

A. "No, there is a species of wood which very much resembles mahogany and is almost as valuable ..." He added that most woods could be adapted for use in domestic products especially one which he considered as good as *lignum vitae* "...and another as good as boxwood." [1: 22]

Plettenberg Bay (Hints on Emigration to the Cape of Good Hope,1819):

"Plettenbergs Bay is visited constantly by a colonial vessel for timber which is cut in surrounding forests. [1: 32]

"From the inexhaustible forests of Auteniqua-land and Zitzikamma (Sitsikamma) lying on the very seashore, the very finest timber for the buildings of the settlement may be procured at no more expense than that of cutting and fetching away." [p. 33]

1819/20 Moodie, J.W.D. (1835)

In the forests at George, or Outeniqua:

Writing of his brother, farming at Grootvadersbosch, who took a waggon to George to collect yellowwood planks [*Afrocarpus* and *Podocarpus*] for house building: "Several of the people whom he had brought to the Colony were employed in felling and sawing timber in the extensive forests of that district which supplied the principal part of the timber used at Cape Town." [1: 341]

From the Gouritz River area eastwards to Outeniqua Land:

"As we proceeded to the eastward, the country began to assume a new character becoming gradually moister and more verdant until we came to that delightful and well-watered portion of the District of George called Outeniqua Land ...

"The mountains are exceedingly steep and lofty, and are often clothed almost to the very summits with the most beautiful woods which in several places extend to a considerable distance into the plains below. [2: 7]

"The town of George is finely situated in a plain at the base of the mountains which are in this place wooded to the very summits ...

"This beautiful portion of the country is by no means equal in fertility to most parts of the Colony ... [2: 10]

"Such absence of fertility is, however, in some measure compensated for by the abundance of water and the facility of cultivation from the lightness of the soil... The inhabitants of this part of the District of George are generally poor, subsisting principally by felling timber and sawing it up into beams and planks for house-building. The timber is either sold to the inhabitants of the neighbourhood, or carried to Mossel Bay or the Knysna where it is shipped for Cape Town.

"Most of the Dutch farmers in the neighbourhood are obliged to work occasionally in the forest with their people, as their places, from the inferiority of the pasturage, are insufficient to provide them with a comfortable subsistence. The forests also afford employment to a number of Hottentots who are more industrious and receive higher wages than in the neighbouring Districts of Swellendam and Uitenhage." [2: 11]

1820 Attakwas Pass, 10 km west of Robinson Pass:

Travelling northwards: "The pass called Attaquas Kloof is one of the wildest and most romantic in the Colony. We first ascended a very steep and rocky road which carried us over the top of a high grassy hill from whence we had a fine view of the windings of the rude waggon track—for road it could hardly be called. It sometimes seemed to ascend the perpendicular face of a mountain, then it would take a sudden turn and wind round it, when the intervening heights would conceal it from view. Again, it would appear at a great distance, climbing a long ridge among rocks and brushwood, or skirting the base of the vast mountains which rose in majestic grandeur on either side of the deep glen, through which a little rivulet was seeking its way among the fragments of rock and stones which had fallen from the heights above ... [2: 30]

"What materially added to the grandeur of the scene was that someone had set fire to the dry grass and bushes. The conflagration spread rapidly up the steep sides of the ravine in long lines of flame to the summit of the mountains, leaving all black and dreary behind it. At one place we were obliged to drive the waggon through the burning grass and were sometimes almost stifled with clouds of smoke." [2: 31]

1822–1883 Phillips, J.F.V. (1931)

Plettenberg Bay forests:

"Forest devastation there was at its height, with reckless fellings and burnings. This lessened until 1883 when proper forestry control was introduced." [p. 102]

1835 **Alexander, J.E. (1840)**

George and Tsitsikamma forests:

"The forests of Knysna and George occupy an extent of 300 sq. miles between the village of George, the mountains, the Zitzikamma River, and the ocean.

"The forest is not continuous but there are open patches of pasture here and there in some of which we saw squatters in log huts who felled and sold the timber without a licence. Elephants, leopards, buffaloes and other wild animals are found in this beautiful forest which is composed of stinkwood [*Ocotea bullata*], yellowwood [*Podocarpus*], white *els* [*Platylophus trifoliatus*], *assegai* [*Curtisia dentata*], and other valuable trees.

"It is supposed that eighteen hundred loads of timber, each valued at four pounds ten shillings, were removed in 1834 surreptitiously from the forest.

"The surveyor-general has exposed these nefarious transactions, and also the wanton destruction of timber, by felling the trees without regard to age or situation, for, as the branches were not removed, twenty other and younger trees were commonly destroyed by the fall of one.

"Besides which, the white and coloured hunters, to satisfy their gluttony by getting at the wild honey at the top, would, without hesitation, cut down a tree of 5 feet diameter.

"In 1812, Sir John Cradock appointed an overseer for the Zitzikamma forest, licences were then taken out and the abuses were fewer. The office of overseer has since, however, been abolished, and the forest has gradually melted away, but it will not now be suffered to be laid waste, as it has lately been.

"This forest is so valuable to the Colony that there is scarcely a house, mill, wagon, or agricultural implement which is not made of the wood in it.

"It is now proposed that seven shillings and sixpence be paid on each load of timber that is removed, and that one or two gentlemen be appointed as overseers or rangers of the forest." [2: 324]

1838 **Backhouse, J. (1844)**

10 November — Knysna:

"The woods in this part of the country are extensive and interspersed among the grassy hills. Many of these forests are very beautiful: the trees are large and much overrun with climbers.

"The stinkwood, *Laurus bullata* [*Ocotea bullata*] and the yellowwood, *Podocarpus elongata* [*Podocarpus latifolius*; *P. elongatus* not found in this region] are the kinds chiefly cut: the former is allied to the bay, and the latter to the yew. Yellowwood is the prevailing tree in the forests and by the sides of the rivers on the eastern side of South Africa. It is often rendered conspicuous by a long shaggy green lichen with which it is generally clothed.

"Parasitic [actually epiphytic] plants of the Orchis tribe are common to the trunks and branches of trees in the forests; one we saw today had pretty white flowers. [pp. 130, 131]

13 November — "Between the Knysna and Plettenberg Bay a beautiful *Disa* with deep-pink blossoms [possibly *Disa racemosa*] was in flower, and on the sandhills at the mouth of the Zwarte Rivier another orchideous plant which was of a larger stature and had yellow blossoms [probably *Eulophia speciosa*]. The noble plant called *Strelitzia angusta* [*Strelitzia alba*] is found in the forest of this part of the country." [p. 132]

21 November — Over the Outeniqua Mountains, from George to the upper Langkloof *via* Cradock's Kloof [Montagu Pass], 8 km north northwest of George:

"Near the top of the mountain we gathered some bramble berries about as good as the best English varieties.

"Among some wet rocks, a species of *Harveya* [*Harveya pauciflora* or *H. purpurea*] was abundantly in flower. This plant, which is named after my friend William Henry Harvey, who is the author of an excellent work on the *Genera of South African plants*, has blossoms resembling in some degree those of the Chinese primrose. It is probably parasitical on roots, and like other plants of this description, it is destitute of leaves ..." [p. 138]

1838 Bunbury, C.J.F. (1848)

21 June — Cradock's Kloof [Montagu Pass]:

Approached from the north or Langkloof side. "The pass is of an entirely different character from the Attaquas Pass ... huge walls and pyramids of naked rock tower above the road ... the extreme abruptness of the mountains and the want of vegetation giving them an appearance of magnitude beyond the truth... I saw but few plants while ascending Cradock's Kloof. The principal were rushes, Restiaceae of a most stately appearance growing in thick tufts at least 10 feet; and a shrub (*Callitris cupressoides*) [*Widdringtonia nodiflora*] which had much the look of a dwarfish form of the common cypress.

"On the southern side, the mountains, though excessively steep, are less abrupt and craggy, and the vegetation is much more abundant and varied. Here I found a very beautiful *Pelargonium*, some fine everlastings, a scarlet *Antholyza* [probably *Chasmanthe aethiopica*], and several other novelties. And towards the bottom of the descent, before coming quite into the plain, I walked for some distance through a beautiful natural shrubbery of proteas, heaths, and a variety of other fine plants very tall and luxuriant." [p. 175]

1839 Krauss, F. in Spohr (1973)

5 January — Near George:

"When you reach the top of the mountain beyond the Great Brak River you see towards the east a large plain which is deeply furrowed by some river-beds, and over-grown with bulbous plants and only a few bushes ...

"In the evening I arrived at the deeply cut bed of the Notsinakamma river [? Witels River, c. 13 km west southwest of George, near Buffelsdrift]... The river where we slept was overgrown with ratan grass ... [p. 33]

"This beautiful coastal area was originally inhabited by Hottentots. It was a great pleasure to collect plants in these forests. There were tall trees which were used as timber and for waggon-building. Low bushes and ferns grew so thickly that we had to cut our way through. Parasitical plants [probably *Cassytha ciliolata*] often crept right up to the top of these trees. A lot of very old and rotten trees lay about and made it even more difficult to proceed in these dark forests." [p. 34]

January 15–19 — Over Cradock Pass:

"The mountains flatten out gradually towards the sea and their gorges were more fertile, whereas the mountains to the north fall down very steeply and were not overgrown with indigenous forests. Little brooks abounded: ericas, proteas, indigoferas and bush-like composites decorated the rare spots covered with growth." [p. 35]

24 January — Knysna:

"The surroundings of Knysna were attractive. The village of Melville lies in the valley where there were forests before... Everything grew here in abundance and the background was sealed by evergreen indigenous forests. Here was the real reserve of wood for the Colony; most of the wood of the tall trees worked by a large number of woodcutters was used for waggon and ship-building, and was chiefly transported to Cape Town. There were therefore usually two or three ships in the bay bringing a lot of trade and activity." [p. 38]

4 February — Knysna to Plettenberg Bay:

"I made a more extensive excursion on horseback to acquaint myself with the surroundings of Plettenberg Bay. The path led across wooded hills and through well-watered valleys to a small river. The banks were covered by *Strelitzia angusta* Thunb. [*Strelitzia alba*] with high woody stems. This was the only habitat of this magnificent Musaceae—a striking plant with leaves of 4 to 6 feet in length and one foot in width in the jungle, accompanied by *Amaryllis* [*Agapanthus praecox*]. The blue umbrella-like flowers, *Didymocarpus rexii* Bowie [*Streptocarpus rexii*], *Plumbago capensis* Thunb. [*Plumbago auriculata*] and different ferns were a wonderful sight. Mighty yellowwood trees, *Podocarpus elongatus* L'Herit. [*Podocarpus latifolius*]—the trunks of which four men could hardly span—grew here in great luxuriance, rising above the rest of the forest.

"Crossing a hill of sandstone-conglomerate I arrived at the bed of the Keurbooms River... Accordingly aloes appeared again. At the woody Stofpad River [? Bitou River] I found limbs of Crinoideae in slate-like rocks. The Stofpad River and the Keurbooms River met to widen out into big lakes and marshes."

6 February — Up to Paardekop on the mountains:

"The pass led from the Stofpad River over three terraces of sandstone hills covered with Restiaceae, *Erica*, and occasional proteas as far as the Paardekop... The foot-

hills of sandstone are deeply cut by many valleys. These valleys were well watered and were covered with large indigenous forests, especially around the Kaimans River as far as Plettenberg Bay. Beyond the forests grew proteas, *Erica*, Leguminosae, Gnidiae [Thymelaeaceae], Irideae, etc, and on the hilltops *Gnaphalium* [*Helichrysum*] and orchids ..."

Near Plettenberg Bay:

"The surf was very strong. The hills at the coast from Plettenberg Bay to the Tsitsikamma fall steeply. Most beaches are sandy... The hills were overgrown with dwarfed bush-like dune-plants such as Celastraceae, Compositae, Leguminosae, Diosmae, *Rhus, Asparagus capensis* L. (called by the colonists '*wag en bitje*'), and some places near the shore were completely covered by a plantation.

7 February "...I returned on horseback from Stofpad ... to the beach on the property belonging to Captain Harker. Many *pisang* trees (banana trees) [probably *Strelitzia*, wild banana] grew in his garden. I continued as far as the mouth of the Pisang River." [p. 39]

1851 Merriman, N.J. (1854)

December Knysna District:

"I started ... on a toilsome march to regain the road in the Long Kloof, that being the only way of proceeding eastward by land from Knysna. Mr Sutherland and Dr A accompanied me part of the way through a vast forest in which Mr Sutherland had recently cut a road or track communicating with the road which runs from Plettenberg Bay over the mountains to Avontuur; and though I much admired the scenery, I was not sorry to quit the dense mass of superb trees which forms an invaluable storehouse of timber for all parts of the Colony.

"The mountains from George to Plettenberg Bay are more or less laden with the precious treasure of forest trees, part belonging to Government, part to private individuals.

"Two years since [1849], the portion of the forest near George took fire at a dry time of the year and burnt for several days with a roaring and a conflagration truly awful. For nearly a week the people were in consternation lest the village of George should take fire. The roaring may be judged of by the force of the current of air (which the fire caused) being so strong as to root up several of the largest trees, although the scathed trunks of the giants stood forth and told the tale. I thought it wonderful to see how vegetation had seemed to recover its dominion, and to hide much of the deformities which the fire had occasioned.

"We saw plenty of fresh traces of the elephant as we walked through the forest ..." [pp. 136, 137]

1859/60 Phillips, J.F.V. (1931)

Quotes Dr Pappe as saying that the forests were being destroyed by fire. [p. 99]

1868 Noble, J. (1875)

Tsitsikamma:

"Between Plettenberg's Bay and Zitzikamma there is a tract of magnificent virgin forest extending for 56 miles where not an axe has been laid upon a tree.

"This was explored for the first time in 1868 by Mr T Bain and Mr Harrison [sic, Harison], the Crown Conservator.

"They started from Forest Hall, the property of Mr Newdigate, and Plettenberg's Bay, accompanied by native servants and woodcutters to enable them to clear their way through the bush.

"They met with large numbers of large game, elephants, buffaloes, boar, panthers, bush and other bucks; and the wild character of the jungle and its dangers at some parts so alarmed the native retainers that it was only by threats they were induced to go on.

"They found the country beautifully diversified with forests and glades, abundantly supplied with good grass, and watered by no fewer than twelve rivers... The number of the elephants cannot be less than 200, and there are large herds of buffaloes, especially in the '*fynbosch*' between the Groot and Platbosch Rivers.

"Messrs Bain and Harison made their way through to the Zitzikamma and reported that it was impossible to speak too highly of the climate, condition and resources of

the country they had seen, and which, by the path they had cut, and the numerous elephant's tracks, is now tolerably accessible.

"They strongly urged the construction of a road from Plettenberg's Bay to Humansdorp ..." [p. 124]

1869 **Phillips, J.F.V. (1960)**

The Great fire of Knysna and Tsitsikamma Forests:

"... ravaged some of the Blaauwkrantz forest tract. The Blaauwkrantz River [26 km east northeast of Plettenberg Bay] was not crossed by this western line of fire, stated Harison [the Conservator] who visited that kloof a few days after. A second fire, apparently started in the Langkloof by a party of honey-hunters, crossed the range of Blaauwkrantz River which it jumped. 'But ...' wrote Harison '... providentially it took the high ridges and avoided the deep timber kloofs.' With the exception of the forest at Kwaaibrand, portions of Koopmansbosch and Robbehoek, the forest escaped lightly, Harison attributing their preservation to the fringes of *keur*, *Virgilia oroboides* along their margins. At Kwaaibrand, two elephants were smothered by the smoke and throughout the burned forests hundreds of buck were found charred or roasted." [p. 91]

1869 **Sim, T.R. (1907)**

The Great Fire of Knysna in the Tsitsikamma Forests, 1869:

Sim quotes from 'Management of Crown Forests at the Cape' by J Crumbie Brown in his *Hydrology of South Africa*, pp. 175–194. Dr Brown writes: "In another case the smoke was conveyed some 120 miles in a compact volume some seven or eight miles in extent; and in a further case, an area of 400 miles long, varying in breadth from 15 to 150 miles was devastated by fire."

Sim adds that this latter fire occurred in the Midland Conservancy in February 1869 and devastated much of the country from Humansdorp to George-town.

A reporter on the *Cape Argus*, Mr Forsyth, supplied Mrs M Rowan, of the Percy Fitz-Patrick Institute for African Ornithology, *in litt*. 1963.08.05, with the following, using information from the *Cape Argus*, Cape Town:

"The fire was first reported in the *Argus* on 09.02.1869—a brief description from George. There followed fuller and ever more hair-raising accounts on 16/2. 20/2 and 22/2 In addition, a letter from HB Darnel (a former editor of the *Cape Argus* who was farming in the Knysna area in February 1869) written to a friend in Cape Town and datelined Knysna, was also published on 20 February. The same date saw a despatch from the *Uitenhage Times* which gave a full description. Later there were accounts of relief committees, set up to alleviate the lot of the destitute farmers.

"On the dates already quoted, despatches were published from George, Humansdorp, Zuurbekom (or Zuurblom) and Uitenhage. They speak of a tremendous berg wind and temperatures of 114 degrees in the shade."

Effects of fire on forest:

"Fire is the final devouring element for all retrogressive forests, but it is seldom that the condition of virgin high forest is such as to make it possible for fire to pass through, or to do much injury; it is only after successive fires, gradually encroaching, have eaten into and isolated patches; or after man in his wanton ruthlessness has worked a forest sparse, and so removed its natural safety without giving it sufficient artificial protection, that the danger of complete destruction becomes great.

"One or other of these conditions—more usually the latter—has preceded every holocaust, and thousands of acres of what was once sound high forest have been ruined in this way ...

"One forest visited by the writer in 1889, a week after many acres of it had been consumed by fire, will ever be remembered; fire still smouldered in many a stump; every tree was charred right into the hardwood; many large trees had burned clean out, and even down into the ground; not a sapling remained alive or dead; huge rock boulders 30 feet in diameter were cracked and splintered right through ... the soil was burned to a soft loose ash ...

"Visited again a year or two later a copious growth of ferns, solanums, *Physalis* (Cape gooseberry) [*Physalis peruviana*]; *mkanga* (*Senecio juniperinus*) [actually probably *Senecio pterophorus*] had taken possession... Seedlings of forest trees were plentiful, and *Buddleia salviifolia* and *Halleria elliptica* had already made considerable growth... I am informed that now, after 12 years, there exists a dense almost impenetrable jungle of forest saplings mixed with, but getting above, a considerable growth of bramble. [p. 44]

"With *Protea* the case is different. The growth is slow at best, seedlings are always scarce, and an area once cleared may be considered cleared for ever. The *Protea* belt of the Upper Transkei has consequently been denuded more rapidly even than the thornveld, and its possibility of recovery is very much less." [p. 49]

1879+ **Burman, J. (1963)**

Roads through Tsitsikamma forest:

1879 Road built by Thomas Bain began from the western end.

1881 Was passable as far as Bloukrans [25 km east northeast of Plettenberg Bay].

1882 Completion of Bloukranspas.

1884 The road reached Storms River at the eastern end of the forest belt [50 km east of Plettenberg Bay].

From Keurboom's River at the western end of the Tsitsikamma Forests to Storms River at the eastern end is 50 km. The narrow plateau containing these forests is only some 5 to 6 km in width between the mountain range and the sea. This constitutes only about 250 to 300 square km.



9 LANGKLOOF

c. 1700 Redgrave, J.J. (1947)

Algoa Bay:

Piet Timmerman was sent "… especially from Holland to negotiate for the purchase of this desirable spot from the natives who then appeared to own it ... having surveyed from the deck of his tossing ship the endless stretch of barren conical-shaped sand-dunes and bushland that skirted the shore as far as the eye could see, he sailed away in disgust ... only to be ship-wrecked later at the treacherous Cape Recife." [p. 1]

1752 Beutler, A.F. in Theal (1910)

7 April — Reached the foot of the Montagu Pass behind George, and passed over the Outeniquas into the upper Langkloof:

"Very little grass was to be seen but rhenoster bush [*Elytropappus rhinocerotis*] was plentiful, so that the cattle fared badly." [p. 83]

1772 Thunberg, C.P. (1793)

19 November — Essenbosch, 33 km west northwest of Humansdorp:

"…arrived at Essebosch, a fine forest in almost a plain and level country ... [1: 200]

"The bread tree (*Zamia caffra* [*Encephalartos caffer* or *E. longifolius*]) is a species of palm [cycad] which grows on the hills, below the mountains, in these tracts. It was of the height and thickness of a man at most, very much spread, and single. I have sometimes seen from one root, two or three stems spring. It is out of the pith (medulla) of this tree that the Hottentots contrive to make their bread." Describes the method. [1: 201]

"The berries of the guarri bush (*Euclea undulata*) had a sweet taste and were eaten by the Hottentots. Bruised and fermented they held a vinegar like that made from Pontac. The *Crassula tetragona* [the *karkai* plant], as being somewhat of an astringent nature, boiled in milk, in the quantity of a handful, is used as a remedy for the diarrhoea." [1: 202]

Between Kabeljousrivier and Gamtoos mouth, 20 km east southeast of Humansdorp:

"The beans of the *Guajacum afrum* [*Schotia afra*, the *boerboon*], though a poisonous shrub, are boiled and eaten by the Hottentots." [1: 207]

1773 Thunberg, C.P. (1795)

25 November — Upper Langkloof, near Uniondale:

"The land in the Lange Kloof is bare, and without any shrubs or bushes, but abounds much in grass." [2: 55]

30 November — Essenbosch:

"... we proceeded to Essebosch, a pretty, neat, little wood which has acquired its name from the large trees, *essenboom* or ash trees, *Ekebergia capensis*, that grew there, the leaf of which greatly resembles that of the European ash *Fraxinus*. Large fig trees too, *Ficus capensis* [*Ficus sur*], the fruit of which is eaten by the baboons, grew here in abundance." [2: 60]

Early December — Zeekoei River, Humansdorp:

"The fields here abounded in grass, and consequently were proper for the rearing of horned cattle ... [2: 63]

"As the species of palm called the bread-tree (*Zamia caffra*) [*Encephalartos caffer*] was found in these parts, we looked for the fruit which is very scarce, and gathered the seeds." Describes the biology of the fruits. [2: 66]

10 December — Loerie River, 52 km west of Port Elizabeth:

"... we came to Looris Rivier where the country began to be hilly and mountainous like that of Houtniquas [Outeniquas] with fine woods both in the clefts of the mountains, and near the rivulets ..." [2: 79]

13 December — Kraggakamma, 18 km west of Port Elizabeth:

"The country, in which we now were, was called Krakakamma, and abounded with grass and wood... We travelled first to Krakakamma valley, and afterwards from thence farther downwards to the seashore where there was a great quantity of underwood, as well as wood of a larger growth filled with numerous herds of buffaloes that grazed in the adjacent plains [Bushy Park]. [2: 83]

15 December — "... I went out to see whether the trees of the woods, of which this part of the country consisted, had yet any blossoms upon them, but found that the summer was not far enough advanced and that the trees were so close to each other, and so full of prickles, that without cutting my way through them, I could not advance far into the wood, which, besides, was extremely dangerous on account of the wild beasts."

Swartkops Saltpan, 13 km north northwest of Port Elizabeth:

The saltpan was much admired by Thunberg. "It formed a valley of about three-quarters of a mile in diameter, and sloping off by degrees, so that the water in the middle was scarcely four foot deep. A few yards from the water's edge this valley was encircled by a mound several fathoms high which was overgrown with brushwood. It was rather of an oval form and took me up a good half-hour to walk round it." Describes the pan and considers its origin. [2: 89]

16 December — Sundays River, 40 km east of Uitenhage:

"... the adjacent fields were very meagre." [2: 93]

20 December — Van Stadens River, 34 km west of Port Elizabeth:

"In the environs of Van Stade's River, were the finest woods I had seen in the whole country. Few of the trees however were as yet in bloom. The *assagay* tree (*assegaaiboom*) *Curtisia faginea* [*Curtisia dentata*] of which the Hottentots and Caffres make the shafts of their javelins, grew here in abundance, and began now to develop its diminutive blossoms." [2: 96]

1775 Sparrman, A. (1786)

October — Upper Langkloof, Uniondale:

"In the neighbourhood of Brak-rivier which, he says, is where the Langkloof begins, as well as in other places in the Langkloof they made great complaints about the piss-grass mentioned as growing in Attaquaskloof [40 km northwest of Mossel Bay] though nobody could, with any degree of certainty, point out any particular herb as coming under that denomination." [*Euphorbia genistoides* or *E. erythrina* (Smith 1966: 372)] [1: 304]

Essenbosch:

"The name of Essen-bosch is given to a kind of woody tract along the Essen Rivier which, as well as the wood, has taken its name from the *esse* or ash tree ... *Ekebergia capensis*..." [1: 311]

Leeuwenbosch [entrance to Langkloof], 7 km west of Humansdorp, on plains east of Tsitsikamma Forest:

4–12 November — "On the 4th we came to Leeuwenbosch, a little wood... On the 5th we entered the Sitsikamma... As in this province there were various unknown plants, and no naturalist had been there before us we staid there till the 12th ..."

"On the eastern side of Leeuwenbosch the country may be said to be champian [sic, champaign, an expanse of open country] or open country, the long range of hills, by the side of which we had travelled all the way from the Cape, terminating here or else running on to the north. This tract of land seems to come under the character I have given of the sweet grass-fields and plains towards the shore. The same may be said of the other side [eastern side] of the Sitsikamma which, especially near the shore, was extremely low and sandy.

"The *Myrica cerifera* [*Morella cordifolia*] is to be found here, as well as at the *duyven*, or doves, as they are called at the Cape." Notes the waxiness of the former and the use to which the wax is put in making candles. [1: 344, 345]

Seekoei River Mouth:

"On a height near the uppermost farm on Zeekoe Rivier grew the bread-tree (*broodboom*) [*Encephalartos caffer* or *E. longifolius*] of the Hottentots, discovered by Prof Thunberg." Gives a description. "This *Cycas* grows likewise near the Drie-fonteins in Lang Kloof." In the Tsitsikamma there were but eight farms. "Among other rare and cu-

rious vegetables, it is said there is a kind of fig tree [*Ficus sur*] in the woods here, which is of a lofty gigantic growth, with undivided leaves; and the fruit of it is as good, if not better, than that produced from those which are cultivated in our gardens." [1: 346]

3 December — Galgenbosch [Thornhill]:

"On the 3rd we halted at noon near Galge-bosch, a little wood which was much frequented by lions and still more so by buffaloes." [2: 4]

Van Stadens River:

From Galgebosch "... we now pursued our journey taking the lower road by Van Staadesrivier which at that time was brackish and rather deep ... [2: 6]

"On several accounts we hastened our departure from hence. Our course was now to the north over plain level fields for the greater part covered with a dry arid grass to the height of about two feet." [2: 11]

Crossed Little Swartkops River [Chatty River] and arrived at Swartkops River [16 km north of Port Elizabeth] in the later afternoon.

16 December — Swartkops River:

"The *Tulbaghia*, a small hexandrous plant ... grew here in great abundance; though I had never before seen more than a single specimen of it, and that was on the road to Zwellendam. Here I likewise saw, for the first time, a small kind of onion with spiral leaves ... and drew up the description of *Cleome juncea* [*Cadaba aphylla*] which I have inserted in the *Acta Society Upsal.* Vol. 3, page 192." [2: 13]

Went north to the principal salt-pan "... about a mile and a half from the river." Describes the pan. [2: 14]

Came to the Cuga [Coega River, 22 km north northeast of Port Elizabeth] "... a little river the water of which was brackish. [2: 17]

8 December — "... came to a place on the lower part of Zondags-rivier known by the name of t'Nuka t'Kamma which I believe signifies grassy water." Saw an elephant in the thickets. "These animals are said to assemble in great numbers in the thorny thickets made by the *Gauijacum afrum* [*Schotia afra*, *boerboon*] and the *Mimosa nilotica* [*Acacia karroo*]." [2: 18]

The banks of the Sundays River were "... extremely high and steep, indeed quite perpendicular." [2: 19]

Up river to Sundays River Drift [? Addo, 43 km north northeast of Port Elizabeth].

10 December — Left and went to Coerney [11 km north northeast of Addo]. [2: 20]

1776 Sparrman, A. (1786)

20 February — Kraggakamma:

"On plains of the seaside enclosed by thick wood." [2: 317]

9 March — Eastern part of Tsitsikamma [on the plains]:

"On the 9th we again visited Sitsicamma where we now found a number of snakes which, on account of the farmers having set fire to the grass for the purpose of manuring their lands, had fled to the sands and there, at this time, lay dead ..." [2: 321]

11 March — Wageboom's River, 2 km west of Joubertina:

"On the 11th, having taken up our quarters at Wagenboomsrivier, the most easterly part of the Lange-kloof, we discovered at night on a sudden, that a tract nearly 3 miles in length, consisting of fields of dry grass, was in flames. This conflagration which a neighbouring farmer had occasioned for the purposes of destroying the arid plants, grass, and bushes that grew on his lands (though it must be owned that he had set about it very mal-a-propos, both as to time and weather), spread with the wind that blew very hard, with incredible rapidity, proceeding in a direct line to the farm where we were." [2: 322]

1776 Raper, P.E. (1972)

Galgenbos(ch): "*Swellengrebel, wat die Galgenbos in 1776 besoek het, deel mee '... 't Galge Bosch leggende langs gen. rivier (die van Stadensrivier) 't is niet breed en bestaat meest uit doornestruiken en boomen, en uit een enkelde Geelhouten boom.'* " [p. 43]

1797 **Barrow, J. (1801)**

August

West of Port Elizabeth, Algoa Bay [perhaps near Seaview, e.g. Island Forest Reserve]:

"At a distance of 15 miles to the westward of the bay, and close to the seashore, many thousands of acres are completely covered with forest-trees of various kinds and dimensions.

"The most common was the *geel hout* or yellow wood (*Taxus elongatus*) erroneously called by Thunberg the *Ilex crocea* [actually *Podocarpus latifolius*; *P. elongatus* does not occur east of Swellendam]. These trees grow to the amazing size of 10 feet in diameter and to a height of 30 to 40 feet of trunk clear of the branches. The wood is very serviceable for many purposes but will not bear exposure to the weather.

"Next to the yellowwood is the *yzer hout* (iron wood, a *Sideroxylon*) [*Olea capensis*] growing to a size of 3 feet in diameter and very high. The wood of this tree is close-grained, ponderous, and very hard.

"The *hassagai hout* (the *Curtisia faginea* of the Hortus Kewensis) [*Curtisia dentata*] is a beautiful tree growing to the size of the iron-wood, and is used for naves, fellies, and spokes of waggon wheels, and most implements of husbandry. The grain of this wood is somewhat closer and the colour darker than those of plain mahogany."

Barrow then comments on the stinkwood tree [*Ocotea bullata*] but does not say that he saw it west of Port Elizabeth. [p. 133]

"In addition to the forest trees, we met with a great variety of small woods for poles; and the whole coast for more than a day's journey to the westward of Zwartkop's Bay [Algoa Bay] was covered with a thick brushwood almost down to the water's edge.

"The greatest part of the forests of Africa is encumbered with a species of lichen that covers nearly the whole foliage, and hangs from the branches in tufts of a foot to three feet in length. This lichen was observed particularly to be growing upon the *geel hout*, and evidently impeded the growth of its branches." [p. 134]

Barrow notes the "… miserable hovels of the graziers living in this area and of their poor farming methods." [p. 135]

Gamtoos Bay [St Francis Bay]:

"The country that surrounds this large bay is covered with thick brushwood and, in places, with clumps of forest trees." [p. 141]

14 August

Arrival at Wolvefontein, 75 km northwest of Uitenhage:

"Having passed the kloof, or poort [through the Grootriviersberge], we crossed a plain of 6 or 7 miles in width and encamped at Wolga fontein at the feet of another range of hills parallel to the Riet berg [Klein Winterberg and Klein Winterhoek-berge] and more thickly covered with frutescent plants. Here we started a herd of 14 buffaloes that had been rolling in the spring... For three days journey from this place, the road lay over a surface of country finely marked with bold hills, plains, gradual swells, and hollows; but the whole was entirely covered with a forest of shrubbery. Sometimes for the distance of 10 or 12 miles there was not the least opening that made it possible to turn a yard out of the path either to the right or to the left, and from the heights where the bushes were less tall, the eye could discern only an uninterrupted forest.

"Nothing could be more beautiful nor more interesting than this grand and extensive shrubbery appeared to be for the greatest part of the first day's journey; but the inconvenience it occasioned towards the evening, when we wished to halt, was seriously felt. [No suitable place to camp, and no water.] The two nights they [the oxen] were unyoked it was necessary to bind them fast to the waggons that they might not stray into the thicket where they would infallibly have been lost, or devoured by lions." Lion spoor was seen and roaring heard. [p. 120]

"On the slope of a hill towards the southern verge of the forest, I distinguished among the clumps of frutescent plants, several flowers of a *Strelitzia* which I took for granted to be the *reginae*, but on nearer approach it turned out to be a new species [*Strelitzia juncea*] differing remarkably in the foliage from the two already known. Instead of the broad plantain-like leaves of these, those of the new species were round, a little compressed, half an inch in diameter at the base, tapering to a point at the top, and from 6 to 10 feet high. The flowers appeared to be the same as those of the *reginae*, the colours perhaps a little deeper, particularly that of the nectarium which was of a beautiful violet blue. I procured half a dozen roots which are now growing, and likely to do well, in the botanic garden at the Cape [see Barrow on *Strelitzia* in Bathurst District, Albany].

"A beautiful plant of the palm tribe [actually the cycad *Encephalartos horridus*] was growing near the *Strelitzia*, from the pith of which the Hottentots were said to make a kind of bread. It was a species of *Zamia*, apparently a variety of the *Cycadis* described

by Mr Masson. The leaves were of a glaucous colour and lanceolate; the leaflets nearest the base pointed with one, those about the middle with two, and those at the extremities with three strong spines."

17 August — Swartkops Saltpan:

"On the evening of the 17th we encamped on the verdant bank of a beautiful lake in the midst of a wood of frutescent plants. It was of oval form, about 2 miles in circumference. On the western side was a shelving bank of green turf, and, round the other parts of the basin the ground, rising more abruptly and to a greater height, was covered thickly with the same kind of arboreous and succulent plants as had been observed to grow most commonly in the thickets of the adjoining country. The water was perfectly clear, but salt as brine... It is situated on a plain of considerable elevation above the level of the sea ... [p. 122]

"The soil too on all sides of the Zwart Kop's salt pan was deep vegetable earth, in some places red, and in others black, resting on a bed of clay, and without having the smallest vestige of salt in its composition ... [p. 125]

"... we visited the lake at a very unfavourable season [August] when it was full of water." [p. 126]

August — Swartkops River Valley:

"The valley through which the Zwart-kop's river meanders in its course to the bay, is a fertile tract of country, the greatest part of it being capable of being laid under water. It is 20 miles in length and between 2 and 3 miles wide.

"The hills that on each side rise with an easy slope, exhibit an unbroken forest of evergreen plants holding a middle rank, in point of size, between shrubs and trees. The tree *Crassula*, several species of the *Aloe*, the *Euphorbia*, and other succulent plants were also mixed with the shrubbery. The whole valley is divided between four families each having not less than 5 000 acres of land independent of the inclosing hills covered with wood. Yet, not satisfied with this enormous quantity, they have made several attempts to burn down the forest that the cattle might more conveniently come at the nests of sweet grass that abound within it. Hitherto all their endeavours have proved fruitless. The moment that the succulent plants, particularly the great aloes and euphorbias become heated, the expanded air within them bursts open the stems, and the juices, rushing out in streams, extinguishes the fire.

In one part of the valley was a morass of considerable extent that by one single drain might be converted into a very beautiful meadow." Vast quantities of waterfowl, buffaloes, *rietbok*, etc. [p. 136]

Hottentots inland from Port Elizabeth:

"The season of the year is indicated by being so many moons before or after *uyntjes tyd*, or the time that the roots of the *Iris edulis* [unidentified *Moraea* sp.; not *M. fugax* (=*Iris edulis* L.), which does not occur east of Swellendam] are in season, a time particularly noticed by him as these bulbs once constituted a considerable part of his vegetable food." [p. 159]

29 August — Sundays River near Addo, 36 km northeast of Uitenhage:

Camped on the bank of the Sundays River. "The whole channel of the river was buried in thick woods that extended forty or fifty yards from the margin of the water on each bank. The trees consisted chiefly of the karroo mimosa [*Acacia karroo*], a species of *Rhus*, and a narrow-leaved willow [*Salix mucronata*]. The water was considerably impregnated with salt ..." [p. 164]

16 December — Olifants River:

"The long drought had completely deprived the Olifant's River of its waters, and the face of the country was nearly as barren and parched as the Karroo on the opposite side of the Black Mountains [Swartberge, over which they had just passed] except indeed along each side of the bed of the river where the mimosas [*Acacia karroo*], now full of golden blossoms, still retained their verdure, and where the canna plant, or *Salsola* [*Salsola aphylla*], was growing to the height of 8 or 10 feet. Should these two articles, at any future period, be considered as worthy attention in a commercial point of view, the division of Olifant's River is the most favourable situation." [p. 334]

Left the Olifants River, passed the Kamnassie Mountains [55 km east of Oudtshoorn], and went into the upper Langkloof: [p. 335]

"Lange Kloof abounds with streams of water and good pasturage. The ground consists throughout of a fine rich soil." Notes the gardens and orchards there, and that snow falls on the mountains. [p. 336]

Over the mountains *via* Duiwelskop [8 km northeast of George] into the George District:

"... the smooth grassy surface of the northern side now changed into an extensive shrubbery ... heaths and proteas [southern slopes]." [p. 337]

1803 Van Reenen, D.G. in Blommaert & Wiid (1937)

5 May

Gamtoos River:

"That night we detected the presence of a hippopotamus revealed by the noise it made when blowing through its nostrils. We could not, however, catch sight of it. The farm Gamtoos River, together with several others in the neighbourhood, are amongst the best for cattle known in the Colony. The country is rich in grass and the veld is sweet." [p. 77]

May or June

Sundays River [? Addo]:

"The veld thereabouts is good for cattle and sheep, is rich in grass and is interspersed with '*bossies*' which are relished by the sheep. Horse-sickness is not less frequent than in other parts. This region is uninterruptedly hilly. Fountains or other sources of water are not to be found there, apart from a possible isolated one, but then certainly not of any importance." [p. 121]

June

Near Swartkops River Mouth, 14 km north of Port Elizabeth:

"On either side there are hills and bushes. Grass is plentiful and the bushes consist mostly of thorny growths not growing very high, such as *katdoorn* (wild asparagus), etc. Timber for building purposes is very scarce and must be fetched from high up in the mountains and kloofs." [p. 135]

1804 Lichtenstein (1815)

January

Western end of the Langkloof:

"... in a romantic wooded valley" at Cloete's kraal [farm] where there was "... excellent grass." [p. 245]

Near Kromme River, eastern Langkloof:

"We rested near the river under the shade of some small trees of *kruppelholz*, *Protea conocarpa* [*kreupelhout*, *Leucospermum conocarpodendron*] ..." [p. 268]

Just west of Gamtoos River:

"Large tracts are here covered with the most wholesome nourishing grass; the hills are surrounded with woods and, in the valleys are large lakes; the water in them is, however, not wholly free from saline particles. We continued our course for some time through woods and level green valleys with ponds in them in which were large flocks of moor birds, in short, among such beautiful changes and varieties that we could almost have conceived ourselves in a lovely country garden. At the feet of the large high trees grew a number of succulent plants, in particular of aloes which were still in high bloom, many of them with high branches which seemed scarcely to sustain the weight of the heavy fleshy leaves. On the ground crept a number of small plants among which the *Schotia speciosa* [*Schotia afra*] was particularly distinguished by its cluster of reddish-purple flowers." [p. 277]

Galgenbosch [Thornhill]:

"... a very pretty spot in the midst of the forest called Galgenbosch ..." This was west of "... Van Stade's River" where Lichtenstein had just been hunting elephant. [p. 278]

Just east of Van Staden's River, Field Cornet Muller's farm 'Rietfontein', 5.5 km from the coast [Betshanger]:

The farm "... is situated in a pleasant valley bounded on the south by naked rocks, but every way else by finely-wooded heights which form a sort of amphitheatral semicircle round the fine meadow land of which the valley is composed." Mentions the Riet River there. "Among the trees which contribute so much to the beauty of the spot, the *Euphorbia officinarum* [identity uncertain] is particularly to be distinguished. The angular boughs, which issue from the stem with a striking regularity and symmetry of form while the smaller branches, and even the twigs, follow the same measure equally of distance, give the whole tree, with each particular member, the appearance of regular chandeliers. This wonderfully beautiful tree, some of which were as much as 30 feet high has a sharp thorn at the extremities of the twigs, from which it is called by the colonials the *noortsche doornboom*." [*noorsdoringboom*. Smith (1966: 352) gives this name as ap-

plicable to 'several tall-growing arborescent species of *Euphorbia*'. Under *noorsdoring*, Smith indicates that the Afrikaans word *noors* denotes 'the morose appearance of the plants due to the close spiny nature of the stems ...' *Nors* or *noors* = morose, gruff in Afrikaans.] [p. 280]

En route to Port Elizabeth from the west:

"The nearer we got to the coast the more the country resumed its former waste and dreary appearance: the road lay over a flat plain as destitute of woods as it was of hills. In the latter part of the way are some sandhills... On the last hill which goes down to the shore is Fort Frederic built by the English in 1799 ..." Mentions the Baakens River in the valley below. [p. 286]

"The country about Algoa Bay is by nature so fertile that, even if uninhabited, it would produce wood, game, salt and grass for feeding cattle in abundance ..." [p. 288]

Bethelsdorp, 13 km northwest of Port Elizabeth:

"It is scarcely possible to describe the wretched situation in which this establishment appeared to us... On a wide plain without a tree, almost without water fit to drink... For a great way round not a bush is to be seen, for what there might have been originally, have long ago been used for firewood: the ground all about is perfectly naked and hard trodden down ..." [p. 294]

Coega River, 20 km north of Port Elizabeth:

"The Koega ... is a very insignificant little river in which there was scarcely sufficient water for our cattle to drink. To procure water for ourselves we were obliged to dig, and did not obtain very good water... From the Koega we travelled eastwards over a high plain [probably Grassridge, 18 km northeast of Uitenhage] here and there overgrown with bushes and which produced grass and hedge plants in abundance. Owing to the rains which had lately fallen, it looked now extremely pleasant. About noon we arrived at the Zondags River." [p. 415]

1815 Redgrave, J.J. (1947)

Farm Strandfontein, granted to Pieter Retief:

Extended along the coast from Shark's River [Happy Valley] to about present Humewood Golf Links and inland for two miles "... nothing more than a collection of arid sandhills interspersed with dense scrub and boulders ..." He erected a house near present Beach Hotel. [p. 54]

1816 La Trobe, C.I. (1969, reprint)

25 March

Upper Langkloof, after passing over the mountains at Perdekop; somewhere near Klip River on the upper Keurbooms River:

"Barren as these mountains in general appear, they yet afford a rich harvest for the botanist, and we found several curious plants unknown to our best botanist, Mr Melville. In some places the rugged sides of the hills are clothed with aloes and other larger plants, and as we proceeded we saw on many hills the so-called *wageboom* growing dispersed [*Protea nitida*] resembling a planted orchard, the trees standing fifteen or twenty paces asunder." [pp. 174, 175]

First impression of the Langkloof: "... a vale of perhaps 100 miles enclosed by mountains of different heights. On entering it we felt not a little disappointed ... we saw a long ridge of comparatively low hills, divided by narrow parallel kloofs, without wood or water, skirting a dull uncultivated vale ..."

Arrived at a farm called Welgelegen. Went on to Klipheuvel, along the Wagebooms River "... which takes its name from the quantity of *wageboom* loosely covering the hills on each side." [p. 178]

Went on towards Krom River and Jagersbosch. [p. 186]

Reached Essenbosch:

Pitched tent "... on a grassy spot surrounded with bushes and defended by high trees against wind ..." [p. 188]

2 April

East of Jagersbosch *en route* to Soete Kloof, or Soute Kloof:

"... we saw a country before us apparently level but full of dells and gullies. The great variety of bushes and flowering shrubs on all sides attracted our attention. Large aloes [*Aloe ferox*] are interspersed among the bushes and, with their broad leaves, form a

striking contrast to the many small-leaved evergreens which surround them. Some of them were in full bloom, towering above the thicket, and one, more perfect than the rest, was brought into the waggons.

"The centre was a foot and a half long, the rest about 13 inches, all thickly covered with a succession of long bell-shaped flowers, each orange-coloured at the stem and passing into bright vermilion at the top. The brilliant appearance of this huge flower, or mass of flowers, disposed like a chandelier and mounted on a stem 6 feet in height with a capital of massive leaves spreading above 3 feet in diameter, is beyond conception grand ...

"... this country, unproductive as it generally is in means of subsistence for man and beast [is clothed] with an astonishing profusion of vegetable beauty. Hardly a spot exists upon which some curious and beautiful plant does not rear its head in its proper season; and in the midst of this brown desert we see the magnificent chandelier or red-star flower, measuring from four to five inches, to a foot and a half in the spread of its rays growing luxuriantly among the stones [*Brunsvigia littoralis*]." [p. 194]

2 April — After travelling down the lower Langkloof, over open ground, *en route* to the Gamtoos River:

"The whole country assumed a different character as we approached the Chamtoos Revier ... the ever changing scenery of this lovely spot. The elegant but troublesome mimosa [*Acacia karroo*] occupies the greater part of the wood, so as to render it in some parts impervious. [p. 195]

"Leaving the narrow glens of the Soete-kloof we crossed a level piece of ground loosely covered with thorn bushes and arrived at a farm near Wagedrift on the Chamtoos Revier." [p. 196]

An hour later came to the Louri River. [p. 197]

3 April — Galgenbosch [Thornhill]:

The country "... looked like England... The so-called Galgenbosch has very much the appearance of an extensive range of parks. We seemed to be passing from one park to another. The elegant mimosa [*Acacia karroo*] is distributed on the hills in copses, or stands singly. Here and there a thicket fills a dell, or a wood of larger trees in a wider glen. Clumps of high trees ornament the sides of the hills." Went to Klaarefonteyn or Clarafontein Farm at Thornhill.

Thence towards Van Stadens valley, just east of Thornhill and "... proceeded through thick woods which opened here and there, affording a peep towards the mountains on the left or the coasts of the Indian Ocean to the right of the road." Then descended into the valley. [p. 200]

"The descent towards the river is steep and rocky... For about a mile it leads through a wood of lofty trees, some falling through age, others pressed down by an immense quantity of bush-rope, or *baviaanstau* [*Secamone alpini*], other plants are ... disfigured by mosses or covered with wild vines and a variety of creepers, while others tower aloft unentangled in perfect health and beauty. An almost impenetrable thicket forms the underwood ..." [p. 201]

A farmhouse called Kaffre Kraal, built of red brick, on the opposite eminence "... overlooking a deep glen enclosed by steep woody hills ..." must have been on the east bank of the Van Stadens River, because La Trobe then crossed it. He must have crossed fairly near the mountains and not gone down to the mouth.

Then seems to have skirted the mountain, passing under Witteklip. "As we doubled the conical hill to the left, being the last of the ridge of hill above described, we noticed on its declivity some huge fragments of rock, and many of smaller dimensions lower down, apparently thrown from the upper region by a conclusion of nature or by some milder process [this describes well the place below Lady's Slipper]. For several miles the road passes over a dreary waste after which we entered a dense thicket consisting of a vast variety of bushes intermixed with aloes, Indian figs (p. 397: *Cactus opuntiae*, used for fences [*Opuntia* spp.]) of different species and many shrubs and flowers unknown to us. This thicket covers a great extent of country and the whole of the hills descending into the vale of the Zwartkops Revier." Arrived at Uitenhage. [p. 202]

6 April — Bethelsdorp:

"Not a tree is to be seen excepting two or three ragged *speckbooms* [*spekboom*, *Portulacaria afra*] standing before Mr Read's house [in charge of the mission], and scarcely a blade of grass. The hills enclosing the small kloof near the village are completely barren and their outlines tame and uninteresting. The small brook, if it deserves that name, coming out of the kloof, is quite insufficient for the purposes of irrigation and to supply water for a mill, nor could we comprehend how so large a fraternity as are said to dwell here obtain water enough for common use ..." [p. 207]

9 April — Just east of Uitenhage:

"On quitting Uitenhage we soon entered the same kind of thicket of brushwood and bushes which surround the village on all sides and cover every eminence. Our attention was again much engaged with the curious plants and flowers growing luxuriantly amongst the bushes ... [p. 213]

"The road continued to lead through bushes during the whole of the day excepting where an opening occurred with a few scattered copses of trees." *Via* Coega, heading for Geelhoutboom.

10 April — Geelhoutboom [Dunbrody]:

"It was an opening in a wild wood with tall trees and much underwood, not five minutes walk from the banks of the Sundays River." Signs of elephant (dung) were seen. [p. 214]

"The Sundays River flows here between high banks, covered with a forest of great extent on each side... The water is about three feet deep but in the rainy season the stream is very deep and rapid."

Geelhoutboom to Witte River:

"After we left the wood [Geelhoutboom] the country appeared pleasant with good grass and many bushes, either standing singly or in clumps. We directed our course towards a range of woody hills and into a valley through which the Witte River runs into the Sundays River. At the farm of Jacobus Scheper [Scheepers] Senr. [Enon Mission], the valley contracts so as to form a glen, its entrance shaded by trees [military post]..." [p. 215]

Valleys of the Witte River: "To the left [the hills] are high and full of kloofs containing large timber. A range of lower eminence lies at their foot having, as we were informed, plenty of good pasturage upon them. To the right, the hills are lower but more interesting in their appearance. Their tops are covered with bushes ..." [p. 216]

Slagboom, Uitenhage:

En route from Geelhoutboom via Slagboom to Coerney. "Our road to Kourney lay over a steep, stony hill thickly covered with almost impenetrable bushes at the top of which, during the war, the Caffres placed a huge beam at each end fastened with thongs to the trees hoping thus to prevent the Boors and soldiers in the valley from following them to recover cattle or to attack them. From this circumstance, the place has acquired the name of Slagboom, or turnpike-bar. In riding up the hill, Mr Scheper pointed out the plant from which the Bosjesmans extract poison for their darts." [p. 220]

24 April — Klein Rivier Farm "... lies about two or three English miles from the Chamtoos Wagendrift, in the hills higher up the river," near Hankey, 17 km north of Humansdorp:

"We crossed the valley at two fords. The vale is full of bushes and large timber... The hills on each side are not high, and covered with wood to their summits. Large thornbushes occupy the greatest part of the banks of the river. Tall *geelhoutboom* trees [yellowwood, *Podocarpus*] and other evergreens exhibit some fine forest scenery. As we approached the place we met the farmer going with some Hottentots to cut down bushes and open a better way from the drift... The vale is not to be compared with that on the Witte River either for extent, fertility, or beauty but the Klein Revier is a clear everflowing rapid stream [? the Kleinrivier passing Hankey]." [p. 245]

30 April — Eseljagd River, upper Langkloof:

"... on the banks of the Eseljagd River (or Zebra-hunting River), which at present consisted only of a few stagnant pools. After quitting this place we entered a narrow glen bordered by a ledge of rocks, bushes of various kinds, and *wageboom* trees [*Protea nitida*] growing luxuriantly wherever any soil was left to support them." [p. 255]

Redgrave, J.J. (1947)

c. 1817 — Port Elizabeth sea front:

"A line of sand-dunes stretching from the mouth of the Swartkops River to the fishery at the point of Cape Recife rendered the sea invisible from what is now Main Street. The white population was estimated at about 35 souls ..." [p. 14]

1820 — Port Elizabeth and the arrival of the 1820 Settlers:

"But the hearts of the settlers sank when they gazed on the distant sandhills... One member wrote: 'Our first impressions of the country at which we at length arrived were anything but cheery ... we descried a coast lashed by a broad belt of angry breakers... The shore was girt with an array of barren sandhills, behind and close to which appeared a series of rugged and stony acclivities ...' " [p. 17]

1820 **Moodie, J.W.D. (1835)**

Langkloof:

"I had now entered the Langkloof ... which extends for more than 100 miles between two parallel ranges of mountains, or rather mountains on one side and high grassy hills on the other." [2: 35]

Of the mountains along the southern flank behind George: they are "... nearly destitute of wood on the northern side... I was much disappointed in the appearance of this tract of country which ... was rather bleak and forbidding from the total absence of wood... Throughout its whole extent the valley is so similar in its general character that it hardly merits a particular description ..." [2: 36]

West of Gamtoos River:

"The eastern extremity of the Lange Kloof opens into the valley of the Kromme River [18 km west of Humansdorp], and here the scenery again becomes interesting and romantic... The pasturage along the banks of the Kromme River is everywhere of that coarse description which is distinguished by the term 'sour' by the colonists.

"As we approached the Chamtoos River the country became more level, and was everywhere thickly clothed with low trees or bushes 10 or 12 feet high of a sombre green colour, but the pasturage, whenever an opening occurred, was tender and sweet which showed that the soil was naturally fruitful. This description of country, which was new to me, had an unpleasing and gloomy aspect from the unbroken uniformity in height and hue of the trees, so that at a distance it seemed to be covered with heath or young fir plantations." [His first sight of *wageboom* trees [*Protea nitida*] [2: 37]

Van Stadens River eastwards:

"We travelled several hours through this inhospitable tract without seeing a house or any opening to relieve the wearied eye, excepting where the bush had been cleared away in making the road. [They had come through the Valley Bush from the Gamtoos River.] At length when we came within a few miles of Van Stadens River we emerged from the savage waste. The country suddenly assumed a more smiling appearance and the hills and valleys were covered with rich pasturage of a more verdant green than any I had yet met with in the Colony.

"This was the season for burning the grass which becomes too rank and coarse for the cattle when allowed to grow too long ..." Spoke to a farmer there: "Shrugging his shoulders and with tears in his eyes, the farmer told me that in burning the grass some time ago, supposing that his sheep were elsewhere, they had all been scorched to death in the deep ravine from which they could not make their escape.

"After crossing the river we ascended the hills on the opposite side and passed through a beautiful little forest of fine timber-trees, the branches of which were richly festooned with the bearded lichen which gave them a hoary and venerable appearance. The high grounds above the river were covered with verdant pasturage and this beautiful description of country, interspersed with wood and bush, extended as far as the eye could reach towards the sea coast which we could perceive in the distance. My Hottentots told me that the woods swarmed with elephants and buffaloes. We soon, however, re-entered a tract of country similar to that which I have already described on the banks of the Chamtoos River, covered with the same kind of dwarf-trees and brushwood. This is an invariable characteristic of the rivers in this part of the Colony.

"It is a curious circumstance that the most arid land is generally found in the extensive plains on either side of the larger rivers. Small as the rivers (as they are called) generally are, the deep and wide valleys, through which they run, constitute the most striking features of the landscape."

Mentions how they so often found only a trickle in the rivers when they reached them. "The excessive heat of the sun in such situations burns up the grass, and leaves only sufficient moisture to nourish the hardy stunted brushwood whose roots can penetrate the indurate clay where more delicate plants would soon perish if not constantly supplied with rain.

"In these situations, after plentiful showers, the ground, wherever an open space occurs between the bushes, is covered over with sweet and tender grass of the softest green, but the succeeding droughts, aided by the intense heat of the sun, leave all bare again when the cattle and sheep are forced to seek subsistence by browsing on the leaves of the shrubs." [2: 38]

Uitenhage:

"To supply this village with water, a strong spring taking its rise in the high mountains behind it has been conducted along the main street from a distance of 9 miles in a deep ditch ...

"The ground on which Uitenhage stands has almost entirely been cleared from the low bushes and brushwood... The soil there is very rich. [1: 40, 41]

"After quitting ... this village, we travelled for many miles over gentle undulations of ground, everywhere thickly covered with bushes among which great numbers of buffaloes are shot by the Dutch and Hottentots ...

"... We passed the 'Kuga River' [13 km east of Uitenhage] still buried in this almost interminable forest, ascended a steep ridge on the opposite side and crossed an extensive plain clear of bushes and covered with coarse long grass. [1: 42]

"The elevated plain [Grassridge], or rather flat-topped hill, over which we were now travelling, like most of the high grounds in this part of the Colony, was covered with coarse soft limestone which rested on a deep stratum of sandstone, and the soil was a sandy clay and generally very shallow so that here and there the rocks appeared on the surface. Wherever limestone abounds near the surface of the ground we always found that the grass grew more luxuriantly and that it preserved its verdure longer than in other situations during the droughts to which the whole Colony is subject. In the middle of this ridge, which cannot be less than 300 feet above the sea, great quantities of oyster-shells are dug out to burn into lime." [1: 43]

1820 Philipps, T. in Keppel-Jones (1960)

30 April — Algoa Bay, on his arrival with the 1820 Settlers:

"Having gathered a bunch of sweetest heaths, the jessamine [*Jasminum* sp.], Palma Christi [*Ricinus communis*], etc., which grew close to the beach ..." is all Philipps had to say of the vegetation at the landing place. Despite having brought a few sheep with him on the ship from England he lost sight of his ram until he "... espied him in some heath, but as wild as he was before tame." [This gives some idea of the nature of the veld.] [p. 46]

4 May — South side of Swartkops River:

"We encamped by some pools of water, white as milk, it was very palatable but in making tea we found it turned quick black."

5 May — Crossed the Swartkops River to "... a farm house with a fine garden with running stream which waters it all over ... encamped on the Cougha [Coega]. A rivulet, almost dry ... passed through millions of aloes [*Aloe africana*] called likewise the chandelier plant, they covered hundred of acres." [p. 49]

16 June — From the landing site at Algoa Bay to Chelsea farm, 16 km west:

"Chelsea is a government farm about 10 miles from Port Elizabeth... The ride is most interesting, for the first seven miles through heath, but when the road passes between the hills it is very beautiful. The cottage ... is close to the sea to which there is a pretty ride ..." [p. 61]

21 June — Uitenhage:

"Uitenhage ... is situated on a large plain, plentifully watered and surrounded by high naked hills on nearly all sides ..." [p. 63]

1825 Philipps, T. in Keppel-Jones (1960)

Early summer Port Elizabeth to Swartkops River:

After leaving Port Elizabeth "Some Hottentots passed us riding on oxen which they manage by running the bridle through the cartilage of the nose and thus render these animals perfectly tractable. We saw several pools of water perfectly white, and crossed a tract of land covered with aloes [*Aloe africana*], called likewise the chandelier plant ... after crossing the Zwartkops (Blackhead) River we arrived at Uitenhage ... [p. 4]

"Colonel Cuyler, the landdrost, has a large mansion built in the Dutch fashion with a valuable farm a few miles distant." [Doorn Kraal, later Cuyler Manor, 4 km down the valley] [p. 5]

En route towards the Sunday's River: "Our road lay principally through thick bush which grows very thick near the post [Sunday's River Post, probably near the present Addo]." [p. 8]

c. 1826 **Moodie, J.W.D. (1835)**

Port Elizabeth:

The town is increasing in size and importance. "The country in its immediate vicinity, though by no means deficient in natural fertility of soil, is exceedingly arid from want of rain and the scarcity of springs, and is, in consequence, very thinly inhabited." [2: 310]

1835 **Alexander, J.E. (1838)**

Port Elizabeth area:

"... I rode out ... on the open plain towards the Zwartkop's River. It was not exactly the season to see the splendid Cape bulbs, geraniums [*Pelargonium* spp.], and heaths which, in October and November especially, carpet the ground most brilliantly. But at all seasons there are flowers of rare beauty and plants of strange form to be found in the Cape Colony.

"Some curious bulbs I saw whose leaves were spirally twisting themselves out of the ground; half of the leaves of others were cut off as if by a sharp instrument, and over the green mass rose pink umbels [probably *Boophone disticha*]. Locusts flew up in clouds wherever we went ..." [1: 338]

Buffelsfontein Farm, west of Port Elizabeth [probably present site of Lovemore Heights, 9 km west Port Elizabeth; part is still called Buffelsfontein, with Botha's, or Buffelsfontein, Kop on high ground]:

"... I rode out ... to visit a respectable Dutch boer, Mynheer Botha, of Buffels' fontein. We found the neat whitewashed house in a valley; a flower and vegetable garden enclosed with rails was on the slope before the door. A waggon stood by; outhouses occupied one side, and beyond them were kraals of thorn bushes for the cattle ... [1: 340]

"We rode out before dinner to inspect the farm, and, ascending some heights, saw a noble and extensive South African landscape. Grassy plains stretched far before us undiversified by a single tree though wood was seen occupying hollows in various directions while towards the north and west arose the grand features of the Elands and Winter Hoek Mountains and the beautiful ranges of the Zitzikamma ... Buffelsfontein was 2 000 morgen ..." [1: 341]

1836 **Harris, W.C. (1839; reprint 1963)**

July — Swartkops Hill, ? c. 10 km east of Uitenhage to 'Quaggasvlakte', Alexandria:

"... we ascended the Zwartkop Mountain [escarpment] by a steep and difficult acclivity ... and encamped near an extensive grove of aloe-trees in full bloom. Thence, a rugged and circuitous track of about 100 miles constituted the road, the scenery comprising a mixture of barren unprofitable valleys, and stony uninteresting hills varied occasionally by deserted farms where depopulation had stayed the hand of the husbandman, and the blackened walls of roofless cottages which had been sacked by the Kaffirs during their late irruption ..." [p. 7]

1838 **Backhouse, J. (1844)**

21 November — Upper Langkloof over the mountains behind George:

"In the evening we pursued our journey in the Lange Kloof which is an extensive valley between ranges of lofty hills with farms at distant intervals wherever there are little streams to fertilize the ground which is generally dry pasture composed more of bushes than of grass." [pp. 138, 139]

27 November — Lower Langkloof, near Krom River:

"We emerged from the Lange Kloof by a steep descent to the upper part of the Krom Rivier... The vale of the Krom Rivier is narrow. In some places the head of the river extends from the hills on one side to those of the other side and is choked with *palmit* [*Prionium serratum*]. The quantity of water was so small as only just to be traced in a flowing state in a few places.

"The hills, both here and in the adjacent parts of the Lange Kloof were besprinkled with a glaucous-leaved protea forming a small tree [probably *Protea nitida*].

"In a stony place on one of the hills the noble *Cyrtanthus obliquus* was in flower. The stem is as thick as a man's thumb, a foot high and crested with pendulous, glossy red tubular blossoms tipped with yellow." [pp. 142, 143]

28 November — Krom Rivier:

"Three Fingo women stopped where we outspanned... They were eating the root of *Cussonia*, an arborescent shrub belonging to the same natural order as the ivy; the leaves were palmate and the root is about as thick as a man's arm, tender and white.

"The Coloured people eat likewise the roots of the blue waterlily, *Nymphaea capensis* [*Nymphaea nouchali* (= *N. caerulea*)] which abounds in some of the pools of the Krom Rivier, along with *Villarsia indica* [*Nymphoides indica*] a smaller plant with yellow-fringed blossoms. The magnificent flowers of the blue waterlily exhale an odour resembling that of the violet.

"Fine specimens of *Virgilia capensis* [*Virgilia oroboides*], a small tree with fragrant, pink, pea-like flowers were growing near some streamlets.

"The blue African lily, *Agapanthus umbellatus* [*Agapanthus praecox*] was in flower in moist places.

"An aloe with a trunk rising to 8 feet high, though not in flower, formed a striking feature among the bushes on the adjoining hills (illustrated on p. 88).

"We left the Krom Rivier and stopped at a place called Esschenbosch (Ash Wood) ..." [p. 143]

30 November — From Diep River eastwards to the Gamtoos River at Hankey [24 km north northeast of Humansdorp]:

"... we outspanned near a streamlet on the banks of which *Cyrtanthus angustifolius*, a plant with two or three slender scarlet nodding blossoms on the top of a stem, was in flower.

"In this neighbourhood were large patches of shrubs of the genus *Brunia*; these are about 4 feet high. In wet places in the Cape Colony they are common. The foliage is thick and slender, and the blossoms, which form clusters of little balls of a dingy white, are fragrant.

"In the evening we reached Honey Vale [Honeyville, 10 km north of Humansdorp] where the common watercress, *Nasturtium officinale*, was plentiful in a streamlet, probably having been introduced."

1 December — Leaving Honey Vale "...our way now lay over some high moory land and through a long stony kloof with bushy sides producing a white jasmin, *Jasminium flexuosum* [probably *Jasminum angulare*]; scarlet and ivy-leaved geranium, *Pelargonium inquinans* and *peltatum*; blue plumbago, *Plumbago capensis* [*Plumbago auriculata*]; large-flowered stapelia, *Stapelia grandiflora*; a fragrant acacia [*Acacia karroo*], etc."

Arrived at Hankey "... after crossing the Camtoos River and some low pasture-ground besprinkled with *doornboom* [*Acacia karroo*]." [p. 144]

5 December — From Hankey towards Van Stadens River:

"The punt at the ferry over the Camtoos River being out of repair we were obliged to take a bad mountain road that in six hours brought us to a considerable stream... The blue waterlily [*Nymphaea nouchali* (= *N. caerulea*)] and the *Villarsia indica* [*Nymphoides indica*] abounded in the pools of this river which was probably the 'Loxie' [probably Loerie River, which enters Gamtoos River 4 km south of Loerie village].

"A large white-flowered sansiviera [*Sansevieria hyacinthoides*] and a gethylis [*Apodolirion macowanii*], a fragrant white flower like a colchicum, were plentiful in blossom among bushes by the side of the road, and a handsome pink brunsvigia [*Brunsvigia gregaria*] on the dry hills.

"There were some epiphytes of the Orchis tribe on the trees of a wood we passed through in which a vine was climbing among the trees. It had heart-shaped leaves and slender branches which are used for cordage. It is called *baviaan'touw*, baboon rope [probably *Secamone alpini*].

"Here we first saw the chandelier euphorbia, *Euphorbia grandidens*, a singular tree with erect angular leafless branches which form a remarkable feature in the woods of the eastern part of the Cape Colony and adjacent parts of Caffraria. [p. 151]

7 December — "I came upon a troop of baboons that had been feeding upon the fruit of one of the larger species of *Mesembryanthemum* [*Carpobrotus edulis*] which is among their favourite food and is not unpalatable to man... Attached to some rotten wood upon the ground in the neighbour-hood I met with a fragrant fungus of an undescribed genus. It has since been described under the name of *Broomiea congregata*, or compound geaster. It consists of a convex mass of numerous cells resembling those of a bumble bee's nest, each cell opening by a fringed pore at the apex." [p. 152]

Descended to the Van Stadens River.

10 December Bethelsdorp:

"The country between Port Elizabeth and Bethelsdorp is poor, stony, and bushy but abounding with *Aloe ferox*, the species of *Aloe* from which the drug called Aloes is obtained... A many-flowered scarlet cyrtanthus [probably *Cyrtanthus spiralis*] and the white *Gastronema clavatum* [*Cyrtanthus clavatus*] were now in blossom near Bethelsdorp. They belong to the same order of plants as the *Narcissus* but are dissimilar in the form of the flower, the *Cyrtanthus* being tubular and the *Gastronema* bell-shaped. [p. 157]

19 December "We left Bethelsdorp and travelled to the Zwartkops Rivier about 12 miles distant [actually 8 km]. The intervening country was poor and bushy, interspersed with little saltflays [? vleis] or dried-up pools, bordered with maritime plants.

"In one place I noticed the *Euphorbia meloformis*, a plant in form resembling the fruit of a melon, half buried in the earth.

"There are also some other remarkable species of *Euphorbia* in this part of the country. One of them has scorpion-like prostrate stems [probably *Euphorbia stellata*]; another has thick angular spinous upright stems about 3 feet high [*Euphorbia ledienii*].

"The last is called *norse doorn*, nasty thorn [*noorsdoring*].

"The Zwartkops Rivier is a clear stream with deep pools and a gravelly bed. Its banks are margined with willow [*Salix mucronata*] and *Acacia caffra* [*Acacia karroo*]. Our waggon was outspanned on the edge of a little grassy flat surrounded by bushes, this place being better adapted for the grazing of our cattle than nearer to the town of Uitenhage ..." [p. 161]

20 December From near Uitenhage, towards Enon Mission on the Witte River:

"Our route lay over a country thickly covered with bushes of various species of *Rhus*, *Lycium, Acacia, Euphorbia, Aloe*, etc. and past ... Zand Fontein, 6 miles [actually 8 km] from Uitenhage... Near this place the Kouga River was quite dry and about 20 miles further the Zondag or Sunday's River was reduced by drought to a few pools.

"A portion of this country between these rivers is called the Gras Rug [Grass Ridge, 22 km east northeast of Uitenhage]: it consists of dry calcareous hills with thin grassy herbage interspersed with suffruticose plants among which some of the species of *Mesembryanthemum* hold a large place ...

"In this district we noticed many caulescent aloes which had been deprived of the centre of their heads and we learned that the solid mass of the blanched base of the expanded leaves had been removed by the Hottentots as an article of food. Between the Kouga and Zondag Rivers small tortoises were numerous; they are not uncommon in the poorest parts of southern Africa." [p. 163]

21 December Enon Mission:

"The long drought had reduced the Witte Rivier, on which Enon is situated, to a single pool. A few wells had been sunk in the bed of the river to obtain drinking water. Large yellowwood trees, *Podocarpus elongata* [actually *Podocarpus latifolius*], nearly allied to the yew, and probably a hundred years old, were dead from the drought on the margin of the water-course. [p. 165]

"Among the variety of plants growing in the head of the Witte Rivier was a small prickly cucumber, *Cucumis muricatus* ? [*Cucumis africanus*].

"The tall chandelier *Euphorbia* and the yellowwood were the most striking trees in this vicinity." [p. 167]

25 December Between Zandfontein, 9 km north northeast of Uitenhage and Addo Drift:

"... over an uninteresting country, without fresh water, to the Zondag or Sunday River which we crossed at Addo Drift... We noticed the bones of an elephant on the calcareous hills of the Gras Rug [Grassridge] and saw some tortoises in bushy places... A caulescent aloe with large glaucous red-margined leaves, and another with spotted leaves were growing on the declivities of a saline valley leading to the river which we crossed near two public houses; beyond this we outspanned in the bush which consisted of large shrubs and low trees." [p. 171]

1838 Bunbury, C.J.F. (1848)

30 March Langkloof, three miles north of Cradock's Pass [Montagu Pass], at Roelof Kamper's [? Kamfers] farm:

"The country was extremely arid except along the course of the little streams, and on the hills near the younger Kamper's residence the bushes had been burnt to a consider-

able extent, a practice general in this country and advantageous to the cattle but very provoking to the botanist.

"Here, however, was plenty of that curious plant called by the colonists *paarde kapok*, or horse-cotton, *Lanaria plumosa* Ait. ... *Argolasia lanata* Juss. [*Lanaria lanata*] with its stem and flowers enveloped in a dense woolly coat of singular whiteness. A beautiful everlasting, the *Helichrysum foetidum* bearing a profusion of golden yellow flowers, is common along the edges of streams in the Long Kloof, together with the graceful and pretty shrub *Gnidia oppositifolia*.

"On the parched and barren hills which bound the Long Kloof, a few species of everlasting were the chief plants in flower at this season; and another of the same tribe, *Metalasia muricata* is as common along the road all through this kloof and indeed throughout the Districts of Zwellendam and George, as the ragwort is in England. [p. 105]

"Different species of *Restio* ... form the principal part of the herbage, both on the hills and along the sides of streams. In most rivers is an abundance of our common reedmace or bulrush *Typha latifolia* which appears to be as truly wild here as in Europe." [p. 106]

31 March — Central portion of the Langkloof:

"This long valley, although crossed by numerous streams, is on the whole of a remarkably arid and monotonous appearance. Indeed, short of actual desert, I can hardly imagine anything more wearisome: not a tree, not a house, or a trace of civilisation for miles together; scarcely a bush above 3 feet high; nor a tinge of green except along the margins of streams whose course is indicated by a narrow strip of reeds and rushes. A great part of the ground is covered exclusively with the melancholy grey rhinoceros bush [*Elytropappus rhinocerotis*]. The mountains on the south are extremely steep and rugged ... like the cliffs of Table Mountain, without a tree or blade of grass. The streams ... are numerous, and, though small, are never entirely dried up. An industrious and enterprising people would have turned them to good account in irrigating land. As it is, I travelled through the Long Kloof at two different seasons, and both times it appeared equally barren." [p. 107]

Diep River:

"The Diep River is one of the deepest rivers we have met with yet, and very clear; it runs northward.

A large part of the surface of the hills had been ravaged by fire so that nothing remained but charred, leafless sticks and, where this was not the case, there were few plants in flower. Those which I observed were principally of the fleshy or succulent tribes which delight in the most parched, barren, and rocky situations ..." [p. 110]

At the Keurbooms River in the Langkloof a very steep hill had to be mastered. "The lower part of this hill was covered with beautiful proteas especially *P. mellifera* [*Protea repens*] and *lepidocarpon* [*Protea neriifolia* is meant here] now in full bloom; and higher up were abundance of aloes. [p. 109]

"Past the house flows another Diep River, a beautiful clear stream winding through a thick covert of reeds, *palmiet*, *Juncus serratus* [*Prionium serratum*], and tall rushes. Its course may very easily be traced through the valley by the lively verdure along its margin, contrasted with the parched and withered hue of the country in general." [p. 111]

2 April — Kromme River valley, 64 km east of Diep River, at Meeding's or Jagersbosch:

"... rugged stony and barren hills ... the hill immediately behind the house which abounds with Proteaceae and heaths, and promises a good harvest of plants in a more favourable season. I gathered a leucospermum (*L. attenuatum*) [*Leucospermum cuneiforme*] which I had not before seen in flower. I have seen no acacias since we crossed the Great Doorn River on the morning of 29 March [near Oudtshoorn]." [p. 112]

4 April — The rockiness was "... adorned with tall aloes [*Aloe ferox*], with the large palm-like leaves of the zamia or caffer bread [*Encephalartos caffer* or *E. longifolius*], and with a variety of heathlike shrubs ... [p. 113]

"This was the first time I had seen any of the zamias growing wild; indeed, from all I could learn, this place, situated about six degrees east of Cape Town, seems to be the westernmost limit of their geographical range in South Africa. The zamias are among the forms of vegetation which characterise the eastern part of the Cape Colony, and especially the great tract of thicket or bush extending along the Caffer frontier. But the species which I saw at Jagersbosch was different from that which is most abundant in the Fish River bush. The latter, *Zamia horrida* [*Encephalartos horridus*] is about 3 feet high; its leaves very glaucous, and every leaflet armed with two or three strong and sharp spines; the other is considerably larger, its leaves dark green, the leaflets much longer and narrower than those of *horrida*, and without spines. The stem is very thick

and (in *Z. horrida* more particularly) has a tessellated appearance from the scars of the old leaves.

"The hills near Jagersbosch abound with the small tree called *wagenboom Protea grandiflora* [*Protea nitida*] which was indeed common in many parts of the country we had traversed, but this was the first time I saw it in flower. It is one of the largest kind of *Protea*, for though it does not attain such a height as the silver tree, it is fully as thick in the trunk. Its flower-heads, of a delicate straw colour, measure 5 inches across. Its peculiar grey foliage, and crooked and twisted mode of growth, give it a certain general resemblance to the olive tree. Its name is derived from the use made of its wood for wagon-wheels, and the like. A beautiful sugarbird (*Le sucrier a plastron rouge* of Le Vaillant) of a golden-green colour with scarlet breast was here perched on its flowers, climbing about them and thrusting its slender beak into very floret [? lesser double-collared sunbird, *Nectarinia chalybea*].

"The moist hollows between the hills, as well as the valley of the Kromme River, were nearly filled with the *palmiet* rush, *Juncus serratus* [*Prionium serratum*], a common plant throughout the country we had traversed from the Hottentot Holland Mountains eastward. It is eminently a social plant (to use Humboldt's expression) growing very thick together and forming large masses unmixed with anything else. In its herbage and general appearance it is quite unlike a rush and has more the look of an aloe or of the crown of a pineapple mounted upon a thick, black, spongy stem which varies in height from less than a foot to 3 or four feet according to the depth of water in which it grows." [p. 114]

6 April — Crossed Gamtoos River near the mouth, going east:

From Leeuwenbosch in lower Langkloof travelled "... over an open and uninteresting country to the Camtoos River which we crossed by a floating bridge a little above its mouth. This is one of the largest rivers in the Colony ... [p. 117]

"At the place where we crossed it, the Camtoos is 220 yards wide and its waters are beautifully clear. A chain of wooded hills run along its left bank. As soon as we cross this stream a remarkable change takes place in the appearance of the country which from thence to the Van Stadens is really pretty, with a pleasing variety of hill and dale and great masses of evergreen wood, or rather shrubbery, with broad grassy lawns between.

"Here begins the proper region of the *spekboom* [*Portulacaria afra*], the *boerboontjes* [*Schotia afra*], the succulent euphorbias, and many other curious shrubs which may be considered characteristic of the eastern province, though a detachment, as it were, of them is found on the banks of the Gauritz.

"I was struck with the sight of a wood of gigantic euphorbias growing 30 or 40 feet high and of most singular appearance with their fleshy leafless branches arranged like those of a chandelier."

Came to the Van Stadens River:

"The deep and narrow valley ... is quite a gem ... and really puts one in mind of some of the smaller valleys of Switzerland. It is beautifully verdant, partly cultivated, partly pasture ... hemmed in by mountains, not indeed of great height ... but excessively steep and richly clothed with thick evergreen woods. The descent from either side is formidably rugged, abrupt, and difficult beyond anything else of its kind I saw in the Colony, with the single exception of Cradock's Kloof [Montagu Pass, behind George]. [p. 118]

7 April — "On emerging from this valley we left all the beauty of the country behind us and proceeded across a naked arid plain to Port Elizabeth which has itself nothing prepossessing in its appearance." [p. 119]

9 April — Port Elizabeth:

"It is an ugly, dirty, ill-scented, ill-built hamlet, resembling some of the worst fishing villages on the English coast; backed by low stony hills of the most barren character while long ranges of sandhills extend along the shore on both sides of it. [p. 120]

"This unpromising neighbourhood produces many curious plants, particularly of the fleshy kind. Aloes of several species, crassulas and cotyledons with fine scarlet flowers, and euphorbias whose fluted columnar stems are beset with formidable prickles, flourish in the crevices of the sandstone rocks and among loose fragments of stone exposed to the full glare of the sun.

"In company with these are some beautiful everlastings, and various kinds of a hard, rigid, stunted character but with handsome blossoms.

"The sandhills along the coast are partially covered with dwarfish evergreen bushes seldom more than 3 feet high intermixed with succulent plants of the strangest shapes.

The *boerboontje*, *Schotia speciosa* [*Schotia afra*] with its hard knotty twisted branches, its scanty dark green foliage and brilliant carmine-coloured flowers, is plentiful here, but in the form of a low scrubby bush; whereas on the banks of the Camtoos it grows to the size of an apple tree. It is a very general plant in the eastern province.

"The little stream which comes down to the sea at Port Elizabeth [Baakens River] is covered with beautiful blue water-lilies. [p. 121]

10 April "... we proceeded over dreary plains to Uitenhage." [*via* Bethelsdorp] [p. 122]

Uitenhage:

"... surrounded by wooded hills of various elevations... It enjoys also the advantage (inestimable in this country) of a copious and never-failing supply of good water.

"The Zwartkops which flows near the town is a beautiful little river, slow, still, and clear, winding gracefully through the valley and fringed with thickets of tall reeds, ferns, acacia, and a pretty kind of willow... The surface of the river is most beautifully decorated with a profusion of the sky-blue water lily [*Nymphaea nouchali* (= *N. caerulea*)], one of the loveliest plants of southern Africa.

"On each side of the valley are steep but rounded clay hills covered with the succulent and thorny bushes which characterise this part of the country." [p. 123]

12 April From Uitenhage to Addo Drift:

"... over a hilly country covered for the most part with low but thick 'bush', the soil a hard clay. Though the general appearance of this kind of country is in some degree monotonous, yet its rich and singular vegetation is very attractive to the eye of a naturalist. The strange stiff gaunt forms of the leafless euphorbias ... the aloes with their spear-like leaves and tall scarlet spikes; the pale green foliage of the *spekboom Portulacaria afra* which is said to be the favourite food of the elephant; the crassulas covered with milk-white blossoms; the cotyledon with its bluish leaves and bright red flowers; the scarlet geraniums [*Pelargonium inquinans*] peeping from amongst the other shrubs—altogether form a combination extremely interesting to the botanist and which must strike every traveller of ordinary habits of observation by its dissimilarity to anything that is to be seen in other countries. There cannot, indeed, be a vegetation more peculiar or of a more marked character.

"This tract of bush is of great extent. From the Van Stade's Mountains on the southwest of Uitenhage it stretches, with few breaks by the Sundays and Bushmans Rivers, and the Zuureberg, to the banks of the Fish River along both sides of which it forms a belt of several miles wide. [p. 125]

"We arrived after dark at Addo Drift. The Sunday River is here a strong and very muddy stream flowing in a deep channel with high broken cliffs ... ranging along its right bank. It is subject to great floods ..." [p. 126]

1838 Delegorgue, A. (1990)

May Port Elizabeth:

"From the few walks I took in the vicinity I realised that birds were very rare there, probably because the forests were composed chiefly of stinck out [sic, the true *stinkhout*, *Ocotea bullata*, does not occur in the Port Elizabeth forests, e.g. Baakens River], that is to say with trees with strong-smelling wood. These trees, garlanded with five or six foot strands of moss, have a very strange bearded look; this moss seems to hinder them in their growth for beneath it the branches are twisted as if in agony. The few leaves they have turn mouldy while still alive. The humidity in these forests is great; grass is rare and ferns abundant. Several naturalists have made use of this parasitic moss-like plant which they first dry in the oven and then use to stuff birds. Because of its lightness it is used for all sorts of packing; it does not attract insects and has the advantage of being economical. I particularly recommend it, and if I have used it very little myself, this is because I did not remain long in those parts where it is found.

"The plains of this country are remarkable for their sour pasturage, *suren vlaacke*, the Dutch say. They are beautiful to the eye, bad for cattle and only fair for horses." [p. 42]

1838 Krauss, F. in Spohr (1973)

5 April Just west of Uitenhage:

Passed the foot of the Van Stadens Mountains *en route* to Uitenhage from Van Stadens River Mouth. "After passing these mountains and once on top of the hill, one looked over Uitenhage and the surroundings of the Zwartkop River. Magnificent *Strelitzia jun-*

cea Andr.; *Testudinaria elephantipes* Lindl. [*Dioscorea elephantipes*]; and *Zamia* [*Encephalartos*], Euphorbiae, and beautiful bulbous flowers grew here. The river was easy to cross.

"I made several excursions from Uitenhage. The first was to the salt-pan between Uitenhage and Port Elizabeth which provides salt for the eastern districts. Some salt, because of its good quality, was even delivered as far away as Cape Town. The road descended at the left bank of the Zwartkop River through bushy country with many Acaciae into a wide long valley and then up over hills. From the top of these hills is a view over Algoa Bay with Port Elizabeth and Cape Recife. The road descended into the salt-pan which was an oval basin of about an hour's circumference. It was approximately the same height above sea level (30 to 40 feet) as the nearby Zwart River. Rainwater could enter the salt-pan only through small valleys." Describes the salt-winning process. [p. 49]

14 April — Presumably 'Amanzi' springs, east of Uitenhage:

"I went to the warm mineral springs which are about four hours away from Uitenhage at the right bank of the Koega River. On my way I saw many crassulae, aloes and several Euphorbiae with thick spindle-shaped roots, apart from the plants found about Uitenhage."

Describes the springs; the water gushed up so strongly that when he stood in it he was "… swept off my feet... The springs were used very little for medical purposes." [p. 50]

15 April — To the Saltpan at Bethelsdorp:

"... the saltpan at Bethelsdorp where I found good water for the oxen. The saltpan was shaped like a long oval, about two hours in circumference and for the rest it was exactly like the one at the Zwartkop River except that it did not provide so much, and such good salt... Between Cradocktown [Cradock Place Farm], a large farm with several buildings, and Port Elizabeth are two other saltpans about 20–30 feet above sea level which filled up with water in the rainy season but no longer produced salt." [p. 51]

Along the Coega River, after revisiting the Amanzi springs near Uitenhage:

"Along the almost dry Koega River I went down to Tweekoppen [presumably the present twin Coega Kops] and I nearly reached the mouth of this river. Even in the rainy season the mouth was blocked by a sand-barrier and the river as usual widened into a lagoon. Here I discovered under a big-leafed mesembryanthema many specimens of the beautiful *Achatina kraussii* Reeve [zebra snail].

"On my way back to the Zwartkop River I found the hillocks between the two rivers very grassy with few bushes. These places were very suitable for sheep and cattle farming."

26 April — From Uitenhage to the foot of the Winterhoek Mountains; up the dry Coega River bed to 'Elandshorn', 19 km north of Uitenhage [Elandshoring]:

"Many beautiful large Zamiae [*Encephalartos longifolius*] with flowering spadices grew along the river and on the slopes grew thick six-pointed Euphorbiae, and between the low bushes a sort of *Aloe* with 10 to 12 feet high trunks and long sickle-shaped leaves.

"The vegetation [of the Winterhoek] was typical of that for sandstone, except that there were magnificent 10 feet high Zamiae (*caffra-encephalartos* [*Encephalartos longifolius*]) up to some hundred feet between the summit; the old trunks were covered with a new moss (*Syrrhopodon perichaetialis* Bruch.) [*Hypodontium dregei*]." [p. 52]

1839 Krauss, F. in Spohr (1973)

February — Behind Duiwelskop:

"To cross the Langkloof [from south to north] took about half an hour. The kloof was overgrown with low bush but not the actual Karroo plants." Stayed at Schoonberg.

24 February — Left Schoonberg for the farm of Ignaas van Rooyen near the Diep River "… which flows into the Kammanassie River." Then to the warm baths at the Olifants River. "First I had to cross the sandstone hills previously described which were mostly overgrown with dwarf trees, *Leucospermum conocarpon* R.Br. [probably actually *Leucospermum cuneiforme*] and other kinds of proteas, *Rhus*, etc. ..."

Towards the Kammanassie River "The banks were overgrown with *Acacia horrida* [*Acacia karroo*] and *A. caffra* Willd., prickly *Lycium, Carissa arduina* Lam. [*Carissa bispinosa*] and other Karroo bushes ..." Then: "Over an arid hilly Karroo mainly overgrown with dry mesembryanthema, I came to the valley of the Olifants River ..." which was completely dry. This was near a farm called 'En Nooit Gedagt'. "Some hundred paces away from the entrance to the poort of the Zwarte Berge where the Karroo rivers Traka, Kowka and Locri met, was the hot spring [Towerwaterspoort]." Describes the

hot spring and its mineral content. "A few steps away, the springs gave forth ordinary fresh water… The hill was overgrown with large-flowering mesembryanthema." [p. 41]

27 February — Kougha Mountains [miscalled Winterhoek Mountains by Krauss] and Baviaans River Berg:

"The Winterhoek Mountain reaching as far as the Gamtoos River... The vegetation is poor but a few farms existed in places where streams flow out of the gorges… On the left side of the Olifants River ... from the Roode Hills to the Winterhoek ... everywhere is the dry Karroo with its particular vegetation. Nearer the Koega Mountains... The foremost hills ... are covered with various kinds of proteas."

Passed the Koega foothills and went to a farm Paarde Fonteyn:

"The colonists all round complained about the unusual drought and even the oldest people could not remember a worse one. The vineyards and fruit trees were completely withered and in some places people were forced to trek with their cattle ... because of the lack of food and water. In these places the women prepared the soapsuds and soap for washing from the ashes of *Chenopodium* [*Salsola aphylla*] and *Mesembryanthemum* [*Psilocaulon*]." [p. 43]

End February — Back into the Upper Langkloof at Ongelegen, farm of Jacobus Rademaier:

Horsesickness was rife. "People said that it originated from eating poisonous plants, others thought it is somehow in the air, others again ascribed it to the drought. Rademaier, however, believed that wet weather and the eating of sudden grown grass causes the sickness in horses... This was also said in other places; it is also believed that horses kept on top of high mountains are safe." [Actually a viral infection.]

Krauss went down into the Langkloof. "The main vegetation was again *kreupelbome*, *L. conocarpum* R.Br. [actually *Leucospermum cuneiforme*] but also bulbous plants, and particularly the beautiful amaryllis [*Amaryllis belladonna*] adorned the countryside.

3 March — "On March 3rd I travelled from the Langekloof across a steep rise into the narrow valley of the Kromme River ... the river was densely overgrown with *palmiet* reeds [*Prionium serratum*] and is very marshy ..." [p. 44]

4 March — Jagersbos:

Arrived at Jagersbosch, deep in the mountains: "… here I found a few specimens of a pretty plant with a flower rising from the centre (Footnote 21: Krauss was referring to the cabbage tree, *Cussonia araliacea*) [*Cussonia spicata*]."

5 March — Crossed the Outeniqua Mountains again to the Tsitsikamma.

6 March — Reached Koksbosch (Footnote 22: The Moravian Mission Station Koksbosch was renamed Clarkson), 41 km west of Humansdorp:

"Situation and soil was good; there was also sufficient water but the climate was a bit humid because of the frequent mist and rain. Apart from that, the sour veld was not recommended for the farming of cattle and sheep. By 'sour veld' the colonists meant an area where mainly Restiaceae, Irideae, Hypoxineae and other bulbous plants grew. After prolonged feeding on these plants the oxen become thinner and thinner, suffering from phthisis and finally die. To avoid this they were driven to other places with fresh pastures for several months to recover. The sour veld could slowly be improved by frequent burning of the fields during the dry season which actually reduced the sour vegetation. [p. 45]

"Before leaving Koksbosch I made an excursion to the highest peaks of the mountains there [Kareedouwberg], which rise steeply in terraces... On the top I found lovely red everlasting flowers, *Helichrysum*, some Ericae, Indigoferae and other Leguminosae ..."

7 March — To 'Driefonteyn' on left bank of Tsitsikamma River at the mouth, the farm of Piet Rademaier in the Tsitsikamma:

"The river beds are all cut very deeply and the banks were covered with forests. These forests were similar to the Knysna forests but generally not as dense, and they did not have as many large trees. The unwooded parts were overgrown mainly with Proteaceae, Ericaceae, Selagineae, Leguminosae, Compositae etc., but also with many bulbous plants and Restiaceae, and its sour grass was not suitable for cattle farming." [p. 46]

3 April — Left Driefonteyn farm, east to the lowest drift of the Kromme River. Then over a steep escarpment to a "… broad river-bed overshadowed with forests …" Crossed this river (not named) and continued where "… the veld was sweet and overgrown with low bushes of Selagineae, Compositae, Thymeleae, Malvaceae, and Asclepiae."

4 April

Arrived at Zeekoe River.

"Near the coast a vast almost flat plain spread as far as the dunes... The bed of the Kromme River was very wide at the mouth and in some places also very deep. On others it was marshy and shallow ..."

Arrived at Kabeljou River:

"Here the vegetation changed, being more like that of the eastern districts. I saw many tree-like Euphorbiae with *Aloe, Rhus, Schotia, Arduina* [*Carissa*], *Acacia*, and other thorny plants. That night I outspanned on a hill this side of the Gamtoos River." [p. 47]

Arrived at Gamtoos River:

Oxen and waggon were ferried across on a float. "The river here was as deep and as broad as the Neckar near Cannstatt [Germany]. The left bank rises almost vertically... The crossing is very difficult as it is densely overgrown with thorny bushes. In the crevices on top of the hills grew very many cylinder-shaped Euphorbiae, [possibly *Euphorbia clandestina*]." Then went towards the mouth of the Van Stadens River where he crossed, and then towards the Van Stadens Mountains *en route* to Uitenhage. [p. 48]

1840s

Redgrave, J.J. (1947)

Port Elizabeth seafront:

"In those days the approaches to the seashore and beach from the South End were covered with sand dunes interspersed with bush and scrub, and there was no road along the lower beach. Pedestrians were therefore forced to journey over the sand dunes and bush, or follow the old waggon path of Piet Retief, known as Fishery Road ..." [p. 65]

Trinder Square, then 'vlei', beside present lower Western Road:

"The area known as Trinder Square in Western Road was formerly a wide, open vlei used for watering cattle on the Hill, whilst the natives also used the water for domestic purposes... The unsightly vlei was eventually filled in (photograph of the vlei in 1867) ..." [pp. 103, 104]

Russel Road area:

"The present Russell Road was first known as 'Burial Kloof', for on its upper right slope was a burial ground of the early settlers, but later it was named 'Hymans Kloof' after Mr Hyman, leader of the Hyman Party (1820 Settlers) whose isolated dwelling at the lower end of old Main Street faced the kloof. It was a natural kloof with high grassy ridges and boulders on either side forming a long narrow ravine... A stream of water always flowed through it which in heavy rains was converted into a dangerous torrent."

White's Road area:

"White's Road was then a stony, rugged, steep kloof with a strong stream of water running down it in which some of the town's laundry used to be performed. The little footpath up it commenced near the present Public Library and zigzagged in places under bushes and rocks before emerging ... [p. 121] [In 1860, a road was built up the kloof.]

"A flowing stream of water also ran down Donkin Street which also resembled a kloof more than a thoroughfare; halfway up the street was a public well with a pump over it from which the residents in the vicinity drew their supply of water of doubtful quality." [p. 122]

North End of Port Elizabeth:

"The area east of Queen Street [Main Street Extension] and stretching along the foreshore was vacant space with scattered sanddunes. A wide vlei called The Creek lay beyond the present Railway Hotel. [p. 134]

The long green stretch of veld to the Creek ... was formerly used as a racing track." The Creek, in Papkuilsrivier, was filled in for use as railway yards in the mid-20th century. [p. 138]

Cooper's Kloof [Albany Road]:

"Cooper's Kloof was a stony rugged kloof with deep pools of water where children swam and caught fish. [p. 137]

"The old wagon roads to Grahamstown and other inland towns in the early days went past the present Jewish Cemetery at the North End along the upper part of the Creek where it merged into the Deal Party grant (now New Brighton) across the mouth of the Zwartkops River, thence up the kloof on Mr Tipper's property and through the farms on Amsterdam Flats ..." [The wagons must have crossed the Swartkops River near the mouth and did not need to go inland above the ebb-and-flow near Perseverance. Can this be correct unless a ferry was operating there?; Tipper's Creek is still so-called, 1984.]

1845 Port Elizabeth and environs, described by an old resident:

"Though possessing a favourable climate and a soil where everything will grow, it has no vineyards or gardens, no vestige of plantation... Though formerly noted for trees, the neighbourhood was a barren wilderness with nothing to relieve the eye but anthills or squalid Fingo huts.

"Unfortunately the greatest problem of the little settlement was where to obtain a regular supply of fresh water for the rapidly increasing number of residents ..." Wells were dug in Market Square and elsewhere. [p. 33]

1848 Baines, T. in Kennedy (1961)

Port Elizabeth:

Fort Frederick, on the hill above the Baakens River:

"At the base of these hills is a small but rather picturesque cemetery with several tombs covered with slabs of bluish stone similar to that procured from Robben Island, and some of them neatly enclosed by iron rails. The ground had formerly been surrounded by a hedge of aloes but of these only a few remained to guard, like solitary sentinels, the city of the dead. [1: 22]

"This plant, the *Aloe spicata* [actually *Aloe ferox*], as well as many other varieties, is scattered in wild profusion on the hills around the Bay, adorning their barren crags or rough acclivities with its scarlet flowers; and many thousand cases of its juice, the Bitter or Hepatic Aloes of commerce, are annually shipped from Port Elizabeth; but its valuable properties seem to have been unknown to the Dutch colonists till revealed, by a Negro slave, to one of them named De Witt who obtained in consequence the exclusive privilege of supplying the East India Company, and appointed his slave inspector of the work, naming the aloe after him, the '*coree bosch*' [*goreebosch* = *Aloe ferox* (Smith 1966)]. In 1850, 155 166 lbs of Aloes valued at one thousand five hundred and fifty-four pounds were exported from Cape Town and 72 446 lbs at one thousand five hundred and fifty-nine pounds from Algoa Bay.

"The preparation of the sap affords a livelihood to many Hottentots and other persons, and is still conducted very nearly as described by Sparrman in 1776. A tub, or sometimes a skin, is sunk into a hole in the ground and the leaves of the *Aloe* are cut off and placed in it with their points upwards; the juice or sap which exudes from them is then boiled and poured while still hot into the cases in which it is left to harden.

"Its price varies according to the care bestowed upon its preparation, the inferior kind fetching not more than three halfpence while that which has been well boiled, and is consequently much harder, is worth as much as fourpence per lb.

"The juice, which at first is clear and limpid, and, it need hardly be said, bitter in the extreme, soon becomes thick and viscous, and besides its medicinal uses is frequently employed by the frontier farmers as a varnish for partitions, ceilings, or articles of furniture, to which it imparts a beautiful polish and a rich brown colour." [p. 23]

Redgrave, J.J. (1947)

1850s Port Elizabeth:

"We rounded Cape Recife and saw the white houses of Port Elizabeth in Algoa Bay with its shores generally low and sandy with scattered bush ..." [p. 445]

1861 Municipal regulations promulgated:

"No person shall be allowed, under penalty of five pounds sterling, without a licence from the Council, to quarry or carry away any clay, sand, gravel, ironstone, limestone, or loose stones, or to cut any turf or brushwood from the waste lands of the municipality ..." [p. 419]

1870s Veld near Redhouse:

Opening of Port Elizabeth-Uitenhage train line: "The veld between the town and Zwartkops was in capital order and the beauty of the scenery did not fail to exercise a gladdening effect." The train went "... past Zwartkops with its picturesque background of hills; past the Redhouse ... and amidst veritable flower dells. It was refreshing to the Bayonian to see such country with its covering of green, purple, yellow, blue, and other tints ..." [p. 442]

1870/80s The Baakens River:

"... at high tide was very deep and penetrated up as far as the old wooden stores, and extended in width from the narrow valley road to the back of the Markham Hotel, forming a high lagoon which was crossed at the lower end by a narrow footbridge ..." [p. 538]

10 ALBANY

1497 Da Gama, V. in Colvin (1912)

16 December — Coast of Alexandria:

"The country about here is very charming and well wooded; we saw much cattle, and the farther we advanced the more did the character of the country improve, and the trees increase in size."

1752 Beutler, A.F. in Theal (1910)

August — From around Alice, Victoria East, westwards to Bedford District:

"The country was so parched by a long drought that the cattle were half famished, and large thorn trees [probably *Acacia karroo*] were perishing from want of moisture." [The trees might have been in their late-winter leaflessness.] [1: 89]

1775 Sparrman, A. (1786)

11 December — Coerney River, which enters Sundays River near Selborne, 6 km northwest of Addo:

"We afterwards drove higher up along Koernoi-rivier [Coerney River] and found water there almost motionless and brackish. We ordered the tops of the grass of the reeds growing in the little stream to be cut off for the purpose of foddering our horses at night ... [p. 37]

12 December — "... our guide took us first to the east and then to the south-east over champain country ..." Found a spring of water much trampled by buffaloes, but an hour's ride further on found better water.

14 December — Arrived at Bushmans River. The country through which they passed not described. [p. 38]

Travelled from Bushman's River to Assegaaibosch near Sidbury, 30 km west southwest of Grahamstown; then northwestwards to Alicedale, 42 km west of Grahamstown; then northwards up the Bushman's River to Kommadagga, 55 km west northwest of Grahamstown:

Left Bushman's River. "A little further to the eastward we had to go through a vale covered with wood. This vale is called Niez-hout-kloof [Nieshoutkloof, Sneezewood Kloof, c. 8 km west northwest of Sidbury] from a kind of tree [*Ptaeroxylon obliquum*] which is said to excite sneezing if it be rubbed and then smelled. We were not so fortunate as to find this tree but, from the description that was given to me, I should imagine it belonged to the order of Lomentaceae.

"... in the evening we arrived at Hassagai-bosch [Assegaibosch]. The other part of the road, together with the adjacent country, was full of steep hills so that we were frequently obliged to lock the wheels of the wagon, and at the same time to dismount and lead our horses over the precipices.

15 December — "Early next morning we quitted Hassagai-bosch which in itself is merely a little insignificant grove and derives its name from a kind of tree [*Curtisia dentata*] to be found there, as well as in many other parts of the country. The district round about was of the kind called Sour." [In all these contentions Sparrman was correct. His "... insignificant little grove" is indeed small (depending on which grove he meant because there are three possibilities); a specimen of *Curtisia dentata* was found growing in a small patch of forest there in 1980; and the country is certainly sourveld.]

Arrived at Nieuw Jaars-drift, 4 km northeast of Alicedale, on the New Year's River:

"The water here too was good and in some places very deep. The adjacent country had a delightful appearance being adorned with great numbers of the *Mimosa nilotica* [*Acacia karroo*]."

At 'Hevy', a farm near Saltaire, 19 km up the Bushmans River from Alicedale, but south of Swartwatersberg Pass:

"It was merely a rocky vale in which there were several pits of stagnant and brackish water... All the plants round about (except the succulent ones) were dried up like hay." [2: 81]

17 December — Kommadagga, 52 km southeast of Somerset East:

Arrived at Quammadacka Well, two hours from Hevy. "A boggy pool of water which at that time was dried up, from 20 to 25 feet across, was the only watering place to be found in that tract of country of considerable extent." Wild beasts wallowed and drank there; the water stank. "On a plot of ground a little higher than this bog we discovered traces of a water-spring gently trickling down ..." [1: 81]

21 December — From Kommadagga, 7 km north to Little Fish River:

"In this tract of country there was a great drought on both sides of the river, but still greater further on towards the north where the soil was more gravelly and produced a greater quantity of succulent plants. In the spaces between these, besides shrubs and bushes, there was sometimes to be found a little grass; everywhere else the ground was as bare and dry as a high road with a clayey bottom." Despite the drought saw large herds of springbok and other animals, including Black Rhino. [2: 188]

From the Great Fish River at c. Cookhouse, 21 km east of Somerset East, westwards to the Little Fish River near Somerset East:

29 December — "This tract of country was thinly covered with thorn trees, *Mimosa nilotica* [*Acacia karroo*] which shaded the ground and kept it cool, so that being in some measure covered with grass, it exhibited an agreeable verdure and at the same time harboured a considerable number of springers [springbok], quaggas, and hartebeests ..."

30 December — The farm of Prinsloo, "... at the base of a high mountain [Boschberg]." [2: 139]

1776 Sparrman, A. (1786)

January — Agter Bruintjieshoogte [the area from the above mountain eastwards to Somerset East]:

"Agter Bruntjes-hoogte, where we were now arrived, is rather a flat tract of country which takes in the upper part of Kleine Visch-rivier and is separated from Camdebo by Bruntjes-hoogtens [25 km west northwest of Somerset East], or the Bruntjes-hills, and with respect to the latter place (Camdebo) [Pearston District] is situated *agter*, or behind them [to the east of Bruinthieshoogte]. [1: 141]

"Agter Bruntjes-hoogte is the northernmost part that I visited of the whole Colony; and, in my opinion, it is likewise the most pleasant. There was still remaining on the ground a more meadow-like verdure than is usually seen in this country; a verdure that owed its existence to the shade afforded to the soil by the thorny branches of the *Mimosa nilotica* [*Acacia karroo*] and was still further enlivened by the numerous yellow blossoms of that plant.

"The great quantity of beautiful vernal lilies, together with a peculiar parasitic plant of blood-red hue (described by me in the Swedish Transact. for 1776, page 307) which were now springing up out of their beds that were covered with a more verdant and luxuriant herbage than the other parts of this country, must doubtless, at the season when they come into bloom, add still more to the splendour of this delightful scene ..." Describes the kitchen gardens, etc. along the Little Fish River. [1: 162]

"The superior degree of fertility, and the more delightful verdure which I found here, ought perhaps to be ascribed to a ridge of mountains on the east side of the Little Visch-rivier which was intersected by beautiful green vales interspersed with woods. These mountains, by collecting the clouds together, caused them to fall in refreshing showers of rain on the banks of the river that ran at their feet." Notes how the greater fertility of the soil here brings in the antelopes as graziers. [1: 163]

"What contributes not a little to this fertility is that the land is fresh, that is to say not yet worn out by being too frequently and too closely grazed off by the numerous flocks and herds of the Christians [Dutch farmers]." [1: 164]

1776 Swellengrebel, H. in Forbes (1965)

6 November — Country surrounding Hoffmanskloof on the old road up from Nieuwejaarsdrift to Assegaaibosch:

"The hill crests formed the natural route-ways because they were practically without trees and are ... covered with much grass." [p. 72]

1779 Paterson, W. in Forbes (1965)

3 February — Table Farm [Noutoe], 11 km northwest of Grahamstown:

The country around Noutoe is "... quite uninhabited, the grass so high that it reached the horses bellies and the aspect agreeably diversified with little pleasant woods upon the declivities of the hills." [p. 88]

1782 Le Vaillant, F. (1790)

10 October — East bank of Great Fish River *en route* to Kokskraal, 12 km north of Cookhouse [? flats near present Eastpoort]:

"In a plain covered with long grass and a few shrubs... Some straggling antelopes and a few flocks of ostriches." [1: 344]

October — Left Kokskraal eastwards towards Bedford:

Kaabaskraal [not found] "... 400 paces from Groot Vis, situated at a declivity of a little hill which extended with an easy slope to the bottom of the chain of mountains clothed with forest of very large trees, a small rivulet intersected the middle and discharged itself into the river." [2: 38]

3 November — Left the river and went northeast, where he found trees and very long dry grass. [2: 226]

Travelled for 5 hours: *Acacia* veld; big trees on tops of mountains. [2: 230]

Marched 7 hours: Acacias getting scarcer and more stunted; grass not so high. [Probably near Bedford town.] [2: 234]

5 November — In a valley with immense forest of large and magnificent trees as at Outeniqua; *stinkhout*, *geelhout*, etc. [? Forests in Bedford Mountain.] [2: 239]

Describes the forests, which abounded with bushbuck and blue duiker. [2: 244]

Went through an area burnt out, but now sprouting green. Herds of springbok, wildebeest and ostriches. [2: 247]

10 November — Going east; mimosas [*Acacia karroo*] so abundant and bushy that they formed a forest. [? Towards Adelaide District.] [2: 252]

15 November — Going south [towards the Great Fish River]:

"... through mimosas [*Acacia karroo*] so numerous, dense, and encumbered with bushes as to need forcing through in defile (for perhaps a league)." [2: 265]

1786 Gordon, R.J. in Cullinan (1992)

12 February — Quaggasvlakte, near Paterson:

Kwaggas Vley: "Saw numberless quantities of game; buffalo, *kwagga*, hartebeest, ostrich, springbok. Grassy lime-bearing ridges everywhere with thorn-bushes as well as other trees such as yellow-wood and stinkwood and other types. It appears that the game has come here to take refuge." [Yellowwood grew in neighbouring forests, but not stinkwood.]

13 February — Boknes River forest, 10 km southeast of Alexandria:

"For six hours we travelled with ox-waggon around the high wooded ridge [Langebosch Hills] and came to the mouth of the Bokna, or Vaders River, on the shore. It emerges from these high ridges here but has not flowed into the sea for a long time. It has formed however a very large marsh, fifty paces from the sea... I went east northeast along the shore, which is sandy here to a prominent green hill where I found an old shattered monument. Gathered together the pieces in order to carry them on the wagon with us to the Cape." [The Bartolomeu Dias padrao on Kwaaihoek False Island, erected in 1488.] [p. 156]

1790 Van Reenen, J. in Kirby (1958)

16 September — From Bruintjieshoogte southwards to Bushmans River, probably near present Kommadagga:

"Travelled from here to the Bosjesmans River ... good broken grassland and bush." [p. 95]

28 September — From Bedford to Adelaide:

"Travelled thence 8 hours further ... crossing a little stream called Caaga [Kaga Rivier at Bedford] ... to the river called Caapna [Koonap] or 'fine fields' which district is rightly named because of the beautiful countryside which is interspersed with perennial streams, all of which are suitable for irrigation, and which possesses everything necessary for good and fine farms, excellent for cattle ... broken grassland. Saw a great deal of game. Shot two buffaloes." [p. 96]

1797 Barrow, J. (1801)

30 August

Sundays to Bushmans River, from c. Addo in the west to c. Rautenbach's Drift:

"... we travelled near thirty miles over a wild uninhabited part of the country covered chiefly with shrubby plants of the same nature as those that grew so abundantly between Graaff Reynet and the Zwart-kop's River, but in general taller and of more luxuriant growth. It was, in fact, an arm of the same forest through which a road had been cut just wide enough to admit the waggons.

"Beyond the forest the country was beautifully marked with knolls and dells, finely chequered with clumps of evergreen trees and patches of shrubbery. Among the swells were level meadows covered with grass of a coarse reedy nature, and full of copious springs of good water.

"In the evening we encamped on the Boesjesmans River ..." [He must have travelled through part of the Addo Bush towards Sandflats, now Paterson.] [p. 164]

August

Suurveld, from Highlands Mountain, 20 km west of Grahamstown, at the eastern sector of the Suurberg Range, to the coast:

Assegaaibosch Farm, near Sidbury. "On the Hassagai-bosch River stood the second habitation that had occurred in the last three days' journey, and we were informed that there was no other to the eastward.

"The country that lies between the Sunday River and the eastern limit of the Colony, and between the Rietberg [Highlands Mountain] and the sea coast is called the Zuure Veldt, or sour grass plains.

"In appearance it is the most beautiful division in the whole district; it is well wooded and watered, has a great depth of good soil and is well clothed with grass. Till the scandalous rupture between the peasantry and the Kaffers ... Zuurveldt was one of the best peopled divisions in the district but has been since that time nearly abandoned." [p. 165]

From Assegaaibosch Farm *en route* to the Kariega River, c. 20 km south of Grahamstown:

"We had not travelled many miles beyond the Hassagaibosch River till the discovery of the whole surface of the country in flames indicated our approach to some of the stations of the Kaffers. We pitched our tents in fact at night on the banks of the Kareeka [Kariega River], amidst several hundreds of these people ... [p. 168]

"Towards the setting of the sun the whole plain was covered with cattle which, in vast herds, were brought in from every quarter ..." [p. 170]

Assegaai River, c. 18 km south of Grahamstown, probably near Salem:

Barrow remarks on the presence of Kaffers there when, by treaty, the Great Fish River had been declared the boundary of the Colony. Chief Malloo said "... that there were no habitations in that part of the country where they had fixed themselves, and, as to their motive for passing the boundary, he could only say, for his own part, that he had come over for one of the reasons that had carried the colonists first after the treaty into the Kaffer country, which was that of hunting game.

"What this chief stated in his reply was perfectly correct. The Dutch peasantry have not only gone into the Kaffer country since the year 1793 to hunt for the larger sorts of game, particularly the hippopotamus that abounds in all the great rivers of that country, but all those who dwell near the extremity of the Colony, upon the Great Fish River, have always used, and still continue to consider, the Kaffer side of the river as their own ... [Indicates the state of human pressure on the countryside at that time.] [p. 172]

2 September

"On the 2 September we skirted the banks of the Kareeka [Kariega River] towards the seashore, perpetually passing through multitudes of Kaffers and their herds of cattle. Of the latter, the collected opinion of the party was that there could not have been fewer seen in the course of the day's journey than 5000 head ... [p. 177]

3 September

"The route from Hassagai-bosch River had been taken out of the common track in order to speak with the Kaffer chiefs as well as to have a view of that part of the coast where the Boesjesmans [Boesmans River] and the Kareeka Rivers discharge themselves into the sea [Kenton-on-Sea]. Over the grassy plains of the Zuure Veldt there is little difficulty in finding a road where the deep glens, through which the branches of the rivers run, can be avoided, and we had met with no obstacle till our arrival at the Kowie which falls into the sea a little to the eastward of the Kareeka. In order to cross this river it was necessary to descend from the plain into a deep chasm two miles in length, not only down a steep precipice strewed over with fragments of rock but in several places we had to cut through thick clumps of brushwood ..." [p. 181]

4 September — Kowie River to Great Fish River Mouth:

"On the fourth ... we directed our route towards the mouth of the Great Fish River. The country over which we passed was perfectly flat, and in those parts where the Kaffers had not yet been, there was an abundance of long grass. On approaching the sea coast we observed a long train of fires... The flames ran in all directions among the long dry grass and heathy plants with incredible celerity. The face of the country for several miles was a sheet of fire ... reached the mouth of the Great Fish River where we pitched our tents for the night." [p. 184]

September — Suurveld, south of the mountains between the Bushmans and the Great Fish Rivers:

Barrow's description covers much of what has come to be called Valley Bushveld: "All the chasms [kloofs and river valleys] with which the plains in this part of the country are inter-sected, and the banks of all the rivers, the sides of the knolls and the range of the hills that terminates this division to the northward [the Grahamstown line of mountains, etc.] were covered with wood. This consisted generally of a tall luxuriant shrubbery out of which sprang up in places, sometimes singly and frequently in clumps, large forest trees. Of these, the *geelhout* [yellowwood, *Podocarpus*] was the most lofty, and being here disentangled from the pendulous lichen that cramped its growth in the great forests of Van Staaden's River [west of Port Elizabeth], showed itself a beautiful tree.

"An euphorbia [*Euphorbia grandidens*], throwing out a number of naked arms from a straight trunk thirty or forty feet high, held a distinguished place among the shrubbery. But one of the largest and most showy trees, at this time in the height of its bloom, was the kaffer's bean-tree, the *Erythrina corallodendrum* [*Erythrina caffra*], so called from the colour and resemblance of its large clusters of papilionaceous flowers to branches of red coral. Numbers of beautiful birds such as small paroquets, touracos, woodpeckers, and others, were fluttering about these trees for the sake of the juices yielded by the flowers. The coral-tree, like most dazzling beauties, has its imperfections: the leaves are deciduous, and the blossoms, like those of the almond, have decayed before the young leaves have burst their buds.

"Not so with the Hottentot's bean: the clusters of scarlet flowers intermingled with the small and elegant dark-green foliage gave it a distinguished place among the tall trees of the kloofs and the thick shrubbery on the sides of the swells. This plant is the African *Lignum vitae*, the *Guajacum afrum* of Linnaeus and the *Schotia speciosa* [*Schotia afra*] of the *Hortus Kewensis*. The wood, however, is not sufficiently hard to be converted to the same purposes as *Lignum vitae*, nor is the tree large enough to make it of any particular use. The seeds of this leguminous plant are eaten by the Hottentots and sometimes also are used by the Colonists.

"Two plants of the palm family were frequently met with; one the *Zamia cycadis* [*Encephalartos caffer*], or kaffer's bread-tree, growing on the plains, and the other, also a species of the same genus, skirting the springs and rivulets. The fruit of the latter was called wild coffee and substituted by the peasantry for this berry. [The latter would surely have been the palm, *Phoenix reclinata*, whose date-pips were used as a type of coffee by the 1820 Settlers who came to the Bathurst District 23 years after Barrow had been there.]

"The *Strelitzia reginae* also, now in full and beautiful bloom, grew everywhere in widespreading patches in the vicinity of the Great Fish River, but not one of the new species [*Strelitzia juncea*] discovered about twenty miles to the northward of Zwartkops River could be found among them. The cerulean blue nectarium of the *reginae* seemed to be uniformly faded and it lost its colour by a short exposure to the weather which did not appear to be the case with that violet blue of the *teretifolia*. The seed of the *reginae* is eaten both by the Kaffers and the Hottentots ... [cf. Barrow under 'Port Elizabeth to Sundays River' in 1797 for strelitzias north of Uitenhage.]

"A great variety of bulbous rooted plants were now springing out of the ground; and several species of those elegant families the *Gladiolus, Ixia, Morea* [*Moraea*], and the *Iris* [*Dietes*] were in full bloom.

"That singular plant of the *Tumus elephantiopus* [*Dioscorea elephantipes*], so called from a protuberance thrown from the root resembling the foot of an elephant, was met with only in this part of the country.

"Several species of *Xeranthemum* and *Gnaphalium* [*Helichrysum* and *Syncarpha*] decorated the grassy plains with their brilliant colours of red, yellow and silky white. The Dutch of the Colony name these flowers of seven years' duration [*sewejaartjies*], but in Europe we extend the idea of everlastings." [p. 188]

North side of Rietberg, the range from Alicedale eastwards to Grahamstown:

"Travelling along the feet of the Rietberg ... on the northern side, we passed several fine clumps of forest trees in the kloofs of the mountains and, among these, obtained three new species of timber foreign to the woods near Zwartkops Bay [Algoa Bay]. The face of

the country was here particularly rugged ..." [Probably down the New Year's River, past the southern slopes of the Swartwatersberg, 42 km west northwest of Grahamstown.] [p. 226]

End November — Just north of upper entrance to Baviaans River Valley, c. 45 km north of Bedford:

"The storm continued for a great part of the night and, on the following morning, some of its effects were seen in the wreck of a grove of tall mimosas [*Acacia karroo*], the greatest part of which was torn up by the roots. Such like storms are said to be very frequent in these great chains of mountains during the summer months ..." [p. 320]

30 November — Head of Baviaans River Valley:

"Passing over a rough mountainous country we halted on the 30th near the source of the Bavian's, or Baboon's River. It rises out of a chain of mountains in the Kaffer country, and joins the Great Fish River.

"Tall spreading mimosas [*Acacia karroo*] were here scattered over the face of the country and, with their new foliage of lively green, displayed a very beautiful appearance; they were also studded with clusters of golden flowers, not more pleasing to the eye than agreeable to the smell."

Notes that this part of the country was renowned for its honey: "... it was hanging in large clusters from almost every rock as this was the season of its greatest plenty and perfection. The Hottentots have a common observation among them that when the *doorn boom* [*Acacia karroo*] blossoms the honey is fat." [p. 321]

Early December — From Baviaan's River to the Kagaberg behind Bedford:

"From the Bavian's River we made an excursion, for the second time, into the Kaffer country, where we ascended the Kaka [Kagaberg], the continuation of the first range of mountains in the Sneuwberg. The summit was broken into hill and dale, and the surface beautifully varied with patches of green grass and clumps of tall forest trees. The thick and sombre foliage of the woods, throwing their deep shadows into the hollows, contrasted with the bright and lively green knolls of grass, and produced a succession of gleams and glooms that were extremely beautiful and pleasing. No part of Africa had yet afforded such grand picturesque and diversified scenery as this commencement of a double chain of mountains, and the intermediate forests, of which the eye, looking easterly, could discover no end.

"The trees that were most plentiful were two species of the Geelhout [*Afrocarpus falcatus* and *Podocarpus latifolius*], or Yew, some of which were from 20 to 30 feet in circumference and 60 to 70 feet in length.

"The summit of the Kaka mountain commanded an almost extensive view of the Kaffer country, as far as the seacoast to the south, and beyond the residence of the king to the south-east [Chief Ngqika]. The level plains over which the Kat [at Fort Beaufort] and the Kaapna [Koonap River at Adelaide] are seen to serpentize, those plains where once the Ghonaqua nation [Khoekhoe] tended their flocks and herds, now desolate, were laid as it were, at the feet of the Spectator." [p. 324]

1803 Van Reenen, D.G. in Blommaert & Wiid (1937)

3 June — Rautenbach's drift, 8 km southeast of Paterson [Sandflats]:

"This river flows into the sea. The situation closely resembles that of the Zwartkops River mouth and it is very good for sheep and cattle." [p. 153]

9 June — From Cookhouse, 21 km westwards to Somerset East:

"The luxuriance of the grass is like that of Zoetemelks Fontein [Sidbury]...and the climatic conditions are equally good for raising cattle and sheep." [p. 155]

26 June — Bedford to Fort Beaufort:

"Kafirland, so far as I have seen it, is a very pleasant region. It is flat country, dotted with small thorny bushes between which there is an abundance of grass. The further one goes into the country the more plentiful is the water. The climatic conditions and the soil are the same as at Bushmans River and from the Sundays River as far as Zwartkops River, except that here it is possible to divert the water with greater facility because the land lies lower and is flatter. The water flows from the mountains and the streams are nearer to the surface of the earth. It also appears to me that the country about Bushmans River, Sundays River, and Bruintjeshoogte is more suitable for sheep on account of the small salty bushes which are found there and not in Kafirland. Kafirland is very healthy for cattle, which are kept in great numbers." [p. 195]

1804 Lichtenstein, H. (1815)

January

Addo Heights, 11 km east of Addo:

"Our farther route was very pleasant, over a broad gently sloping hill, overspread from top to bottom with a number of shrubs and trees beautifully in blossom, particularly mimosas... The road had been cut through these shrubs, but was again half overgrown." [p. 417]

Hermanus Kraal [Fort Brown], 20 km north northeast of Grahamstown:

"It was evident here, from the more luxurious vegetation, that we were drawing nearer to the seacoast. The country was grown over with bushes and succulent plants between which were many footprints, winding about and crossing in every direction, made by the wild animals going to and from the river. The rhinoceros is very frequently seen in these parts ..." [p. 431]

A storm broke on the evening of their arrival at Hermanuskraal. "In the following days a reviving rain fell from time to time which soon made a surprising alteration in the appearance of the country. As it is naturally fertile, our wearied oxen soon recovered their strength... The insects and plants we collected here were most of them entirely new to us, nor did we find them again in any part of our travels ..." [These plants and insects not described.] [p. 433]

Agter Bruyntjes Hoogte, between Little Fish River and Bruintjieshoogte:

"This whole country is exceedingly propitious to the feeding of cattle although it has as arid an appearance as most other parts of the Colony. Probably a number of wholesome and nourishing plants grow here which is scarcely visible as the eye is transiently cast over the surface of the ground, yet which are easily found by the cattle. This part of African husbandry, I mean a knowledge of native plants proper for the feeding of animals, is exceedingly neglected ..." [p. 441]

June

En route to Kat River at Fort Beaufort:

Wild country, not mountainous; no roads; sometimes had to cut way through bushes. [p. 392]

1809 Collins, R. in Moodie (1860)

Swaershoek, Somerset East District:

"Although this quarter is considerably more elevated than most of the adjoining country, it abounds with excellent pasturage, and the cattle bred there bear as high a price as any in the Colony." [p. 6]

February

From Somerset East to Adelaide:

"The country situated between Agter Bruintjes Hoogte [Somerset East] and the Konaba River [Koonap] abounds in excellent fountains. The soil is good; and the timber growing on the mountains that border it on the north is superior to any within the Colony." [p. 18]

Koromoo [Kroomie, Fort Beaufort/Adelaide border]:

"... Koromoo then contained some water. Besides mimosas the country we had traversed that day [from the east] contains a great quantity of other small woods. There were several fine yellowwood trees growing on the banks of the Karoomo [Koromoo = Kroomie]."

After discussing the Winterberg, while he was at its southern base near present Adelaide:

"Two sources of the Konaba [Koonap River] are produced by it; another source called the Kowie comes from the continuation of the Kaffir Mountains more westwardly. [The Kaffir Mountains was the name given to the line of the Winterberg/Amathole range. In this case the Kagaberg behind Bedford is intended, and the river is the present Cowie River, not Kowie as spelt in the text.]

"...at the Kaka River which comes from the mountain of that name [Kagaberg] and falls into the Konaba." Collins rode for two hours west of the Kaga River and came to a place called Plattehuis, where a small hut had been erected some 20 years before "...when the farmers of Agter Bruintjes Hoogte were permitted to remain there during an extraordinary dry season. The next day we turned more south and after marching six hours we arrived on the highest part of the hills on the left bank of the Great Fish River. Towards the rear we overlooked the country that we had traversed this and the preceding day consisting of extensive plains, rich in pasturage, but unadorned by arboreus plants. In our front was a double range of mountains called Zuureberg and Rietberg which concealed the Zuureveld from our view.

"We now began to descend the slope of the river which we reached after a march of two hours through bushes. Some rain had fallen the day before and the river was much swollen... The river here must be about 30 yards in breadth and was thickly lined." [p. 49]

1813 Burchell, W.J. (1822)

Approaching Kommadagga and Swartwaterspoort:

Burchell, writing after his return to England and discussing plants he had found on 14 July 1811 at Karoopoort in Ceres District, western Cape, compares them to plant-types he found in 1813, two years later at Kommadagga and Swartwaterspoort in the Eastern Cape's Somerset East and Albany Districts. The chronology is confusing until thus explained:

"Four of the strongest and most characteristic features of the Cape botany, the *Erica*, the Diosmae and the Proteaceous and Restiaceous tribes [fynbos], entirely disappear; nor did I meet with any of them again until two years afterwards when I entered the same botanical parallel at Kommedakka [Kommadagga] and Zwartwaterspoort [Swartwaters Poort] lying in the same latitude as the Karoo Pass, but at 6 degrees longitude more to the eastward ..." [1: 208]

1813 Campbell, J. (1815)

19 April East of Port Alfred *en route* to the Fish River:

Open country: "The grass around us was tall, thick, and sweet; but we saw no other inhabitants than the wild beasts, and no other paths than those they made in travelling to pools of water."

Plains around Mt. Donkin [Round Hill], 21 km north northeast of Port Alfred:

"... we entered an extensive plain to which we saw no bounds before us, or to right... The plain was in many parts marshy owing to the late rains ..." [p. 112]

1816 La Trobe, C.I. (1818)

10 April Between Coerney and Addo Drift:

"By the way we saw abundant traces of recent works of elephants, trees pushed down or pulled up by the roots, and near a road a great quantity of fresh dung, as likewise a large thorntree with a stem nearly a foot in diameter standing topsy-turvy on its crown with only one large root at the top, all the smaller being devoured as well as the more tender parts of the bush and the leaves." [p. 239]

Slagboom to Coerney:

"For some miles we passed through detached woods, then gained an open uninteresting country ..." Reached Coerney after sunset. [p. 220]

11 April Left Coerney "... and arrived by an uninteresting road at Sand Vlachte [Sandflats, now Paterson], a farm in a dreary flat with mean-looking cottages, outhouses and Hottentot huts. Soldiers were quartered there ... [p. 221]

"We now proceeded towards the Zuurberg [Suurberg] and after some time entered a woody country. In one place a road has been cut through the bushes and wood, parallel to the old worn-out track. The nearer we approached the mountain the more were we entertained with the surrounding scenery, the road winding through narrow valleys or over eminences covered or crowned with wood." Began a climb which was very steep. [p. 222]

"After quitting the wood we found ourselves on a barren heath ...

12 April "Among other singular plants on the Zuurberg we noticed a species of *wageboom* [actually *Oldenburgia arbuscula*] with a much broader leaf than that which we had hitherto seen on the hills about the Kromm Rivier [in the Humansdorp District]. The outside was a dark green, the inside silver-grey covered with a white down." [p. 223]

From top of Suurberg travelling north towards Kommadagga:

"On leaving this place [on the Suurberg] we ascended to a wide waste similar to the Karroo ..."

Passed Kommadagga and went on towards the Great Fish River, where they camped. [p. 224]

13 April

Crossed the Great Fish River:

"This part of Caffraria presents itself with hills of moderate height and a smooth outline. The plain next the river and ascent towards the hills are studded with mimosas [*Acacia karroo*] and seem to be good grazing ground." [Possibly somewhere near the farm Steenbokshoek in Albany, northeast of Junction Drift where the Little and Great Fish Rivers meet.] [p. 226]

Refers to Caffraria as "... that benighted country in full view of which we travelled nearly the whole day at no great distance from the banks of the river through a dry barren waste." [p. 227]

14 April

Crossed the Little Fish River for the third time, *en route* to Somerset East:

"After crossing the river and reaching the top of the bank the country assumed the appearance of a park. The land was covered with short grass, and the thornbush, dispersed in clumps or standing singly, its great ornament."

Boschberg, Somerset East:

"The Boschberg ... is a beautiful mountain of considerable height intersected by many kloofs filled with wood, the intermediate eminence, like buttresses supporting the mountain. They swell towards the bottom into hills of fanciful shape covered with green sod of the richest hue excepting where the wood stretches from the kloofs over part of them. At the top of these buttresses runs a horizontal ledge of rock partly covered with bushes and creepers. A precipice of a red colour with grey veins and overhanging a wide kloof filled with timber-trees has a singular effect. The region beyond the rocky ledge is rough but grassy." [p. 228]

The farm of Dr Mackrill, near Somerset East:

"Its boundary to the east is a rapid brook proceeding from the mountain and emptying itself into the Little Fish River. The greatest part of the valley is sprinkled with thornbushes, some of which are of extraordinary size and beauty. The brook forms very fine cascades before it enters the river... The upper fall is over eight or ten ledges of rocks and the lower plunges in several streams into a deep basin. Large timber trees and wide-spreading bushes adorn the steep banks of the brook." [? Glen Avon.] [p. 230]

1819 Burchell, W.J. (1822)

Albany District (in a Report before Select Comm. London, from Ann. Register for 1819):

Question to Burchell: "Is the pasturage good?" Answer: "The District of Albany is very fine pasture country." [1: 20]

The Suurveld, Albany (In: Hints on Emigration to the Cape of Good Hope by WJ Burchell):

"Such a country is the southern part of the District of Albany known by the Dutch name of Zureveld (pronounced Surefelt) [suurveld] the boundary of which on the west is the Sunday River dividing it from the country of the Boors; on the south the ocean; on the east the Great Fish River separating it from the country of the Caffres; and on the north an inhabited part of the Colony. Comprising an area of about 80 miles by 50 miles measured on a map, or 100 by 60 of travelling distance." [1: 30]

1820 Donkin, R.S in Scott (1970)

22 May

Bathurst Village, 14 km north northwest of Port Alfred:

[Sir Rufane Donkin *in litt.* to Lord Bathurst] "Bathurst, from which I date this dispatch, is situated about three miles east from the left bank of the Kowie, and about 7 miles from the sea. The soil adjacent is the finest perhaps in the Zuurveldt, and close to the site of the town are large woods of fine timber, limestone, clay for bricks, abundance of water, and materials for thatching." [p. 9]

1820 Moodie, J.W.D. (1835)

From Sunday's River eastwards to the Bushmans River [*via* Addo Heights and Quaggas-vlakte]:

"The next stream we came to was the Sunday's River. We were a whole day in descending and ascending its opposite banks. The country was very similar to what I have already described along the Zwartkops and Kuga Rivers - bleak, bushy, and arid.

"There are a great number of elephants and buffaloes in the bushes along the course of the Sunday River... During the day they generally retire to the deep ravines in the sides of the valley, but in the night-time they are all in motion, wandering over the whole country ...

"On the eastern bank of the river we had to climb a very high and steep hill [probably Addo Heights] and emerged from the bushes on the end of a long sharp grassy ridge along which we travelled for some miles with the deep bushy ravine on either hand. The appearance of the country was totally altered. It consisted of high grassy hills of the most irregular forms divided by deep valleys sprinkled with clumps of bush and tall mimosa thorns [*Acacia karroo*] in all directions.

"I observed several round natural basins containing rain water and resembling artificial ponds. These singular excavations were generally on the top of the sharp ridges and appeared to be formed by the earth sinking in beneath them. [Moodie notes that the Dutch farmers there maintained that buffaloes, horning the soil, were the cause because the loosened soil was then blown away by the wind; they were more probably old sinkholes.] However this may be, the farmers are often glad to avail themselves of these periodical pools to water their cattle, for springs are very scarce in this part of the country. The more the pools are frequented the better they retain water, as the constant trampling of the cattle gives consistence to the soil and prevents filtration. By means of these occasional supplies of rain water the farmers, who have other places possessing constant springs, are enabled to keep a great number of cattle by removing them for a month or two when their grass becomes scarce.

"After winding along a succession of sharp irregular ridges, well covered with grass, we entered a long valley with low hills on either side called Quaggas Flakte. Here we saw great numbers of spring-bocks in troops of 50 or 100 together... There are a great number of large anthills along the sloping sides of the valley." [2: 44]

A Hottentot who had overeaten a fatty foodstuff "...became seriously unwell but recovered by chewing some dry roots of the sweet-scented flag or *Calamus aromaticus* [*Acorus calamus*]. This plant is very much used by the Dutch for stomach complaints and they generally cultivate some of it in wet places in their gardens." [2: 48]

early 1820s

From Jagersdrift [12 km east northeast of Alexandria] on the Bushmans River, 7 km to the present Whitney Farm [17 km east southeast of Alexandria]. Moodie's brother had been given ground there which he renamed Long Hope, later to be changed by another occupant to Lange Hoop:

"After crossing 'Jager's drift' we pursued our journey along a road excavated in the face of a steep woody bank on the margin of the river and which was so narrow in some places that any mismanagement would have precipitated our waggons into the water. The trees above us supported huge fragments of rock that had been detached from the precipices and seemed ready to break loose from their uncertain hold, and crush us to atoms in their course.

"We at length emerged from the bushes near a house occupied by a Dutch farmer... Their cattle and sheep were fat: they had cultivated several acres of land on a rising ground where their crops were secure from the occasional floodings of the river which occur every four or five years.

"It was with extreme toil that we ascended the steep and rugged bank on the western side of the river by a rocky path cut through the woods. We had now attained the general level of the country and in a couple of hours arrived at a little spring where my eldest brother had erected a temporary shelter with long poles fixed in the ground in the form of the roof of the house and covered over with long reeds. [2: 134]

"The country in which my eldest brother had now fixed his residence was exceedingly beautiful and fertile. With the exception of the Ceded Territory which we had just left [Peddie] we had seen nothing as yet to compare with it in point of verdure and productiveness, and for agricultural purposes I am inclined to think it superior to any other part of the southern coast of the Colony." [2: 136]

It extends "...for about 30 miles along the sea from the river [Bushmans] to the Sunday River [actually c. 75 km], and varies from 6 to 10 miles in breadth. At a greater distance from the sea the soil becomes drier and poorer, and the grass suffers more from the summer droughts.

"About half-a-mile from my brother's house an extensive forest of fine large timber commences and entirely covers a range of high hills which run parallel to the coast for upwards of 20 miles. This particular division of the District of Uitenhage is called 'Onder Bosjesmans Rivier'." [2: 137]

Whitney Farm and environs:

"A fine rivulet ran along the base of the wooded hills in our neighbourhood and a number of Dutch farmers had built their houses on its banks, or near the outskirts of the forest.

"The soil in most of these situations is so exceedingly fertile that though they have cultivated the same ground for ten or fifteen years without manure, they still calculate on reaping from 40 to 60 returns of wheat, and yet the land does not deteriorate.

"This part of the district is so well supplied with rain or heavy dews that the crops never suffer materially from drought.

There is a narrow strip of open country extending for several miles between the woody hills and the sea which is still more fertile and beautiful ..." [p. 140]

Moodie compares the country west of the Bushmans River at Whitney, with that east of the Bushmans, both areas along the coastal belt:

"The sea-coast of the District of Albany to the eastward of the Bosjesmans River is nearly equal to it in point of verdure but the soil is not by any means so rich." [2: 136]

Into the Kaba valley, 10 km southwest of Alexandria [Moodie went to see ground he had applied for]:

"... we descended from a beautiful verdant plain at the edge of the forest into a deep chasm which divided the high range of hills towards the sea. We got into a labyrinth of elephant-paths ... and followed the winding course of the river as well as we could, crossing it in a hundred places, sometimes dragging our horses through the tangled mass of the jungle or scrambling along the face of a rocky precipice. In some places we found a little grassy peninsula clear of wood where we could see about us, but in general we had nothing to guide our way but the course of the stream, the banks of which were covered with tall trees and bushes with hooked thorns which are here expressively denominated 'wagteen bityes' [*wag-'n-bietjies*] or 'stop a littles' [e.g. *Scutia myrtina*, or *droogmykeel*; *Capparis*, etc.].

"At length, after a toilsome journey of 6 miles in which we had not encountered any elephants, we suddenly emerged from the forest upon a level plain about 2 miles long and half a mile broad covered with the most luxuriant herbage.

"On either side of this beautiful glen rose steep grassy hills, 500 or 600 feet in height, having their summits partially covered by the edge of the forest. Numerous steep woody ravines descended into the plain on either side; and, its opening towards the sea being obstructed by high sandhills, the rivulet, having no outlet, had formed a small lake at the bottom of the valley. Surrounded on all sides by high hills and woods, a more wild and sequestered spot could not be conceived.

"The ground was everywhere turned up by elephants and wild pigs. In wading through long grass we started three of the latter... In one of the little ravines we found nine elands quietly grazing on the side of a steep hill ...

"... I had never before met with any soil bearing such indisputable tokens of fertility as that of the 'Kaba', as this alluvial valley is called by the Hottentots and Dutch. The level bottom is everywhere covered over with a rich black vegetable mould from 1 to 3 feet in thickness containing land and seashells in considerable quantities.

"The sides of the hills were adorned by long grass to their very tops and here and there rocks of soft limestone showed themselves through the soil. We observed several deep ruts resembling waggon-tracks occasioned by the elephants sliding down the hills where it is too steep for them to keep their feet. When these animals come to a place of this kind they sit down on their haunches and, supporting themselves by their forelegs, allow themselves to descend without any effort, leaving two deep ruts behind." [2: 142]

Kaba Valley, 10 km southwest of Alexandria:

"The land granted jointly to my brother D[onald] and me consisted of about 5 000 acres in two lots, included between the forest and the sea-coast. One of these places, which I had described, had a constant stream of water taking its rise in the woods.

"The other, though equally beautiful and fertile [Groote Valley] was only supplied with water by a natural pond formed by the rains which was subject to be dried up in the course of the summer.

"We therefore decided to fix our residence at the former, the name of which we altered from 'Kaba' to Hoy, after our native island of Orkney [Scotland]." [2: 148]

Moodie left Whitney, his eldest brother's location, to go to live at Hoy:

"We descended through a narrow strip of wood into an extensive romantic savanna covered with rich pasturage and surrounded by high hills partially clad with forest trees. After passing over this beautiful spot we entered the forest which was about 2 miles broad at this place" and went to a farmer's house. [2: 149]

"This farmer's estate was situated in a similar valley to our land [Hoy] from which it was divided by a steep ridge of high hills thickly covered with wood. We were therefore obliged to descend to the bottom of the valley near the sea and, ascending a low ridge

of what had originally been sandhills but were now covered with rich soil and long grass, we pursued our journey round the corner of the wooded hills to Hoy. A parallel range of sandhills appeared on our right; on the side towards the land these were covered with low jungle, brushwood, and creeping plants which, decaying in the process of time, created a soil over the surface of the calcareous sand and are succeeded by luxuriant herbage.

"We had an extended prospect from the road we were travelling for more than 60 miles along the coast of Algoa Bay which was defended from the ocean by an unbroken barrier of high sandhills lashed by an unceasing surf." [2: 153]

His farm in the Kaba:

Chose the site for his house "…where the little stream emerged from the deep woody ravine at the head of the valley, it took a turn and flowed round the base of a steep hill crowned with a perpendicular crag of limestone, and here, the banks being level, it diffused itself over several acres of rich alluvial ground covered with long rushes. At the base of the hill there stood a tall yellowwood tree with spreading branches ..." where Moodie made a beehive hut for shelter. We "… waded into the water with our sickles to cut rushes to cover it." [2: 154]

In the Kaba valley a storm broke in the night: "We heard the aged trees rending in the depths of the forest with the violence of the blast... [That storm had broken over the whole region and caused much damage throughout Albany generally.]

"At length the stream, which had been gradually swelling with the torrents which descended from the deep ravines in the wood, broke over its level banks and laid the upper end of the valley under water ... the water was running in deep channels ...

"The first dawn of morning discovered to us that the lower part of the valley, where there was no outlet for the water, was covered by a lake a mile and a half in length, and several broad streams still continued running into the lake from the banks of the river." [2: 164]

Moodie had a Hottentot employee he used when hunting: "He was a complete wild man of the woods... I was often surprised with his nimbleness in climbing the highest trees to get at the wild vines growing over the tops ... he would take hold of one of the 'baboon's ropes' which hang in festoons from the branches and, in a few seconds, he would be perched like a crow on the top ... and flinging down whole bunches of the fruit. [2: 183]

"I occasionally employed my people at spare times in gathering wax-berries [*Morella* (= *Myrica*) *cordifolia*] that grow in great abundance upon small bushes in the sandhills near the sea and yield a substance partaking of the nature of wax and tallow which is mixed with common tallow and used by the colonists for making candles. The berry is about the size of a pea, and covered with a bluish powder. They are gathered by spreading a skin on the sand and beating the bush with a stick. When a sufficient quantity of the berries is collected they are boiled with a large quantity of water and the wax is skimmed off as it rises. The wax is then poured into flat vessels and allowed to cool when it becomes hard and brittle and has a metallic sound when struck. The cakes thus formed are of a deep green colour and are sold for the same price as tallow. The wild pigs devour these berries when they come their way, and seem to be very fond of them." [2: 197]

After 3 years on his farm at the Kaba, Moodie moved to his other place 'Groote Valley'. He found his health affected by the changing temperatures and nature of the soil in the deep Kaba Valley. [Grootvlei is 11 km south of Alexandria and 9 km east of Kaba.]

Went to "…'Groote Valley' or the great lake, so called from a large pond of rain water it contains, which however was occasionally dried up after long droughts in the summer season. I determined to fix my abode here for the future as, in the event of the natural pond failing, I had little doubt of procuring a sufficient supply of water by digging in the sand along the beach." [2: 199]

Groote Valley:

"…commanded an extensive prospect along the coast from Cape Padron [Cape Padrone, 16 km south southeast of Alexandria] near which it is situated, to Cape Reciefe [Cape Recife] the western extremity of Algoa Bay. The Groote Valley is about 6 miles in length extending in a narrow strip between the thickly wooded hills and the low bushes along the beach.

"The situation I selected for my hut was on the top of a steep grassy hill which overlooked the sea, above which it was elevated about 300 feet. [2: 200]

"About a mile inland from my house which was in the middle of the place, there was a deep hollow surrounded by high wooded hills with long ravines descending into it from all sides. The large natural pond from which the place derived its name, and the two smaller ones, are situated in this hollow and were supplied with rain water from the hills.

"To the westward of my hut was a long narrow plain nearly on a level with the sea, from which it was separated by a chain of low sandhills covered with small trees and bushes; and behind this plain rose a parallel ridge of high grassy hills with a belt of wood covering the steep side fronting the sea.

"Further inland rose a still higher range of rounded hills covered by the margin of the extensive forest, to which I have already alluded, and intersected by long ravines in all directions... [2: 202]

"Nothing can exceed the richness of the soil and luxuriance of the herbage on this place, even to the summit of the highest hills wherever they are clear of wood.

"The trees here, as in other parts of the Colony, are almost all evergreens, and during several months when the kaffre-trees [*Erythrina caffra*, *kaffirboom*, or coral tree] are covered with their large red blossoms, they impart a rich purple tinge to the forests.

"The kaffre-tree has been described by Bruce who has given a most accurate drawing of the flower and the pod: the latter contains several red beans, which, he says, are used in the eastern countries by the name of 'carats' for weighing gold [the lucky bean of children]. It obtains its colonial name of kaffre-tree from being found chiefly in Kaffreland and the neighbouring parts of the Colony. When the blossoms of this beautiful tree make their appearance, the Kaffres begin to sow their grain, and a surer criterion for judging the proper season could not be found." [2: 203] [The Xhosa name for the coral tree is *umSintsi*. Their word for the month of September is therefore *eyomSintsi*. The tree flowers in September and October, normally at the beginning of the spring rains. Unfortunately the use of *eyomSintsi* is falling into disfavour and is being replaced by an anglicisation, *uSeptemba*.]

Moodie speculates on the origin of the hills and notes strata of "…hard grey sandstone which makes its appearance on the beach in several places where strong springs of water escape into the sea." [2: 204]

Giving his ideas on the development of the hills from initial sandhills covered with vegetation, he adds: "Assuming that the average depth of the vegetable soil is about 2 feet and that the soil is annually increased about a fourth part of an inch by decay of the grass, a hundred years would be more than sufficient to convert bare sands into a rich soil covered with luxuriant herbage." [2: 208]

His hut was "…within 300 yards from the edge of the forest." [2: 211]

Left Groote Valley, via Alexandria Forest, for Grahamstown:

"We started from Groote Valley on horseback, and after riding for 6 miles through the forest by following the elephant paths, we reached the open district on the other side and continued our journey to Grahamstown by Jager's Drift on the Bosjesmans River." [2: 233]

Bushmans River [probably at Rautenbach's Drift] to Grahamstown:

"The character of the country along the Bosjesmans River which we next crossed, is so similar to that of other rivers I had lately passed that it requires no description. Notwithstanding its long course it frequently stands in brakish pools during dry seasons.

"The country to the eastward of the Bosjesmans River gradually assumes a more mountainous character and the soil becomes poorer and more sandy. The limestone disappears entirely... [2: 48]

"In descending a hill we came suddenly in view of Grahamstown which is situated in a kind of basin with high rocky and barren hills on one side and rounded conical hills on the other, divided by long sloping valleys sprinkled with mimosas [*Acacia karroo*] and clumps of brushwood. The grass was verdant on all sides, but the number of broad waggon-roads ascending the heights in all directions had a most unsightly appearance. The town is built on an eminence in the centre of the valley. [2: 49]

"The mimosa tree is still preserved in the middle of the principal street, under which Colonel Graham lay when he chose the site of the future town which now bears his name... [In 1810–1812; the site is commemorated by a memorial in High Street, just west of the Cathedral.] [2: 50]

"Colonel Graham's judgement in selecting the present site for the town has often been called in question with some appearance of reason. The principal objection against it is the difficulty of communication with the most fertile portion of the district which lies beyond a steep range of rocky mountains on the south side of the town and towards the seacoast. The roads across these mountains are so bad that they form serious obstructions to the farmers in bringing their produce to the only market in this part of the Colony... [Graham had chosen the site for military purposes.] No spot commanding a sufficient supply of water for the use of the inhabitants could have been chosen better suited for this purpose than Grahamstown." [2: 52]

From Grahamstown, *via* Belmont Valley [southeast of the town] and Blaauwkrantz, to Kaffir Drift on the Great Fish River:

"On quitting the town we passed through a long narrow valley with numerous little settlements occupied by our countrymen. A little stream wound along the bottom, crossing the road in several places, and the sloping sides of the hills were thickly sprinkled with mimosa thorns [*Acacia karroo*]. The bark of the mimosa is generally used in the Colony for tanning leather and the decayed trees supply the principal part of the firewood used in Grahamstown.

"We soon quitted this pretty valley and, ascending the hills to our right, travelled along the top of a high ridge of rocky hills from whence we had an extensive view to the sea coast at 30 miles distance over an endless succession of grassy ridges of nearly the same height, divided by deep woody ravines. Even at this distance we could perceive that the country improved in verdure as it approached the coast, but its general appearance was tame and uninteresting from want of variety." [2: 56]

Rested at Blaauwkrantz, 18 km east southeast of Grahamstown:

"This singular spot which is called Blaaw Krantz, or the Blue Rock, deserves a particular description. The little stream which supplies Grahamstown with water flows for several miles along the narrow valley through which we had been riding until it reaches Blaaw Krantz where it is met with another rivulet from the opposite extremity of the valley and, both uniting into one, find an exit towards the sea by a tremendous chasm with perpendicular rocks on either side about 300 feet high which runs at right-angles to the course of the valley.

"It is remarkable that this chasm is formed through one of the highest parts of the long ridge which bounds the valley to the south side... The tops of the hills on either side of the chasm are so exactly on a level, and so much higher than the sources of the streams that it cannot be supposed for a moment that the accumulated water can ever have risen to such a height as to have worm a passage for itself towards the sea.

"The entrance to this wild chasm is partially blocked up by large rocks firmly wedged together with the edges of the strata downwards, as they have fallen from the precipices... [2: 60]

"The Blaawkrantz is a favourite resort of Kaffres in their plundering expeditions as they can easily conceal themselves among the wood and bushes in the chasm where they stand little risk of being overtaken by the colonists. The stream which has found this singular passage to the southward after running for about a mile between perpendicular crags and high trees and jungle, at last gains a more level tract of country and forms the Kowie River which winds its way through deep woody ravines until it discharges itself into the sea at 30 miles distance." [2: 61]

Kaffirdrift, on the lip of the Great Fish River valley, 27 km northeast of Port Alfred:

"The military post of Kaffre Drift is situated on the edge of the high bank above the Fish River, and a road has been excavated in the face of the precipitous descent which leads down to the ford. Thousands of tall euphorbias resembling chandeliers were bristling up above the bushes and small timber that covered the sides and bottoms of the deep channel of the river. [2: 62]

"The Fish River is exceedingly rapid at this point during the ebb-tide and, in crossing it, should the horse of the traveller stumble among the slippery rocks, he stands a good chance of being carried down the stream into deep water and get drowned, an accident which had happened a few days before... [2: 63]

"No road had been made on the opposite bank and we had to lead our horses to the top, which was about 400 feet above the river, through thick jungle, huge rocks, and euphorbias which had been overturned by elephants. We saw fresh tracks of these animals in great abundance." [2: 64]

1820s

From Trompettersdrift [40 km east of Grahamstown] on the Great Fish River, towards Grahamstown:

"The road from Trompetter's Drift to Grahamstown passes through a rocky and arid country which affords tolerable pasturage for sheep, but the larger cattle were in poor condition.

"The mountains near Grahamstown form the boundary between two different kinds of country, all the lands to the northward of them for several miles being arid, while the tract of country extending from the mountains to the sea is verdant and productive but better adapted for cattle and horses than for sheep." [2: 130]

From Grahamstown to Jagersdrift, 17 km south southeast of Salem:

Leaving Grahamstown "...we crossed the mountains behind it by a dangerous and rugged road which the government have taken little pains in improving though it communi-

cates with the more fertile parts of the District of Albany... To avoid this execrable road the farmers are compelled to make a circuit of several miles in bringing their produce to market... The worst part of this road is on the south side of the mountain where it descends in a direct line from the summit to the bottom of a deep ravine, when it again ascends another mountain of inferior height by a winding course and, after skirting its base for a few miles enters an elevated plain intersected with deep woody ravines with small rivulets running through them.

"After crossing the mountains we pursued our journey along a high, level tract of country towards 'Jager's Drift', or Hunter's Ford, which is about 8 miles from the mouth of the Bosjesmans River [direct]. The country improved in verdure as we approached the coast and the cattle were in better condition, though the grass was not of the most nutritive quality... The stream winds its way through level plains covered with soft nutritive pasturage and sprinkled here and there with clumps of small wood and bushes. The steep hills on both sides of the valley were thickly covered with low wood and bushes overtopped with tall *Euphorbia* growing among the rocks. [2: 130, 131]

"About half a mile above the ford, a perpendicular rock composed of horizontal strata of red sandstone rose to a height of 400 or 500 feet above the river which washed its base. [2: 132]

"The action of the sea ... still flows up to the ford... [ebb-and-flow]." [2: 133]

Hermanuskraal [Fort Brown], on the Great Fish River:

At the military post: "We crossed the Fish River just in time ... when it swelled to such a degree in consequence of rains in the interior that it became impassable for several days... [2: 223]

"Nothing can be wilder and more romantic than the scenery along the Fish River near Hermann's Kraal. The steep rocky faces of the hills are everywhere covered with low wood and bushes, and here and there might be seen a lofty *Euphorbium* shooting up its tall white trunk and green angular branches. We ascended from the deep bed of the river by a long ridge with a precipice on one side of it, the base of which was washed by the Fish River." [2: 234]

1820 Philipps, T. in Keppel-Jones (1960)

5 May — Camped on the bank of the Sundays River:

Which "... was so low that I crossed it on foot... The bush began to be much thicker at this spot ..." [p. 49]

6 May — Addo Heights:

"... at sunrise ascended Addo Heights from which there is a most beautiful prospect of Algoa Bay, etc. The ascent is through bushes of evergreens, many blooming, and if the waggons deviate from their track the most aromatic odour scents the air from the wheels crushing the branches, although not always of an agreeable flavour." [p. 50]

10 May — Down Belmont Valley [Blaauwkrantz River] *en route* to Bathurst, 5 km east of Grahamstown:

"The country is beautiful all the way thro' a valley surrounded by high hills interspersed with mimosa [*Acacia karroo*] thorn; the Country is also well watered. [p. 52]

"On leaving the winding road thro' the mountains we open on a spacious plain, with no timber and scarcely a bush to be seen. After a walk of 3 miles we arrived at my location ... there was scarcely a vestige of any wood and, it being an extensive plain, we considered we had a full view of all that was to be seen, and we had left the day before such charming places." This was just south of Waaiplaats. [p. 53]

To Pigot Park Farm, 17 km east of Grahamstown, at Blaauwkrantz:

"The country is beautiful all the way through a valley surrounded by high hills interspersed with the mimosa thorn [*Acacia karroo*]; the country is also well watered."

11 May — Pigot Park (Major Pigot's): "The scenery is most romantic, hollow wooded glens and a fine spring of water; after this place the country changes much, the road winds through high naked hills" on its way to "... Waaiplaats (Vooy Place)," 30 km north northwest of Port Alfred. [p. 52]

12 May — Along the Blaauwkrantz River:

"On leaving the winding road through the mountains we open on a spacious plain with no timber, and scarcely a bush to be seen." Three miles further on they came to Philipps' location, which he later called Lampeter, after crossing the Waaiplaats open grassveld.

At the ruins of the house, which he then restored "... there was scarcely a vestige of any wood and, it being an extensive plain, we considered we had a full view of all that was to be seen."

14 May — Lampeter Farm:

"We took a long walk down the glens ... and discovered two fine woods full of the finest timber... [p. 53]

15 May — "My carpenters are busy cutting timber for the roof and the rest cutting rushes for thatching; they grow very long, above six feet.

"The house is situated on a gentle rising hill but no trees very near except a few scattered thorny mimosa. On one side at a distance is a pretty little grove, and on the other a naked reef of stone, before and behind an immense plain covered with a very good grass, at the termination of which we could see some very high hills. The woods and the beauties of the grounds are concealed from view of the house, a beautiful stream of water runs at the bottom of the hill in front of the house... [Thus the house would have been on the upper and northern portion of the farm, where the open grassy plains drop down into the Torrens River, near Clumber below.] [p. 54]

"I have a beautiful stream of water before the house, the farm has the appearance of a fine level down, but the grass is equal to the richest meadows in Wales. I only await the arrival of the plough. I have no growth to grub up, no wilderness to burn. My garden is digging, it consists of two acres enclosed, the whole of which we can irrigate, the soil is excellent, we have almonds raised from stone, we have a spring in one corner of the garden and intend planting willows over it. The palm tree (or as the Dutchmen call it the Caffre cafee) grows nearly round it, it bears a yellow berry resembling coffee... (Footnote: *Phoenix reclinata*, an indigenous palm commonly called the wild-date palm [grows commonly along rivers in Bathurst])." [p. 70]

Trying to plough virgin ground without a proper plough: "... the land was difficult to break up, never having been done perhaps since the creation of the world. With me the root of the wild vetch [unidentified Fabaceae] was worst while others had to grub up the roots of the thorny mimosa." [p. 75]

7 June — Kowie Bush, 10 km west of Bathurst:

"We now came to Kowie River Hill, the ascent is very abrupt and through high bush which throws a gloom... It is marked on the map 'difficult and dangerous on account of the Caffres and Elephants' ... the former lived for months on berries, roots, etc." [p. 55]

9 June — Approaching Addo Heights from the east [from Paterson]:

"It is impossible to give you an adequate idea of the greatest part of this ride without requesting you to call to your membrance some of the finest pleasure grounds you have ever seen, and after all it will fall far short. The whole scenery immediately around appears as if it was kept in order by innumerable gardeners. The grass was sprouting out perfectly green as if it had been newly mown... The road smoother than any gravelled walk, frequently serpentine. The clumps of shrubs with leaves of various hues of green, some blooming, others seeding. geraniums [*Pelargonium* spp.], with other creepers ascending the stems, then falling gracefully down the branches. The beautiful plumage of the birds... A bushbuck darting now and then from one shrubbery to another ..." [p. 58]

Near the Sundays River at Addo:

"I passed the spot where we had outspanned coming up [5th May] but it was scarcely to be traced, so many waggons had passed since and a scarcity of feed for the cattle was the consequence. This is much felt in a country with so little water, as their stages are so arranged as to unite the advantages of pasturage and water. The Sunday River was empty as before... The bush about this place is very thick and they frequently kill what is called the Tiger close to the [military] post." [p. 59]

1820 Pringle, T. in Robinson (1951–1952)

22 September — In a letter to Sir Walter Scott, the Scottish author and poet, regarding Baviaan's River valley, 18 km northwest of Bedford:

"The scenery is in many places grand and picturesque and (excepting the very different aspect of vegetable nature) not unlike some of our rugged Highland Glens. Every now and then the hills recede a little and leave some rich tracts of valley land on the banks covered with scattered mimosa trees [*Acacia karroo*] and evergreen bushes. The hills are in some parts masses of naked rock but more generally covered with tufted grass and scattered shrubs. In one of the extensive kloofs, as they called them, that runs to the eastward, is an intensive and impenetrable forest of natural timber - the only forest indeed in this quarter of the Colony. But this we have not seen, being distant from our route." [p. 53]

1820s **Rose, C. (1829)**

Grahamstown:

"Graham's Town, now a large, ugly, ill-built, straggling place containing, I should think, nearly 3 000 inhabitants and soldiers, was a few years back only a military post, and the mimosa tree [*Acacia karroo*] stands in the principal street beneath which it is said the first English officer, Colonel Graham, who led a military party there, pitched his tent... [p. 45]

"Graham's Town lies in a hollow surrounded by high green hills on which are clearly traceable to a great extent the roads branching out like radii from the centre... These hills possess no beauty of form and never rise into magnificence (at least not for Africa), but there are many glens of calm pastoral beauty among them, and many abrupt ravines dark with trees, and rich in every flower that loves the shade. And there are openings, poortes as they are here called, bounded on either side by high precipices from which hang branches of graceful and feathery foliage, while in the hollow flows a stream ... now lost in the deep shade cast by the magnificent yellowwood trees. [p. 47]

"... among the hills ... the grey weather-stained rocks ... give shelter to the various *Proteas* with their rich blossoms and to many other mountain plants." [p. 48]

mid-1820s Grahamstown to the Kap River:

"The last week has to me been one of delightful excitement. I have rode over 350 miles, have been amidst new scenes, new trees, new flowers, new animals, and a new people. The country through which we passed ... is totally different from that about the Cape, being covered with grass which is, after rain, of the richest green, and large tracts frequently bear a striking resemblance to English park scenery; wanting, indeed, its forest-trees, for the timber in the open country does not rise to any size, but fully atoning for this want by the beauty and variety of its shrubs and flowers; the palm-like *Euphorbia* with its naked trunk; the mimosa [*Acacia karoo*] with its delicate green, rich yellow blossom, and large milk-white thorn; different jasmines with white clustering flowers relieved by their dark foliage; the *spek-boom* [*Portulacaria afra*], food for the elephant almost hid by the ivy geraniums [*Pelargonium peltatum*] rising to its top and crowning it with purple blossoms; the various parasitical plants; the uncouth aloes and all those strange unnatural snake-like plants that creep along the ground, and are known to your greenhouses... [p. 70]

"Then the shadowy dimness of the scenery of the river's banks, dark with its giant trees festooned with rope-like creepers, and the high weather-stained rocks covered with trailing plants ...

"... our party had halted on the Kap River near the site of an abandoned military post." [Near the graves of 3 English soldiers.] [p. 72]

Great Fish River, possibly near the Kap River, where he was stationed:

"I had been told of a wild glen near the Great Fish River which contained caverns, formerly the retreats and habitations of the Kaffers, and, accompanied by a Hottentot, I rode in the direction pointed out. [He had engaged a young Hottentot boy as guide.]

"I left my horse and attendant at the edge of the kloof and descended the steep side from rock to rock, clinging to the branches of the trees, the wild grey trunks of which shot out from the rifted cliff, and at length reached the caves. I crept into them on hands and knees but found it impossible to penetrate far on account of the narrowness of the opening and the dirt of the rock-rabbits, their present inhabitants.

"If I was disappointed in the caverns it was not so with their situation which was singularly wild and picturesque, for, from the weather-stained and craggy rocks that rose above their entrance, hung the ice-plants and many fantastic creepers and rock-plants, with the twisted branches and trunks of trees met above throwing the scene into twilight gloom.

"I returned to my Hottentot and sent him round with the horses with directions to wait while I penetrated through the thick wood and jungle that filled the dark hollow of the glen, on one side of which rose the cliff ..." A stream flowed over a rocky bed "... now in many parts dry while in others the water lay in deep black pools rendered still darker by the giant branches of the shadowy yellow-wood tree, the foliage of which is so gloomy... Under high dark trees on whose trunks the damp green and brown mosses grew and from whose branches depended the unsunned creepers dipping their tendrils in the stream or clustering in dark luxuriance on its banks; through the thin stems of the kaffer coffee [*Phoenix reclinata*] which, generally low, here assumed the dignity of a tree throwing out its beautiful palm-leaves from a trunk of 20 feet in height, bending over the water ..." [p. 97]

Fish River Bush near Grahamstown:

"The country I was now traversing, that through which the Great Fish River winds its course, is of a very singular character. In many parts it is covered to an immense extent by a thick jungle called the Fish River Bush ... hill and hollow are equally clothed with the same dusky foliage. In others the rider passes over vast naked plains ..." [p. 122]

He describes a bank along the river "... richly covered with flowering shrubs and plants, among which the *Strelitzia regina*[*e*] shone pre-eminent, while the *Euphorbia*, so characteristic of African scenery, that strange tree whose burning milk is said to be the food of the rhinoceros, shot up its palm-like form into the bright sky ..." [p. 123]

1820 **Shaw, W. (1860)**

Salem, an 1820 Settler Location, 18 km south of Grahamstown:

Assagaay Bosch River [Assegaai River]: "It consisted of a series of valleys of various and unequal width, and followed the winding course of the river which had its source in the Zuurbergen, a range of mountains not far distant to the north ... although at the time of our arrival it was flowing, yet we afterwards found that for several months of the year it does not flow, but, like many periodical streams called rivers in southern Africa, it consisted chiefly of long reaches of comparatively deep water but with occasional intervals of from 10 to 30 yards in width, called 'drifts' or 'fords' where, excepting after heavy rains, it was generally possible to cross the head of the stream dry-shod. In many parts the water was brackish but it afforded an abundant supply for all ordinary purposes ... while at various points there are valuable and never-failing springs of water of the best quality for drinking and culinary purposes.

"The hills bounding the succession of long, low valleys on both sides of the river wind gently down from the extensive flats or plains which extend for many miles on the common level of the country. These plains, as well as the connecting slopes, are covered with grass, affording, in most seasons, an abundant supply for the cattle. The sides of the hills descending to the valleys are in many parts variegated with patches of wood of several varieties affording abundance of fuel and of poles, etc. for building and other purposes. The bottoms by the river were in most places nearly destitute of trees and presented a great extent of land ready to receive the plough." [p. 38]

The Albany Zuurveld, as found by the 1820 Settlers:

"Excepting during very severe droughts the country is covered by a coarse grass and usually has a verdant aspect. The mimosa [sweet-thorn, *Acacia karroo*] studs the plains and slopes of the hills. In many parts a thick shrubbery grows in patches, as if planted for ornament, and gives the country a park-like appearance, while in other places, favoured by shelter from the high winds, trees of a much larger growth shoot up to a considerable height, among which are most conspicuous the straight and tall *Euphorbia* [probably *Euphorbia grandidens*] with their naked and melancholy-looking branches, relieved, however, by the *Erythrina cafra* [*caffra*], or *Corallodendrum*, known among the Dutch farmers and English colonists as the *kafferboom*. This often grows into a large and umbrageous tree and is sometimes met with standing apart. In the spring season it is covered with innumerable blossoms of a brilliant scarlet colour giving it a very gorgeous appearance. I saw some poles of this kind of tree planted by a Dutch gentleman before his house in Graham's Town in the year 1820. They struck root and have grown into large and highly ornamental trees still standing in the High Street where they were originally planted." [p. 47]

Clothing: "At this period I was obliged to ride about the Settlement dressed in sheepskin jacket and trowsers, with a broad-brimmed hat made from the leaves of the Palmiet which grew in some of the streams." [p. 56]

Grahamstown:

"Graham's Town is situated in an extensive valley on the northern base of the Zuurbergen whence arise the sources of the Kowie River. It is watered by several small streams that, issuing from the mountain side and flowing down natural channels which they have scooped out for themselves from in the deep soil, divide the town into several ridges of nearly equal extent running parallel with each other ...

"In some of the streets, especially one side of High Street, a row of oaks, *kaffir boom* [*Erythrina caffra*], and other trees have been planted near the kerb stones of the causeways which afford pleasant shade to the foot-passenger or lounger during the intense heat of the summer day ..." [p. 76]

1820 **Sheffield, T. (1884)**

Grahamstown, in the valley at the headwaters of the Blaauwkrantz River:

"... it is situated in one of the most beautiful valleys perhaps to be found within the wide extent of South Africa. Encompassed on one side by the Zuurberg range ... and on the other side of the circle by the elevated plateau to which has been given the title of the Grahamstown Flats... It is intersected by branches of the Kowie stream which have their rise in the surrounding hills and, at the time when Colonel Graham selected it

as an encampment [c. 1810], the banks of the little rivulets were covered with mimosa [*Acacia karroo*] and other bushes indigenous to these parts.

"The hills were not, however, quite so bare as we find them at the present time [c. 1990]. In Goodwin's Kloof [western outskirts of Grahamstown], below Allison's [or Alison's] Quarry, giant trees formed a miniature forest; the valley in which the Cradock Road dam is now situated was studded in a parklike manner with mimosas [*Acacia karroo*]; Oatlands Park was a denser and more extensive bush even than it is at present; and the other kloofs running down from the flats carried a tolerable quantity of trees of various kinds.

"The ridge which High Street now occupies was also studded with mimosas [*Acacia karroo*] and it was under the shade of one of these, standing within the memory of many of this generation, somewhere in front of St Michael's Temporary Church [Anglican Cathedral in High Street] ... that Col Graham pitched his tent, and on the branches of which he first hung his sword ... a morass which existed where Mr W Gilbert's residence now stands in Somerset Street, and another on the opposite side of the ridge, known in later years by the unclassical and hibernian name of 'Bog-na-fin' [between African Street and New Streets], being a favourite resort for snipe and other fowl. [p. 202]

"When the first Settler wagons arrived or passed through the town, streets were not formed, and they outspanned where High Street now is ... the Settlers' oxen grazed [there] and they drank at the morass previously referred to on the low grounds on which the late Mr Gilbert's properties now stand, and at the reedy pools on the river banks at the back of New Street ...

"There were no wagon-roads between Grahamstown and Port Elizabeth in 1820, and those of the Settlers who came through this way had to cut roads for themselves through the bush as they travelled, the grass being often knee-deep." [p. 210]

1821 Philipps, T. in Keppel-Jones (1960)

16 February — Lampeter Farm, between Clumber and Martindale:

"The hottentot fig [*Carpobrotus edulis*] is another species of fruit much esteemed by the Natives. The plant grows low and is a runner, the leaf is very thick and juicy and is used by the Hottentots as a Sovereign remedy for any bruise or sore, and they take it for many complaints. The fruit is in shape like a fig but the inside rather resembles the strawberry, both in taste and appearance.

"We have the great advantage of being able to irrigate the whole of the garden. It has quite a foreign appearance, the walks in some places shaded with Indian corn and in others with a beautiful shrub called the Caffre Coffee [*Phoenix reclinata*] which bears a small berry resembling coffee. The young sprouts when dried and split can be platted, and it makes very good sunhats, rather coarse but a tolerable colour. We have made a hat for Papa and Edward, and are now making them for ourselves, they are very cool and light ..." [p. 85]

April — Along the banks of the Kap River, from its confluence with the Great Fish River, c. 5 km from Fish River Mouth:

"... we walked up through the bushes by the side of the Cap River and through paths formed by the hippopotami. There were traces of where they had been the night before. No shrubbery could be planted with greater art, the shrubs were some flowering and others with berries, and amongst the whole the gaudy and singular *Strelitzia reginae* growing in greater luxuriance than we had ever before seen, and on the craggy hill on our left the chandelier aloe [probably *Aloe ferox* or *A. africana*] darted out its radiant branches ..."

Great Fish River Mouth:

"The river becomes magnificent as we approached the mouth, and the water beautifully clear... A bar of dry sand runs about 600 yards right across the mouth and leaves only a space of about 30 yards for the water to issue out. On this bar you can walk securely for it is very broad and hard, and beyond it the surf breaks majestically. The coast is rocky and covered with old trees and branches which give the appearance of the wreck of a fleet; the marks of the hippopotami were to be seen at every step." Refers to black people occupying the eastern bank of the river there, in the Peddie District of Ciskei. "The Caffres cross over to look for honey and game, the grass had lately been burnt by them." Tells of Hottentots collecting seashells there "…to burn for lime which they sell at Grahamstown. [p. 95]

"Looking up the river, standing on the bar of sand, it appears as a magnificent lake, calm and unruffled, an island of sand in the centre covered with aquatic birds, penguins, etc. Behind us the great Southern Ocean ..." [p. 96]

December — Lampeter Farm, after 10 days of rain, which broke a bad drought:

"There are various theories on the subject of eventual rains. Some speculate that in proportion as we cultivate more vapour will escape and more moisture fall. Others say that this country, possessing no timber trees above the surface of the ground (for they all grow in deep kloofs), that the clouds never will be attracted so as to break—for it is observed that, where there is a deficiency of timber trees and rivers in any country, there falls little rain. In other warmer countries there are periodical rains but in this part of the country they are never to be depended upon." [p. 114]

1821 Pringle, T. (1835)

End of March — Suurberg, c. 25 km northwest of Paterson, *en route* from Somerset East to Enon Mission:

"Turning our faces southward, we continued our journey across the successive ridges of the Zuurberg which extended before us nearly on the same level, but intersected by deep ravines whose broken and stony declivities detained and wearied us exceedingly. The summits of the ridges were often almost flat, and covered with long coarse wiry grass of the sort called sour (whence the name Zuurberg and Zuurveld), being of such an acidulent quality that sheep and cattle will not eat it without reluctance, nor can they be safely fed upon it without frequent changes to more wholesome and nutritious pasturage. From this cause perhaps the narrow glens of the range, though sufficiently well-watered, were almost totally uninhabited. In a tract of about 20 miles we only found one farmhouse. Even the larger wild game appeared to be scarce on those elevated pastures; but this was probably due much more to the incessant pursuit of the huntsman than their aversion to the coarse herbage ...

"Among the curious and rare plants which we found in one of the most sterile ravines of those mountains was the hottentot bread tree [*Encephalartos* sp.] which grows to a height of 8 or 10 feet and produces a sort of fruit which I was told the natives pound into a paste and eat roasted ...

"The tabular summits too of these hills were frequently covered for an extent of many acres with a profusion of tall liliaceous flowers which in springtime bepaint the whole ground with their rich blue or scarlet flowers [probably *Agapanthus praecox* and *Watsonia pillansii*]." [p. 81]

Descending the Suurberg, from c. Annsvilla, 27 km northwest of Paterson to Enon Mission:

"... we descended the long declivities of the mountain, and entered the verge of the forest which spreads halfway up its skirts. We entered at the head of a glen... It was an alley made by the elephants when they issue forth from their sylvan recesses to ascend the mountain. It was about six feet wide, and arched over like a summer alcove; for the elephant, forcing his way through the thickets, tramples down or breaks off the larger branches that obstruct his passage, while the lighter and loftier, yielding to the pressure of his body, meet again like a Gothic arch when the monarch and his troop have passed through. These animals always march in single file on such occasions, and a pathway, when once broken out, is soon trodden by them as bare, if not so smooth, as a gravel walk. Indeed, but for the services of the elephant as a pioneer, these dense and thorny forests, choked up with underwood, and interlaced with rope-like creepers, would be almost utterly impenetrable; and, even with his assistance, it requires some exertion and adroitness to force a passage through them. In many places limbs of trees half broken off, and large bushes torn up by the roots, obstruct the passage and one is every moment in danger of sharing the fate of Absalom from the numerous boughs that hang across the path. One of these, as I bent under it on my horse's mane, actually caught and pulled me off my saddle.

"In many places, too, several of these paths converge or cross each other, so precisely similar in appearance that, without an experienced guide, one is almost sure of losing his way... However, we at length threaded our way out of the leafy labyrinth and gained the grassy banks of the White River [Witte Rivier, now Witrivier ... reached the Moravian Mission before night ...

"The valley of the White River lies at the bottom of the Zuurberg mountains which rise on this side to an elevation of about 2 500 feet above the level of the adjacent country. The declivities of the mountain, and the whole of the subsidiary hills which encompass this glen, are covered with the clustering forest-jungle which I have described, but the banks of the stream are comparatively level and open, and covered with luxuriant pastures of sweet-grass... Accompanying the course of the stream, as it meanders through the meadows, you have, on the right, lofty hills covered with woods of evergreens, and broken by kloofs or subsidiary dells filled with large forest timber." Mentions yellowwoods, etc. [p. 81]

Baviaan's River Valley, probably near Eildon Farm, 40 km north of Bedford:

"The hills are high and steep with large grassy flats among them constantly frequented by numerous kinds of quaggas, hartebeests, wildebeests (Nhoos, sic), eland etc... Smaller buck such as reeboks, rietboks, steenboks, etc are still more numerous." [p. 111]

'Ceded Territory' between Eildon Farm in the upper Baviaan's River Valley and Tarkastad:

"It comprises an irregular area of about 2 800 square miles or a million and a half acres of which the upper part, immediately adjacent to our location, is a mountainous region, intersected with deep glens, abounding with wood, water, and pasturage. The streams issuing from these glens and their numerous subsidiary kloofs form the Kat and the Koonap Rivers."

While his Hottentots were hunting eland, gnu, and hartebeest "… I ascended the Winterberg... Though steep, it is accessible on horseback to within 500 or 600 yards of the top, whence it is necessary to clamber up the shelving rocks ... saw eagles and vultures on the cliffs. The base of the rocks was fringed with a belt of dwarf bamboo [*Thamnocalamus tessellatus*], not found in the country below... The top of the Winterberg is usually covered with snow for about three months of the year ..."

The area covered by the Mankazana [17 km north northwest of Adelaide] and Koonap Valleys:

"It was watered by numerous rivulets with ... open upland pastures and fertile meadows along the river margins sprinkled as usual with willows and acacias, and occasionally with groves of stately geelhout (yellowwood). Many of the mountain sides were clothed with forests of large timber." At the time there was no human occupation. Wild animals abounded, e.g. elephant, buffalo, rhino, but he saw none. Even the Kaffir dwellings were in decay. [p. 125]

June

Views the Suurveld from the hills south of Grahamstown, covering the plains from Bushmans River in the west to the Great Fish River in the east over a width of about 50 km, and a breadth (Grahamstown to the sea) of about 40 km:

"This tract may be described as an immense plain, though it is very far from exhibiting over the greater part of its extent anything like a level surface. Near the coast it is much diversified by small hills and gently rising grounds, and for the most part flows into an easy undulating outline. The streams, or rivers also, which issue from the range of mountains we now stood upon, have in many places intersected it with deep ravines, the sides of which are almost everywhere clothed with an impervious forest or jungle. On this account it is difficult to cross the country from east to west with wheeled carriages; and to travel along the banks of the rivers is still less practicable, from the innumerable gullies or kloofs, choked up with copse-wood, that run down to the deep channels of the rivers from the plain or table-land on either side. By keeping aloof, however, from these subsidiary kloofs, and crossing the river glens at convenient places, one may travel over the Zuurveld easily and pleasantly, especially on horseback."

The soils: "... clothed in many places with a closer and more verdant turf than I had seen anywhere else in the Colony; in others, waving with a crop of spiry grass, among the roots of which the loose mould was often turned up and traversed by myriads of grey moles and field mice. The herbage, though abundant, was almost universally of the description called sour, and consequently not very suitable for sheep, but varying very much in quality and appearance in different situations... The want moreover of fresh water in some places, and the precariousness or brackish quality of many of the brooks or fountains, together with the impracticable character of the river banks, and the poverty of the soil over a large extent of the more open country, appeared to present formidable obstacles to the existence of a dense population ...

"The verdant pastures and smooth grassy knolls formed an agreeable contrast with the dark masses of forest which clothed the broken ground near the river course. The undulating surface of the champaign country was moreover agreeably diversified with scattered clumps of thickets of evergreens interspersed with groves of large straggling trees intermixed with thickets of evergreens and clumps of mimosas [*Acacia*] like a nobleman's park." Mentions the *kaffirboom*, *Erythrina caffra*.

1822 Philipps, T. in Keppel-Jones (1960)

3 February

Lampeter Farm, 7 km north northeast of Bathurst:

"The *Strelitzia reginae* grows in great profusion about us but I cannot succeed as yet in obtaining a single seed. They are eaten also unripe by the Hottentots and I have made a meal on them when far from home, partridge shooting ..." [p. 114]

14 December — "In a little grove above the garden (and where the ladies for the first time this morning found out they could bathe) we have several fine Coral Trees, some of the seeds of which we have sent home." [On this same page Philipps describes all the plants and trees on the property. Presumably, the seeds he sent home were the scarlet Lucky Beans so well known from these *kaffir-boom* trees, *Erythrina caffra*, which grow well and strikingly in Bathurst District.] [p. 115]

February — Barville Park Farm, 14 km west of Port Alfred:

General Campbell's place: "In my opinion it exceeds in real fertility anything I have yet seen and the views are very rich, none of that ruggedness which bounds almost every other. It has hitherto been called the Riet Fontein. [The original extent of Rietfontein included the properties now known as Barville Park, Glendower, and Elmhurst.]

"We continued our ride to the Kowie's mouth through the same enchanting fertile scenery ..." [p. 116]

Kaffir Drift on the Great Fish River, 16 km up from the mouth [refers to it being tidal up to there then, something not found currently]:

"... we were off very early in order to cross at Caffre Drift before the tide rose. Capt Black ... kept us chatting so long ... that by the time we got down the steep hill the tide was coming in... As we led our horses down at the bottom, we remounted and rode through a serpentine path just wide enough to admit one at a time for near a quarter of a mile by the side of the river which was concealed from us by a thick shrubbery of geraniums [*Pelargonium*], Cape Jessamine [applied to the cultivated *Gardenia augusta* (=*G. jasminoides*), but probably some other plant is meant here, possibly *Carissa*], and Palma Christi [*Ricinus communis*] ..." [p. 117]

On the return journey they "...visited the mouth of the Great Fish River, went west to the Kleine Mondaine [Kleine Mond River], a very pretty river whose waters are lost in the sands before they reach the sea ..." [p. 118]

1822 Pringle, T. (1835)

April — Koonap Valley at Adelaide:

The area under the Winterberg was empty of human habitation, black or white, but was full of wild animals. "Next day, we followed the course of the Koonap over green sloping hills till the increasing ruggedness of the ravines and the prevalence of jungle compelled us to pursue a Kafir path now kept open only by the passage of wild animals along the river margin."

Came upon signs of elephant. "But it was in the groves and jungles that they left their most striking proofs of their recent presence and peculiar habits. In many places, paths had been trodden through the midst of dense thorny forests, otherwise impenetrable. They appeared to have opened up these paths with great judgement, always taking the best and shortest cut to the next open savannah or ford of the river, and in this way their labours were of the greatest use to us by pioneering our route through a most intricate country never yet traversed by wheel carriage, and a great part of it, indeed, not even accessible even on horseback. In such places the great bull elephant always marches in the van, bursting through the jungle as a bullock would through a field of hops, treading down the brushwood, and breaking off with his proboscis the larger branches that obstruct passage, whilst the females and younger part of the herd follow in his wake.

"Among the mimosa trees [*Acacia karroo*] sprinkled over the meadows or lower bottoms, the traces of their operation were not less apparent. Immense numbers of these trees had been torn out of the ground and placed in an inverted position in order to enable the animals to browse at their ease on their juicy roots which form a favourite part of their food. I observed that in numerous instances when the trees were of considerable size, the elephant had employed one of his tusks exactly as we would use a crowbar, thrusting it under the roots to loosen their hold on the earth before he attempted to tear them up with his proboscis. Many of the larger mimosas had resisted all their efforts, and indeed it is only after heavy rains that they can successfully attempt the operation." [p. 126]

1822 Shaw, W. in Sadler (1967)

13 August — From Alice to Grahamstown:

"It is much infested with elephants, many trees lay along the road, which these animals had torn up by the roots and left as token of their strength."

1823 Philipps, T. in Keppel-Jones (1960)

January

Lampeter Farm:

"Walter had a plant, the latter are the berries of a wood which grows spontaneously after the ground is dug or ploughed [possibly Cape Gooseberry, *Physalis peruviana*]. I disliked the children should eat them, one of our men appearing ill after eating a quantity. However, they are excellent and we have made jam of them ..."

Philipps had mentioned fruits etc. in his garden among them a "... gooseberry ... delicious and most abundant fruit. I have seen it in Wales.

"In the woods we have wild plums [*Harpephyllum caffrum*] as they are called here, but they are certainly olives [actually a member of the family Anacardiaceae]; when ripe they make an excellent acid tart, and in the green state we attempted to treat them as olives but have not quite succeeded as yet. We have mushrooms and wild celery, garlic, spinach, various sorrels, indeed the ivy-leafed geranium [*Pelargonium peltatum*] is an excellent one. Asparagus, but of a bitter taste from want of cultivation. Grapes [probably *Rhoicissus tomentosa*], but not growing in bunches, the vines ascend the high trees. Wild figs [*Carpobrotus edulis*], a sort of bilberry or hirts, as we call them, black berries and a red raspberry [*Rubus*].

"Nature has been bountiful, and were we only blessed with sufficient rains ... we should be a country of consequence but, without a great convulsion, this will never be.

"Africa has ever been called a dry parched country and I begin to think that in another century it may be a barren sandy desert. I am led to this conjecture by the general rumour that the longer a farm is occupied the worse it becomes. The cattle eat down the grass and this exposes the roots over which the sun has then such power that it ultimately consumes it, and I am told that between us and Cape Town there are immense tracts of land which now are entirely barren, not a blade of grass to be seen.

"Albany, where we now are, has never been peopled but by Caffres, and they migrate as the grass gets bad, thus leaving it time to recover ..." [p. 160]

July

Comment on the quality of the Suurveld of Lower Albany and Bathurst Districts:

When Philipps was visiting the eastern part of the Somerset East District he met a Dutch farmer who agreed with him that the sweetveld there would disappear under the pressure of heavy grazing by domestic animals, as was already partly the case in that area then. Philipps then adds "He [the Dutch farmer] approved of the Zureveld for grazing in the summer only and thought there was no fear of this country losing its grass, as with them." [pp. 194, 195] [This shows shrewd appreciation of differences between the qualities of so-called 'sweet' and 'sour' veld grasses at this early time of white occupation. It needs to be said however that, while the Suurveld has, as the farmer contended, maintained much of its cover and quality, the same can also be said of the sweetveld in the Somerset East and Bedford Districts, although some parts of those districts are being invaded by the Karoo (in 1980).]

From Grahamstown northwest to Great Fish River *en route* to Somerset East:

4 July

Went 5 miles from Grahamstown and pitched camp "...near a good pool of water" letting horses and cattle graze during the night. [Between Strowan Farm and Table Farm.]

5 July

Next morning early "...we found our cattle and horses ... but the former had fared very badly, there being little or no grass and they are not accustomed to browse on bushes. [p. 188]

"About two miles on our road we passed the first Boor's place owned by a man of the name of Nel. [Table Farm, then Noutoe]. Five or six scattered huts on a naked stony spot without an enclosure of any kind presented a most dreary aspect ...

"The country now presented a most dreary appearance, grass of any kind had disappeared, patches of stunted shrubs and mimosas [*Acacia karroo*] furnished food for cattle and sheep which, however, fed eagerly on them and were in excellent order. The form of the country was however pleasing, but doomed to everlasting sterility defying the utmost art of man to cultivate it. We passed on the left hand a farm which the Landdrost had appropriated to himself, turning the late possessor out without notice almost on the plea of not having legal title. He was however given another place in lieu but such continued attacks as these on the poor Boors will ultimately lead to confusion again ...

"A few miles further the country again improved, mimosas and parks and grass again gratified us. A large place belonging to a Boor on our left appeared and a windmill, and for the first time eight or ten acres of green corn. It belonged to Delporte, and from various reports is a good place. A few miles further, about sunset, we fixed on a rich spot in the first kloof we had yet seen with plenty of all we wanted, having travelled about 20 miles. We imagined the cattle would relish it but after drinking a great deal they stood

still suffering from a change of food the night before. [They must have been at Palmietfontein, east of Riebeek East, and 27 km northwest of Grahamstown. A Delport farmed there.] [p. 189]

6 July

"Our journey was at first through similar pasturage but soon changed to almost worse than barrenness, rugged stony hills, and scarce anything but stunted heath in patches. After passing one very high hill... We had to pass through what the Dutch call a pass, a chain of hills on each side and room only for the road. On emerging from this we had a view of an extensive valley and high and picturesque hills closing the landscape which in any other country we should pronounce to be supremely fertile and the near approach to a flourishing city but, having sufficient experience of poor barren arid Africa, we were not disappointed when we descended. We were an hour in crossing it and parched with dust, we could not find a drop of water except a dirty pool which however our Hottentots eagerly drank out of...

"The bushes now began to assume a thicker and greener appearance and I have remarked numberless instances of a shrub with a blossom like a honeysuckle (Footnote: A species of *Loranthus* [*Moquinella rubra*]) which is universally found grafted on other trees, but principally on the mimosa in a similar manner to the mistletoe on the oak, and which also grows here likewise on the mimosa. I have tried in vain to find it growing alone, it appears very curious, and can only be accounted for from the birds dropping the seeds and their sticking to the gum which in the mimosa is always exuding. We passed a deserted Boor's house on a wretched spot... [p. 190]

"The country now became worse and our road for the first time bad. From a slight eminence we could now descry the Little Fish River, the banks of which were to be our outspan place and which we soon reached, but a more barren spot cannot be imagined. Our cattle were in a sad state and they had a very poor prospect before them. The river, or rather the course of it, looks more foreign than anything I had seen. It can be traced in its serpentine track for miles by the autumnal appearance of the Willow of Babylon [*Salix babylonica*, although perhaps the indigenous *Salix mucronata* is meant] and other shrubs, one of which was new to me, presenting a striking contrast to the others. It was in full flower and blossom, bushy and gracefully drooping. The river has made itself so deep a channel, and the trees grow so thick that, to obtain a peep at its waters, you look down as to an old coal pit."

At the Little Fish River, Philipps might have been at Junction Drift where the Little and Great Fish Rivers meet, 55 km northwest of Grahamstown, or perhaps near there. He found game plentiful, both mammal and bird kind. His dogs got "doublejee" thorns in their feet (Footnote: *dubbeltjie*, applied to either *Tribulus terrestris* or *Emex australis*).

7 July

"We now came to the main road to Grahamstown. We chose the one we came on as better though longer." [pp. 190, 191]

From ? Junction Drift at the Little Fish/Great Fish confluence:

"We now came into the main road to Grahamstown ... [p. 191]

"As the day was closing and water uncertain, we determined on going out of our own direct road and outspan at a Boor's place on the Great Fish River, its owner was Jan de Lange... The appearance of this place was better than any we had seen ...

"Our cattle had crossed the Great Fish River which was fordable here and grazed all night in Kaffir Land ..." [p. 192]

8 July

Departed, and passed an old post on the Fish River "...but a more horrid barren spot cannot be conceived. The country appeared worse and more wretched than a coal country, to which it bore some resemblance from the black slaty stratas of rock ...

"Some miles further we passed another old post inhabited by Boors and about sunset we descended to a farm house in a plain of great extent surrounded with picturesque hills. Those in front of us were the Bush Bergs [Bosberg between Cookhouse and Somerset East] which were my destination ... we found that the place had lately been purchased by Mr de Clerk ..." [pp. 193, 194]

Met a Dutch farmer hunting on the Somerset East or western side of the Great Fish River. "He had been with his flock that day in Kaffer land where they got the best grass, but he corroborated my opinion that in process of time the grass there would disappear when fully stocked as on this side of the river [the west side]. It is all what they call the sweet grass, knotted like the fiorin (Footnote: A species of grass, *Agrostis stolonifera* or *alba* [*Agrostis bergiana*]), and creeps like it on the ground. He said that after two days rain it would grow some inches and appear luxuriant, but in a dozen more days it would wither and appear as we then saw it, like chaff... He approved of the Zureveld for grazing in the summer only and thought there was no fear of this country losing its grass as with them." [This shows an appreciation of the relative merits of the so-called

sweet and sour grassveld conditions at an early time in Eastern Cape occupation by white farmers.] [pp. 194, 195]

12–13 July — Glen Avon Farm, 5 km east of Somerset East, the Commissariat Farm:

"Mr Hart who is the government manager of the Somerset Farm had within two years got a grant to this mountain consisting of about 15 000 acres. Contrary to the opinion of the whole country he is resolved to cultivate part of it. He has a great supply of water and a shaking bog which he is draining. The grass is all Sureveld ..." [p. 199]

15 July — Near Somerset East, probably east of the town but in drier country:

"Mr Stretch [Charles Lonnox Stretch, soldier and politician, 1797–1882] took a ride with me this morning to see another Government farm which was kept in hand for grazing, although it is capable of extensive irrigation. The country was so dry, and winter was so severe in this country, that very few trees could retain the greenness of their leaves, and the mimosas were leafless, and the road altogether very dreary... The farm belonged to a man of the name of Prinsloo (Footnote: Hendrik Prinsloo, who had been executed at Slagters Nek in 1815)..." There were no fences to the orchards of fruit trees, etc. [p. 201]

July — North bank of the Great Fish River, from near Sheldon to Maastricht Farm and on to Carlisle Bridge, 38 km northwest of Grahamstown. The Espagh family owned most of the farms from Carlisle Bridge (Espagh's Drift) to the Somerset East boundary:

"After looking for water I fortunately found some of the sweetest little bit of green grass I had yet seen ... although the whole space was but a few yards square and it was occasioned by the leaking of a pond which had been made to irrigate the whole garden." [p. 203]

Next day left for Grahamstown "...via de Bruins Drift [probably De Bruins Poort, 18 km north northwest of Grahamstown] on the Great Fish River... The road was so stony and the ascent so steep that it was impossible to do more than walk, it is above a mile in extent, the bushes overhung in many places near the road so that a murderer might stab without being seen. In two hours riding I began to see the sour grass farms and soon after to alight at Capt Campbell's ..." which was Brakfontein, immediately north of Grahamstown, then carrying the road from Carlisle Bridge to Grahamstown. [p. 206]

1823 Thompson, G. (1827)

11 May — Theopolis, Bathurst:

The Hottentots there had built a strong and lofty palisade round the common kraal against the Caffer thefts of cattle. "The stakes of this fence, consisting chiefly of caffer-*boom*, *Erythrina caffra* which grows abundantly in the neighbourhood, had in numerous instances struck root and thrown out flourishing branches which gave the palisade an uncommon and agreeable effect." [1: 31]

12 May — Barville Park Farm, near Kasouga:

"Mrs Campbell's neatly ornamented cottage, though constructed only of wattle and plaster, had a most pleasing and picturesque appearance...The natural features of the country are exceedingly beautiful ... the cottage surrounded by luxuriant woods and copses of evergreen ... flocks of sheep pasturing on the soft green hills ..." [1: 32]

18 May — From Grahamstown northwestwards through the Great Fish River valley:

[Had travelled through the grassveld of southern Albany before arriving at Grahamstown.] Within an hour of leaving Grahamstown "... the green pastures of Albany disappear and the road, as it approaches the banks of the Fish River, winds through the black and monotonous jungle, unfit for the residence of men or for the pasture of cattle ..."

Arrived at Espagh's Drift [Carlisle Bridge], 40 km northwest of Grahamstown. [1: 46]

West from Carlisle Bridge to somewhere in the Junction Drift area, 20 km west of Carlisle Bridge. "Continued our route through a brown and barren looking country except along the courses of the river which consists of deep alluvial soil thickly overgrown with mimosa [*Acacia karroo*] trees." Then north to Van Aardt's Post, which was near Golden Valley and Cookhouse in the Somerset East District. [1: 51]

19 May — From Van Aardt's Post near Golden Valley, to Somerset East:

"A ride of three hours ... across a more open country well clothed with grass."

Somerset East:

"The greater part of the arable soil had been formed out of a swamp which, though drained on the surface, is still full of springs and moisture underneath." Only "...the drier portions around the borders of the marshy plain" required irrigation. [1: 54]

1824 **Philipps, T. in Keppel-Jones (1960)**

9 November — Glendower Farm, 7 km west of Port Alfred:

Charlotte Philipps, writing to England: "The coralla trees are very numerous and appear to great advantage, being generally concealed in deep kloofs." (An editorial footnote reads: The coralla or coral tree is the genus of the *Erythrina* called in South Africa the *kaffirboom*.) [p. 219] [Thus the name coral tree for this *Erythrina* goes back, certainly to the year 1822, and therefore for some time prior to that date.]

1825 **Philipps, T. in Keppel-Jones (1960)**

Early summer — Near Addo:

"We crossed the Sunday River which is very shallow and with a channel so broad that fancy may conceive it to have been formed by the passage of waters of the deluge off the land.

"We had heard much of the enchanting prospect from Addo's Heights which we now began to ascend; the road winds through bushes of evergreen, many in full bloom. The waggon, which occasionally deviates from its track, crushes the branches and the most aromatic odour scents the air." From the summit, Philipps could see ships lying at anchor in Algoa Bay.

"Running quite inland were seen those naked mountains which form a belt almost the whole way from Cape Town. Surrounding us on all sides were fine undulating hills, the summits here and there covered with shrubs or verdant grass, and numerous herds of deer were dispersed about. The whole scene is captivating; the grass had been lately burnt, but rain had fallen and it was a complete grass-plot ...

"The bush, as we proceeded further on, was more broken, and formed into complete shrubberies; always circular, the more lofty in the centre. It is difficult to persuade oneself that they are natural, the whole appears kept in such perfect order, owing, it is probable, to the browsing of the deer and other animals.

"The whole country continued so beautiful as to render it almost impossible to give an adequate idea of its varied charms. The road, smoother than any gravelled walk, being of a strong sandy texture, veins of stone are occasionally found across the road. Clumps of shrubs with various shades of green, some blooming, others seeding, geraniums [*Pelargonium* spp.] with various creepers ascending the stems, then falling gracefully down the branches ...

"Between 9 and 10 o'clock we pitched our tent on Quagga-flat, close to bush and water... We resumed our route at sunrise ... [p. 8]

"... we reached Routenbach's drift [Rautenbach's Drift] where we breakfasted; then crossed the Bushmans River, the fording place of which was so deep as nearly to reach the axle-tree of the wagon [10 km southeast of Paterson]." [p. 11]

Summer — Albany and Bathurst Districts:

"The country around Grahamstown is extremely beautiful. The place itself is situated in an extensive valley, tolerably watered. The road extends for some distance along this valley which is surrounded by high hills adorned with mimosa thorn [*Acacia karroo*] and every variety of flowering shrubs ... [p. 42]

"The waggons were sent on at an early hour... The place appointed for the rendezvous was at the junction of the Kap and Great Fish Rivers. The approach is exceedingly fine between the hills, the descent rather steep; the tide was in and the two rivers full up to their beds, a novel sight to us for all the great rivers we had hitherto crossed were dry in part with only deep pools here and there.

"Our tents were pitched in a superb amphitheatre encompassed with lofty hills covered with trees full of the most luxuriant foliage spreading a gloom over surrounding objects, and heightening the whole effect ... [p. 43]

"... we prepared for our excursion to the Great Fish River mouth... As we approached the mouth, the river becomes of considerable width. The banks are muddy but the tide never falls more than five feet consequently the channel here is always full.

"The prospect is magnificent, the water perfectly transparent, slowing amongst verdant hills shaded by lofty evergreens ... [p. 46]

"Looking up the river the scene is calm and unruffled and assumes the appearance of a lake with an island of sand in the centre covered with a great variety of aquatic birds." [Then speculates on how this sand bar at the mouth is altered by river movements at different times of the year.]

Up the Kap River, Bathurst:

"... it was arranged that we should make an excursion up the Kap. No shrubberies can be formed with greater art than those on the banks of this delightful little river on which are to be seen a profusion of flowers and berries of the brightest and most varied colors.

"The gaudy and singular *Strelitzia* [*Strelitzia reginae*] grows here in greater luxuriance than we had ever yet seen it. And on the craggy hills, the chandelier aloe [probably *Aloe ferox*] expands its radiant branches.

"A few hundred yards up the river we were locked in on either side by overhanging rocks and trees of the richest foliage. Our boat disturbed many of the das or cony that ran along the rocks ...

"Two miles farther we came to a shoal, and satisfied ourselves that our voyage must end here, and we resolved, on returning to a beautiful spot that we had selected for taking our repast and where we amused ourselves with exploring every part; we had no paths but those formed by the baboons. At the end of one we discovered a rude but very ingenious scaffolding made by the Hottentots to obtain honey from the hive." Describes the honeyguide bird. [p. 49]

"... [we] got into our boats. We kept along the shore and in a little nook where a stream of water ran down, to our great joy a hippopotamus suddenly lifted up its head close to us, and soon after a young one, and then a still younger. [Watched them for half-an-hour.] When this family party had retired we returned to our encampment ..." [p. 52]

From the Kap River confluence to the Great Fish River Mouth:

"We resolved the following morning to pay another visit to the Fish River mouth, and on our road saw certain indications of an elephant being in our neighbourhood. A large tree, a *Euphorbia*, at least 30 feet high had been just torn up by the roots and lay across the path ..." [p. 53]

Left the camp at the Kap River confluence. "Still travelling through the same beautiful country we reached the Kleine-Mondjies, two singular rivers, if rivers they can be called, for they resemble two broad lakes (Footnote: One is now called Lyndoch; the other Wellington) the waters being choked by the sand before they reach the sea. They wind gracefully as if assisted by art, the waters serene and unruffled, and gently increasing as the tide advances through subterranean passages. The banks slope gradually which is an unusual circumstance in this country. The prospect is very delightfully varied with fine undulating hills, richly wooded and terminating with the ocean ...

"Quitting these hills we got upon a plain where a springbok afforded us some sport... After a very delightful ride of some miles we reached our destination and, having disposed of our horses, walked up to join the party who were waiting for us in the wood. Our path led along a deep valley by the side of a winding stream, its rocky banks studded with flowers of every description for it is such places that they are most luxuriant, imbibing the little moisture they require from the stones.

"The plains were covered with a plant [possibly *Carissa*] very much resembling the myrtle in leaf, height, and blossom, bearing a small apple that has a very delightful spicy flavour, some of the fruit being red, others yellow.

"Interspersed with this was an *Amaryllis* [*Haemanthus*] growing in the most extraordinary profusion, the plants in some places crowded together so as to impede each other's growth. It has several flowers on a single stem and its two flat leaves rise after the flower has faded. [p. 62]

"Soon after entering the wood ... occasionally a deep hollow or kloof was formed where the forest trees, receiving shelter from the sun, and moisture for their roots, grow to a large size. Various creepers were entwined around the trees, forming an entire arbour - the monkey-rope, the wild vine [*Rhoicissus*] with its grapes ascending the branches, wild figs, geraniums, etc. etc.

"The wild fig [*Carpobrotus edulis*] is a fruit much esteemed by the natives. It is shaped like a fig but the inside rather resembles a strawberry both in taste and appearance. The leaf is very thick and juicy and is used by the Hottentots as a sovereign remedy for bruises, etc., and they take it for many complaints. Wild plum trees [*Harpephyllum caffrum*] are in great abundance; also bilberries, raspberries, and black-berries.

"Ascending the rugged path we reached a natural formed tower from whence are seen gigantic trees whose tallest branches would not reach within a hundred yards of us. And, overlooking the steep below, the rocky chasm is filled with luxuriant evergreens, and the *Euphorbia* shooting its naked branches through the green foliage. When this tree is cut down the milky juice exudes in great quantities and is said to be one of the ingredients with which the Bushmen poison their arrows... No sound, save the rippling of a distant waterfall, was heard.

"Here the country opens to the view with all its varied charms. Rich clumps of trees disperse about, clusters of the gay mimosa [*Acacia karroo*] with its little fringed balls of yellow blossom gilded by a bright sun ... [p. 66]

"The dwarf coral tree [*Erythrina humeana*] presented a most brilliant appearance... Paroquets frequent the woods in flocks as the wild fruits ripen in their different seasons and perch in the noble *Coralodendrum* [*Erythrina caffra*] tree." [p. 69]

Near Bathurst:

"Furniture, I am told, is generally made from the sneeze-wood [*Ptaeroxylon obliquum*] which admits of a very high polish. This, and the Yellowwood tree [*Podocarpus*], is the only wood I have seen used for that purpose, all other timber is either too hard or too soft. [p. 79]

"The ride to Bathurst lay through naturally formed pleasure grounds ... deer of various kinds springing and running in every direction. We also saw 14 ostriches together ...

"Little more than an hour brought us to Bathurst, and a more beautiful spot cannot be imagined. It stands on two undulating hills, extremely fertile, with a few detached houses... They have been built in part intersected with bush ... [p. 80]

"From the Fish River mouth to the Kowie, the country is very rich and beautiful in a belt of about 2 miles in breadth from the sea ..." [p. 83]

Crossed the Kowie River on to the west side:

"Beautiful as the scenery had been, with few exceptions throughout the settlement, the country through which we now travelled exceeded in fertility, softness and luxuriance, all the preceding. Our road lay through an extensive plain forming one grand and noble park bounded towards the south by gently swelling hills ornamented with clumps and groves. [p. 84]

"Keeping this road we reached the old military post (Lynch's) situated on a hill [Glendower Farm]... At the extremity of a rich and extensive meadow stood a picturesque cottage, in the front of it a luxuriant grove. Behind the house, from every side, this prairie was encompassed by lofty verdant hills with the Riet Fontein flowing along the valley, full up to the margin, broad, and covered with bush, sedge and reeds. The hills were intersected with flowering shrubs; the valley with lofty trees; among which the *Coralodendrum* [*Erythrina caffra*] was seen to greater advantage than we had before remarked, for this tree is in general concealed in deep kloofs ... [p. 85]

"The beautiful rivulet, so much the object of our admiration, terminates in a lake, and, we were told, in the great droughts which sometimes occur, this lake disappears, sinking under the sandhills and appearing again quite fresh upon the beach.

"The prospect continued to vary every five minutes. The hills as we approached them appeared to be variegated with extensive forests of evergreens. The moisture from the sea encourages the growth ...

"The Cape gooseberry grows in great abundance... The walks were shaded by the Indian corn and a very beautiful shrub called the caffer coffee. The young sprouts when dried and slit, will allow of platting. They make a very good sun hat but inferior to the straw."

Returned to Grahamstown. [p. 86]

Vegetation in the Bathurst area:

"The beautiful *Coralodendrum* [*Erythrina caffra*].grows tall and stately as the finest oak, and is one of the very few deciduous trees to be seen in the woods. This tree, at the approach of Spring, throws out large clusters of deep scarlet flowers issuing from a dark brown velvet pod. The whole of its branches are covered, and present the most brilliant appearance.

"The gay and gaudy *Strelitzia reginae* grows in great profusion. The seed is eaten by the Hottentots before it is ripe, and we have made a meal of them for want of better refreshment when engaged in shooting.

"The *Geranium* [*Pelargonium*] and the *Ixia cinnamonia* [*Hesperantha*, probably *H. radiata*] are considered garden weeds. I have seen very beautiful hedges formed of the ivy-leafed geranium [*Pelargonium peltatum*] round the gardens and it is also eaten as sorrel. The *Ixia* is one of the very few flowers which throw out any scent.

"The palma Christi [*Ricinus communis*] grows in wild luxuriance but the stalk is red, and it had not that beautiful bloom which we have seen it exhibit in England." [p. 91]

Along lower Little Fish River, Somerset East:

"The river, or rather the course of it, had a more novel effect than anything we had yet seen. It can be traced for miles in its serpentine track by the singular appearance of the

willow of Babylon, and other shrubs. One of these was new to me, presenting a striking contrast to the others. It was rich in full foliage and blossom, bushy, and gracefully drooping ..." [p. 99]

When out hunting game "... our dogs were soon disabled by a prickly seed [probably *Emex australis*, or *Tribulus* sp.] which gets into their feet. It is about the size of a pea and presents a thorn in every way it lies. It is the food of the guineafowl, and called a dubbeltje." [p. 100]

De Klerk's farm in eastern Somerset East, ? near Middleton:

De Klerk Jnr "...had just brought his flock home from grazing in Caffer land where they get the best grass. It is what they call the sweet grass [*Agrostis bergiana*], knotted like the fiorin, and creeps like it on the ground. He said that after two days rain it would grow some inches and appear luxuriant but in 12 more days it would wither and appear as we then saw it, like chaff... He approved of the zureveldt for grazing in the summer only, and thought there was no fear of that country losing its grass like his own ..." [Repetition of two items above in 1835 book.] [p. 107]

En route to Barend de Klerk. "Here the mimosas [*Acacia karroo*] were thicker than in any other place with thorns; there was little substance around for any creature ... we leave the course of the river [Great Fish]. We had the Boschberg on our right... As we ascended from this valley of wastes, the grass again shewed itself, and of a slight red tinge. On examination we found it to be sureveldt ... in time we reached Barend de Klerk's ..." [p. 108]

Barend de Klerk's [De Klerk Senior] farm on the Little Fish River, near Somerset East, under the Bosberg:

"... part of the Boschberg, distant about 8 miles ended in an abrupt point [Bloukop]. This we had observed to smoke all day and it now gave the effect of a volcano. The fire from the burning of the grass began to grow brighter and to extend itself down the side of the mountain." [p. 113]

Bosberg:

Climbed 'the Boschberg'. "Part of the mountain is in a state of cultivation, and very considerable improvements making under the direction of Mr Hart [of Glen Avon, at the base of the mountain]. There is a considerable supply of water, and a shaking bog which he is draining. The pasture is all zureveldt." [p. 119]

c. De Beers Pass, at the top of the Baviaans River Valley, 40 km north of Bedford:

"... we continued on, riding through the kloof [Baviaan's] for some time until we began to ascend an abrupt hill, from the top of which we saw nothing but wild desolation without tree or bush. We had the Tarka on our left descending into an extensive vale ..." [p. 132]

July

Grahamstown southwards *via* Southwell, 24 km northwest of Port Alfred, to Kasouga River area, 17 km west of Port Alfred:

"In one of my letters I alluded to a rich belt of land which was situated along the seacoast from the Fish River to the Sundays. Within this belt we are now happily placed but the whole country between the Kowie and the Kasouga possesses other beauties in addition, and differs from all others in splendour of scenery of the softest and most luxuriant in Nature.

"The ride from Grahamstown until you arrive at the late Colonel Fraser's [Lombard's Post, 2 km south of Southwell] is the usual hard country intersected with kloofs. Col Fraser's is a charming park, the clumps of bushes rich and similar to Bathurst of which it appears to be the same stratum. Leaving this, you pass through a mimosa part which is allotted to Capt Crause [Walsingham, 7 km southeast of Southwell].

"From this to Mrs Campbell's [Barville Park, 13 km west of Port Alfred] there is poverty and stones but the moment you cross this branch of the Kasouga you tread on the richest pastures imaginable, an extensive parkish plain is bounded towards the south by gentle swelling hills with clumps and groves ... leaving the house on the right, the road passes under a wood. Half way or more over the plain it divides, one leads to the intended new village [Zoar, on the Elmhurst portion of Rietfontein], and the other to Glendower [southern portion of Rietfontein]. We will follow the latter through mimosas and over a small hill covered with bush for quarter of a mile until Lynch's Post (on a little hill) is seen, or rather the remains of it ... rounding the base of the Post hill the cottage of Glendower appears in the extremity of a plain and in front of a luxuriant grove which hides in its recess the farmyard, etc... As the plain is crossed, on the left, and hanging over the streamlet of the Riet Fontaine which runs through the whole, are seen groves and clumps and little detached woods, all growing towards the sea aspect. To the right is an expanded opening and a charming ride to Kasouga mouth, if it was not to notice the little vallies which run up on the left ... [p. 244]

"Following a private road to Port Frances [Port Alfred] the garden is seen situated along the banks of the Riet Fontein [on Glendower] or rather on the side, for it runs almost on the surface, broad but not deep, and covered with rush and sedge and reeds... Still walking south with clumps close to us, and on the left vallies again opening, and disclosing groves and detached little woods, the sand hills appear in sight forming a high barrier to the ocean ... [This is an accurate description.]

"The bush grows all over these hills but leaves sufficient openings to shew the sand... But we are now at the extremity of our land and can see the pretty little lake which terminates the Riet Fontein, here are wild fowl of all descriptions, and the plain on one side of it. To the right the grassy margin, the rich pasture of clover and trefoil ... renders it one of the sweetest spots that ever nature formed... The lake is not always full ..." [p. 245]

1827 **Theal, G.M. (1905)**

Extract from Capt Owen's Journal of the Cape of Good Hope (WFW Owen, H.M.S. Eden, Woolwich, 18 May 1827):

"All the rivers on this coast are barred. In the rainy season the freshets clear them out and carry their deposits to the sea; in the dry season the heavy south-east winds throw them back again and dam them all up with sand bars over which, according to local circumstances, there is more or less water; and as the highest rise nowhere exceeds five feet in ordinary spring tides, and in some places not so much, they are seldom navigable for decked craft, and are often dangerous for boats of common construction." [Refers to the rivers of the south and south-east coasts.] [p. 392]

1835 **Alexander, J.E. (1838)**

From Assegaaibosch near Sidbury, past Highlands Mountain and over Mill River:

"We next passed some very beautiful scenery, altogether unaltered by the hand of man. On our left was a fine range of hills in the ravines of which trees were thickly set. The ravines terminated in an extensive plain of pasture through which a river's course was indicated by a continuation of the wood of the hills deeply fringing each bank. The landscape would have been perfect if the eye had caught anywhere 'the mirror of a pool', or stream, but that was denied us. We galloped over some Kaffir spoor, passed Mill River where the miserable remains of some herds were strongly guarded ..." and went on to Grahamstown. [1: 354]

1835 **Alexander, J.E. (1840)**

Oatlands suburb, Grahamstown:

"Oatlands, the residence of the commandant of the frontiers of Kaffraria (Lieutenant Colonel Somerset) embowered in its mimosas [*Acacia karroo*], is a conspicuous object about a mile from the town. The Cape Corps barracks at about the same distance occupy a green hill further down the Kowie." [This was the site of Fort England, the Mental Hospital at the southeastern edge of Grahamstown (in 1980).] [2: 356]

10 July Kaffirdrift, Bathurst:

"On the 10th we rode towards Kaffir Drift, descended to the Fish River and forded it without difficulty... Among the plants which I gathered at Kaffir Drift were the following:

Fagara sp. [*Zanthoxylum*], *Mesembryanthemum aureum* [identity unknown], *Volkameria* sp. [possibly *Ceratotheca triloba*], *Plumbago capensis* [*Plumbago auriculata*], *Senecio venusta* [identity unknown], *Scabiosa* sp., *Helichrysum ericoides* [*Helichrysum asperum*], *Arctotis* sp., *Senecio* sp., *Polygala myrtifolia, Conyza* sp., *Adelia acitodon* [identity unknown], *Teucrium* sp. and *Tarchonanthus camphoratus*" [p. 219]

1835 **Black, W.T. (1901)**

Mentions a "…distinguished military officer at the commencement of the 1835 war, even on his arrival at Graham's Town, not understanding" the meaning of the report that "…the Caffres were in the Fish River Bush." He had imagined "bush" to mean an individual unit of the vegetation, not a whole valley-cover as in the Fish River valley. Only when he saw the place himself did he understand. This shows the term being used as early as 1835, at least. [p. 9]

1836 Harris, W.C. (1839)

End July

Northwest of Grahamstown:

"The country was still of the same barren uninteresting character as that already described [from Swartkops to Quaggasvlakte], but generally more level, less abundantly watered, and more thickly covered with brushwood and succulent dwarf trees called by the colonists *speckboom* [*Portulacaria afra*]." [p. 12]

Somerset East:

"The paltry little town of Somerset consists only of about two dozen English houses, and stands in a swamp at the western base of a mountainous range called the Zuurberg [actually Boschberg], being completely environed on three sides by the Little Fish River, in attempting to cross which treacherous stream my horse was suddenly engulfed in a quicksand and nearly drowned before I could extricate him." [p. 13]

Beginning of August

Bruintjieshoogte:

"The road over Bruintjes Hoogte comprises a succession of formidable acclivities and perilous descents, and we were frequently obliged to lock both hind-wheels at the same time, the path skirting the very brink of yawning chasms several hundred feet in perpendicular depth ...

"It was pitch dark before we had cleared this mountain barrier and the oxen, being greatly in need of water." Harris went to a farm and acquired grazing there, noting "... the stony character of the country, in every part clothed with a high thicket of *speckboom* ..." [pp. 14, 15]

1838 Backhouse, J. (1844)

26 December

Addo Drift, on the eastern bank, c. 10 km north northeast of Addo:

"For several miles the country was increasingly woody; at length it became a thick forest. In this part it is called the Addo Bush.

"Among the trees is the *Theodora speciosa*, called *boerboon* [*Schotia afra*], Farmersbean, bearing gay crimson flowers succeeded by pods containing beanlike seeds which were formerly used as food by the Hottentots.

"After passing through the forest we emerged upon the Quagga Flats, a grassy country but at this time nearly destitute of water ... we therefore proceeded onward in hope of finding more, but were disappointed. At length we outspanned where there was no water but where the grass was fresh. [p. 172]

27 December

"In the course of the afternoon we reached Bushmans River which we crossed at Rottenburgs Post [Rautenbach's Drift]. The river was reduced to a series of large pools some of which were deep. Many tortoises, probably of the genus *Sternotherus* [Water tortoises or Terrapins, *Pelomedusa subrufa*] were swimming in one of them or basking in the sun on the margin and quickly plunging into the water on alarm. Two large vultures were clearing away the remains of a calf by the roadside."

Sweet Milk Fountain [Sidbury]:

"In the afternoon we proceeded to Sweet Milk Fountain where there was still a little water. We outspanned near the residence of one of the largest proprietors of merino sheep in the Colony, after passing a flock attended by a Caffer shepherd. The introduction of merino sheep into this country seems likely to contribute largely to the prosperity of the settlers, the fine wool being a valuable income.

28 December

"Being remote from bushes to shelter noxious wild beasts, our cattle were left loose during the last two nights in order to allow them more time to browse.

"This morning we passed a few houses called Sidbury; two of them are canteens. It is a poor-looking place but the hills around are grassy.

"As we approached Graham's Town the country became more hilly and was better supplied with water. There was also a moderate supply of grass on the hills which are of sandstone. On the rocky tops of some of them an arborescent bush with large oblongly-ovate leaves and thistle-like flowers forms a striking object [*Oldenburgia arbuscula*].

29 December

"In the forenoon we outspanned by the Assegai-bush River, a small running stream, the first we had seen since Zwartkops. [p. 173]

"On approaching Graham's Town we were struck with the uninviting appearance of its site which is in a naked country at the foot of a low rocky sandstone ridge... At the present time the supply of water was scanty and, at best, there is scarcely a place in the neighbourhood where it is deep enough for a person to bathe." [p. 174]

1838 **Bunbury, C.J.F. (1848)**

13 April

Crossed the Sundays River at Addo Drift into Addo Bush:

"For several miles to the east of it [Sundays River] the country is hilly ... and entirely covered with very thick bush of much taller growth than what I had previously seen, though of the same nature. Most of the shrubs here exceeded the height of a man, and there are plenty of trees, though not of great size. Trees and shrubs alike are loaded in a strange way with a whitish, thready, lichen hanging down in tangled bunches of extraordinary length (Footnote: *Usnea florida*, or a form intermediate between that species and *U. plicata*). It is the very same which encumbers in a similar manner the scattered trees on the campos of Brazil... This tract of bush near the Sunday River is called the Addo or Adow Bush.

"From the high grassy tableland beyond it (known by the name of the Addo Heights) ...

"Traversing the Quagga Flats, wide, open, grassy plains which formerly abounded with various kinds of the larger game ... we reached the Bushman's River... [Probably Rautenbach's Drift.]" [p. 126]

14 April

From Rautenbach's Drift on the Bushmans River, eastwards:

"There is some bush and rather pretty scenery in the neighbourhood of the river to which succeed huge, green treeless, round-backed hills, almost mountains in point of magnitude, but utterly unpicturesque. Such is the character of the country for many miles before we reach Graham's Town. This tract is excellent for feeding sheep ..." [Refers to Mr Daniell's farm near Sidbury, now Sidbury Park.] [pp. 127, 128]

April

Grahamstown:

"Graham's Town ... in a hollow surrounded by long flat-topped hills of moderate height and gentle slope which are in some places rocky but for the most part clothed with short herbage ... in a general view the country appears miserably naked and dreary. But there are many pretty wooded ravines and shady nooks concealed among the bare hills... In such situations the vegetation is often luxuriant and beautiful; the trees grow to a considerable height, and various climbing plants twine round them and hang from their branches, or interlace them with rich festoons of foliage. The mossy sandstone rocks, grey with lichens ... half hidden among the evergreen bushes, add to the beauty of these little dells.

"Here grows in great abundance the singular tree called the *nojeboom* [*nooiboom*], *Cussonia spicata* with large and curiously-divided leaves of a very fine green colour springing in radiating tufts from the ends of the branches which are themselves arranged in an umbrella-like form.

"The *doornboom*, *Acacia horrida* [*Acacia karroo* is meant], a tall aloe, *Aloe arborescens* and numerous thorny shrubs are characteristic of the vegetation of these ravines, but the most remarkable of all their plants is the arborescent *Euphorbia*, *E. grandidens* (?) which grows to the height of 40 to 50 feet with a thick rough-barked trunk and with its branches all rising to nearly the same level so as to form a broad flat head. It has no leaves, but its young branches are extremely succulent, thick, green, and angular like those of a cactus, and beset all along the angles with pairs of spines. Its flowers, which are of a yellowish-green colour, comparatively small and inconspicuous, are likewise seated on the angles of the branches. The whole plant is full of an excessively acrid and caustic milk which gushes out in great quantities wherever an incision is made.

"Several smaller species of *Euphorbia* grow among the rocks and stones on the most exposed and sunny parts of the hills round Graham's Town in company with various kinds of *Crassula* and *Mesembryanthemum*, and other succulent plants. Numerous Everlastings, *Helichrysum*, mostly with yellow flowers, abound on the dry grassy slopes. Ferns are not abundant but four or five kinds are to be met with in the deep ravines and on the shady sides of the rocks (Footnote: *Aspidium coriaceum* [probably *Rumohra adiantiformis*]*; Pteris calomelanos* [*Pellaea calomelanos*]*; Pteris hastata* [*Cheilanthes hastata*]*; Darea rutaefolia* [*Asplenium rutifolium*]).

"Formerly, I am told, there was a great deal of brushwood in the immediate neighbourhood of Graham's Town but much of it has been cut for fuel.

"The places I have found most favourable for botany in this neighbourhood were a ravine above the house at that time occupied by the Lieutenant-Governor on the west side of the town, and the southern face of the long and high ridge of hill behind the barracks on the south side of it. This hill rises from the town with a long smooth grassy slope of very easy ascent. Its ridge is narrow, and the descent on the other side very steep, in some places quite precipitous and rocky, in others covered with bushes, and affording a vegetation far more copious than that on the town side.

"From the top the view extends in one direction to the sea over an undulated grassy country variegated with wood ...

"The hills on the north and east side of Graham's Town are considerably lower than those near the barracks and expand on the top into smooth grassy plains of great breadth ... [p. 130]

23 April

"I rode out with Capt Selwyn ... to see a part of the Fish River Bush lying about north-east of Graham's Town through which he is making a fine road. We crossed the race-ground, an extensive and open tableland, very level and covered with a fine, short, close turf like Newmarket Heath. The scene changed entirely when we reached the Bush." Describes the countryside. [p. 138]

"... hill and dale alike covered with impenetrable tickets as dense as the undergrowth of a Brazilian forest and much more thorny. I cannot conceive a country more intricate or difficult. The shrubs are in general the same as those which occur along the Sunday River but in addition there is abundance of the great Tree *Euphorbia*... and the *Zamia horrida* [*Encephalartos horridus*] with its stiff spiny palm-like leaves springing from the top of a short thick stem which looks like a pineapple.

"I never saw, in any other part of the world, anything resembling the Fish River Bush; nor, I should think, does there exist a tract so difficult to penetrate or to clear. The vegetation is so succulent that fire has no effect on it even in the driest weather, and at the same time so strong and rigid, and so excessively dense, that there is no getting through it without cutting your way at every step, unless in the paths made by wild beasts. Yet the Caffers make their way through with wonderful skill and activity, creeping like snakes among the thickets where no white man can follow them, and this covert, extending so far along the frontier, is of great advantage to them, both in their predatory and hostile incursions, as they can muster in force and even approach to within a few miles of Graham's Town without being observed ..." [p. 139]

10 May

From Fort Brown, towards Grahamstown:

"We forded the Great Fish River near Fort Brown (or Hermanus Kraal) where it is much narrower than at Trompetter's Drift. The country between this river and the Koonap and southward to within 5 or 6 miles of the town is extremely rugged and covered with thick bush. [p. 163]

To 11 June

"I remained in Graham's Town until 11 June occupying myself chiefly with botanical pursuits, and notwithstanding the generally bare and monotonous aspect of the surrounding country, it afforded a considerable variety of curious plants.

"The succulent tribes are very abundant, especially three large kinds of *Aloe* which form striking and characteristic features of the scenery. They grow irregularly scattered over the parched and naked faces of the hills but most abundantly among the low broken ledges and knolls of sandstone rock, and are often seen spiring up above the evergreen bushes in the ravines, and crowning the cliffs. One kind grows to a height of 15 feet, and even more. The other two are usually about the height of a man. They are plants of strange rigid and ungraceful appearance but with very handsome flowers which form tall and dense spikes of a fine coral-red colour in two of the species (Footnote: *Aloe arborescens* and *A. lineata*) and of an orange-scarlet in the third (Footnote: *Aloe ferox* ?). When in blossom they are conspicuous at a great distance and might really be mistaken, when seen from far off, for soldiers in red uniforms. [p. 172]

"Numerous succulent euphorbias, of a variety of uncouth shapes, are abundant among the rocks, some looking like clusters of green fluted columns, some like prickly clubs, and some like vegetating pincushions.

"There is also an endless variety of compound-flowered plants, Compositae, mostly with yellow flowers, and some very showy.

"The *Proteas* and heaths, so characteristic of the more western part of the Colony, occur here in very small numbers; and the rushlike plants called *Restio* are much less prevalent than in the western district, while true grasses are proportionately more abundant.

"A very handsome corn-flag (Footnote: *Gladiolus floribundus* [probably *Gladiolus mortonius*]) with a tall spike of large pale pink flowers (now frequent in our gardens) grows here and there on the open grassy hills.

"Mosses and lichens are pretty numerous in the thickets, and often occur in a state of remarkable luxuriance and perfection; a large proportion of them are common to this country and to Europe (Footnote: *Neckera pennata; Pterogonium smithii* [probably *Pterogonium gracile*]*; Hypnum cupressiforme; Sticta fuliginosa* et *limbata; Collema saturninum; Parmelia herbacea*) while others are South American forms.

"The *Tecoma capensis*, a remarkably ornamental climbing shrub with trumpet-shaped flowers of a beautiful orange-scarlet colour abounds in the woods and thickets of the

country beyond the Great Fish River, but I did not meet with it in the neighbourhood of Graham's Town.

"A characteristic shrub of the eastern tract is the *Plumbago capensis* [*Plumbago auriculata*], wellknown in English greenhouses, with its delicate pale-blue blossoms. It is scarcely seen to the westward of the Camtoos but is frequent among rocks and bushes about Port Elizabeth, Uitenhage, and Graham's Town, and abounds in all the thickets of the Ceded Territory [Peddie]." [p. 173]

1839 Ainslie, W. (1899)

Spring Grove Farm, head of the Cowie Valley, Bedford:

"In 1839 my father purchased the farm 'Spring Grove'... Little or nothing had been done on the farm; it was quite in its natural state. My brother Robert and I took possession ... a beautiful stream of clear water running out of the forest, large yellowwood trees along the river; in the meadow, on the western side, grass waving in seed up to our knees, with here and there a few thorntrees... Our nearest and only neighbours in the valley at that time were a number of sawyers or bush-workers, working in the Government forest... The nearest farmer was Mr Henry Pedlar who lived at Elizabeth on the Kaga, about 10 miles away."

They built a wattle-and-daub house. "After completing the house ... we had to get a place put up for the brewery and malting... This we constructed of yellowwood slabs: these we procured from the bushworkers, and they were quickly and easily erected." [pp. 17, 18]

1839 Backhouse, J. (1844)

9 January — From Fort Brown, 20 km north northeast of Grahamstown, to the boundary of Albany on the Koonap River:

"Our road now lay along a narrow path in some places very stony and through thick bush, chiefly of the *spekboom* [*Portulacaria afra*], but in which were growing an entire-leaved jasmine with eight cleft flowers, *Jasminium capense* [*Jasminum angulare*], a magnificent aloe allied to *Aloe serrata* [identity unknown] and several species of *Euphorbia*. Sometimes we emerged in grassy hollows where we saw some wild Guinea-fowl. After passing under a high cliff on the bank of the Fish River ... and crossing the Kunap ... not now flowing ... we halted for the night at Tomlinson's Post, another small military station." [p. 180]

10 January — From Tomlinson's Post [? Koonap Post], 27 km south of Fort Beaufort, on the Koonap River, *en route* to Fort Beaufort:

"In the course of the forenoon we emerged from the vast bush of the Fish River and came upon a hilly country thinly covered with grass and having remote patches of *spekboom* and other bushes ...

"... in this part of the country ... there is an orchideous epiphyte [probably *Mystacidium capense*] on the *spekbooms* in some of the thickets. A lemon-leaved *Loranthus* with a profusion of orange-coloured blossoms [*Moquiniella rubra*] was also growing on some of the bushes." [p. 180]

11 January — Arrived at Fort Beaufort. Thence "...to an opening through the mountains called the Port [Poort]. Near this place we visited the grave of one of the first missionaries who came to this part of the country: his name was Williams ..." [The grave of Reverend Joseph Williams (d.1818) on Baddaford farm, 5 km northwest of Fort Beaufort, now marked by a National Monument plaque.] [p. 181]

Visited Maqoma's Kraal:

"The Blinkwater is a little winding river on a rocky bed bordered with willows and trees; near to its side Macomo had a hut and a tent [20 km north of Fort Beaufort, up the Kat River]."

2 April — Kaffirdrift on the Great Fish River:

"About 4 miles from Newton Dale [near Fish River Mouth, Peddie District] we entered the Fish River Bush and at the same time began to descend into a deep ravine in the clay-slate formation in which the river flows. The bush extends many miles and is very thick. *Spekboom* and euphorbias are among the principal plants of which it is formed.

"The former is the favourite food of the elephant which, a few years ago, abounded here. This huge animal formed the tracks now used as roads ...

"This ford is called Caffers Drift [Kaffirdrift]. It is wide and stony and has a broad margin of reeds on each side. These, with the flowing of the tide, occasion a great deposit of mud which renders the river difficult to cross even by wading and leading the horses." [p. 289]

Kaffirdrift on the Bathurst side of the Fish River:

"... this was woody and steep but was rendered very interesting by the beauty of its vegetation. Among the striking plants were a fine *Ipomoea* and a handsome *Hibiscus*, the blue *Plumbago capensis* [*Plumbago auriculata*] and the scarlet *Tecoma capensis*.

"At a mile and a half from the river, near a deserted military post, we emerged from the bush. Here, among some sterile rocks, there were scattered plants of *Crassula obliqua* producing splendid tufts of little scarlet flowers. [p. 291]

"In some of the narrow woody valleys about the Kap River [17 km east of Bathurst] and the adjacent parts of Albany the little date *Phoenix reclinata* abounds. It has pectinate leaves and attains to about 10 feet in height. It is a highly ornamental little palm and frequently bears the name of Coffee-tree because of the form and size of its seeds which nevertheless are not available for the purposes of coffee. Children eat the thin sweet coating of the fruit." [p. 293]

6 April — From Bathurst westwards to the Kowie River, *en route* to Theopolis Mission:

"... through the Kowie-bush which is much like that of the Fish River, the road being an old elephant track... Our road lay for a considerable distance along the bottom of the deep woody ravine of the Kowie in which a species of *Angrecum* (?) [possibly *Polystachya* is meant] was growing as an epiphyte upon the trees and exhibiting its small yellow blossoms.

"The beautiful *Strelitzia regina*[*e*] was abundantly in flower on the north side of the ravine. It is very plentiful in this country, growing in large tufts among the bushes. Its leaves have a flag-like appearance; they are spoon-shaped and on stout foot-stalks. Its singular orange blossoms, 3 inches long with purple tongue-like anthers, are produced from the upper side of a large horizontal sheath on the top of a stalk, and present a very remarkable appearance.

"The seeds of the large white-flowered species, *Strelitzia augusta* [*Strelitzia nicolai*] which grows nearer the coast, are edible.

"Grass became more abundant as we proceeded over a series of hills separated by woody kloofs towards Theopolis ..." [p. 296]

9 April — From Theopolis Mission to Salem, 18 km south of Grahamstown:

"Much of the intervening country is sandy hills with thin grass... In a copse near a small stream called the Kareega [Kariega] a fine *Gardinea* [possibly *Gardenia thunbergia*], a handsome shrub with large fragrant white blossoms, was in flower ...

"Towards evening we passed over an extensive plain and descended into the vale of the Assagai Bush River [Salem]." [p. 298]

17 April — Farmerfield, 6 km east of Salem:

"The estate contains 6 000 acres. It was formerly a sheep farm but is better adapted to horned cattle and agriculture ... it is grassy and pleasantly situated but not in the most fertile part of Albany, the soil of which is generally far from rich ..." [p. 305]

18 April — Between Salem and Sevenfountains, 24 km southwest of Grahamstown:

"*Nerine undulata* a pretty plant of the *Amaryllis* tribe was plentifully in flower by the sides of rivulets here." [p. 306]

20 April — The farm of E. Thornhill, c. 18 km southwest of Grahamstown:

"We visited a place in a woody valley where, among some overhanging rocks, there were drawings of men and beasts traced with red pigment. These were evidently the work of Bushmen who were probably the original inhabitants of Albany before it became occupied by the Caffers who were driven out of this part of the country by the Dutch.

"The figures of men in this place were about 9 inches high. Those of buffaloes and other wild beasts were much less ..." [p. 307]

26 April — Crossing the Great Fish River [probably *via* Vyge Kraal, through present Kentucky Farm, now Andries Vosloo Kudu Reserve]:

"We took a new road which led along a circuitous ravine branching from the Fish River below Fort Brown. At this place a large gang of convicts, chiefly Hottentot, were employed in forming a road... The hill on which they were working was of clay-slate interrupted by basalt and silicious schist. [Probably Vyge Kraal drift.]

"Among the bushes with which it was clothed there was a species of *Zamia* [*Encephalartos*] ..." Reached Tomlinsons Post on the Koonap that evening.

28 April — Fort Beaufort District, above the town:

"The number of inhabitants is considerable in this picturesque part of the country where mountains, wood, and grasslands are interspersed, and the Kat and Blinkwater rivulets are scarcely ever without running water." [p. 312]

Returned to Fort Beaufort "...through a kloof in the mountains in the upper part of which there were a few patches of caffer Corn. The copses were decorated with *Tecoma capensis* and *Plumbago capensis* [*Plumbago auriculata*]." [p. 313]

30 April — From Fort Beaufort to Alice:

"From Fort Beaufort we traversed some stony hills covered with grass and besprinkled with *doornboom* and came again to Block Drift ..." [At Alice.]

18 May — Travelling from Bedford, through the Great Fish River, to Glen Avon:

"On descending to the Great Fish River the country became poorer and more bushy, and continued so to Somerset. Near one part of the road, an *Aloe* with a tall trunk *Aloe ferox* (?) formed a splendid object; its flower stems were from 3 to 4 feet high, some of them with one or two upright branches. The blossoms were tubular and shaded with red, orange and yellow. They clothed the stems from the base so as to form spikes the thickness of a man's arm." [p. 326]

1839 Bunbury, C.J.F. (1848)

28 February — Referring to *Protea cynaroides* on Table Mountain and the Cape Flats: "... while its range in longitude is greater than that of almost any other member of its tribe, extending as far to the eastward as Graham's Town ..." [p. 217]

1843 Cumming, R.G. (1850)

Albany and Caffraria:

"Throughout the jungles of Albany and Caffraria, but more particularly in the deep kloofs and valleys, many varieties of noble forest trees are found of considerable size and great beauty, several of which are much prized by the colonists on account of their excellence for waggon-work and house building. Of these I may enumerate the Yellow-wood tree [*Podocarpus*], the wild cedar [*Widdringtonia nodiflora*], the Stinkwood Tree [*Ocotea bullata*], and the black and white Iron wood tree [*Olea capensis* and *Vepris undulata* respectively]. The two latter are remarkable for toughness and durability and are much used in the axle-trees of waggons.

"The primitive use of wooden axle-trees has of late years been superseded in some districts by patent iron ones; many, however, still use and prefer the old wooden axletrees because waggons having those made of iron, in steep descents run too freely after the team to the injury of the two after-oxen, and, further, because a wooden axle, if broken, may be replaced in any remote part of the country whereas a damaged iron axletree cannot be mended even by the skilful smiths throughout the towns and villages of the Colony. The iron axles are especially apt to be broken in cold frosty mornings during the winter ..." [1: 48, 49]

Through De Bruin's Poort, 20 km northwest of Grahamstown:

"We commenced descending through the De Bruin's Poort where the road winds in a deep, narrow and rugged ravine through dense evergreen underwood in its descent to the lower ground adjacent to the banks of the Great Fish River. The poort, or mountain pass, the terror of waggon-drivers, being at all times perilous to wagons, was in the present instance unusually dangerous and impassable, the recent rains have entirely washed away the loose soil with which the colonists had been in the habit of embarking the permanent shelves and ridges of adamantine rock over which the waggons must necessarily pass, while they had at the same time undermined an immense number of large masses of rocks and stones which had hitherto occupied positions on the banks above and which now lay scattered along the rocky way, presenting an apparently insurmountable barrier to our further progress. [1: 44]

"The country through which we had passed was densely covered with one vast jungle of dwarfish evergreen shrubs and bushes among which the *speck-boom* [*Portulacaria afra*] was predominant. This species of tree which is one of the most abundant throughout the forests and jungles of Albany and Caffraria, is utterly unserviceable to man as its pithy branches, even when dead, are unavailable for fuel. It is, however, interesting as constituting a favourite food of the elephants which, about 25 years ago, frequented the whole of this country in large herds. The footpaths formed through successive ages by the feet of these mighty animals are still discernible on the sides and in the necks of some of the forest-clad hills ..." [1: 46]

September

Presumably the Dikkop Flats, 32 km northwest of Grahamstown, on the south bank of the Great Fish River at Carlisle Bridge, having come through De Bruin's Poort. The road went that way in those early days, not through Helpoort:

"... a march of four hours [from De Bruins Poort] brought us to the bank of the Great Fish River having crossed an extensively open glade covered with several varieties of low shrubs and grasses and rough heather ..." [1: 49]

Country southwest, west, and northwest of Bedford:

"Our march ... lay through a mountainous country abounding with rich pasture covered in many places with picturesque thorny-mimosa trees, detached and in groups, imparting to the country the appearance of an English park... At sundown we encamped at Daka-Boer's Neck [Daggaboersnek] on high ground where the road crosses a bold precipitous mountain-range ... 30 km northwest of Bedford. [1: 56]

"The country through which we passed was bold, mountainous and barren excepting along the banks of the river [Great Fish River, which he crossed twice] which were adorned with groves of mimosa [*Acacia*], willow [*Salix*], and whitethorn [probably *Acacia karroo*], clad with a profusion of rich yellow blossoms yielding a powerful and fragrant perfume. It was now the spring of the year, and this season, having been peculiarly favoured with rains, a vernal freshness robed these somewhat arid regions ..." Reached Cradock on 2 October. [1: 57]

1846 **Ainslie, W. (1899)**

Kroomie Mountain, Fort Beaufort:

"I should mention that this range of hills is covered by a dense bush, or forest, extending from the Blinkwater on the east round to the Koonap on the west... On top of this range and round the top of the Waterkloof, there are open, grassy glades extending for some miles; there are slip-paths and bridle-roads cut through the forest at different parts ..."

On reaching the top of the range "... we proceeded up a narrow path to the top of the range where we could only march in single file. At the top of this path, on clearing the bush, is a fine, open, grassy undulating flat." [p. 160]

Forest, probably on either Spring Grove or Cavers Farm, head of Cowie Valley:

"At daybreak we returned home and found the whole forest one mass of fire. Some fires had been made in the bush and, with the strong wind, they had spread throughout the whole forest, destroying acres and acres of timber. Those who witnessed it said that a ball of fire would be carried by the wind for 100 yards, so that in a short time the whole forest was in a blaze. Thousands of pounds worth of timber was destroyed that night." [p. 122]

1846 **Cumming, R.G. (1850)**

29 January

Great Fish River between Fort Beaufort and Grahamstown, probably near Fort Brown:

Met about 60 waggons "...waiting the fall of the river to get through. Some of us set to work to clear away a bank of mud on the opposite side after which a good many waggons ... crossed the river." [Muddy deposits were brought down even then.] [2: 153]

1846 **Paver, R. in Duminy & Adcock (1979)**

Maastrom Farm, outskirts of Bedford town:

"Sir Andries Stockenstrom [1792–1864] and his family were then residing at Maastrom on the confines of the Kaga forest ... [p. 54]

"... his farm which included the extensive and dense forests which clothe the high ridges and deep kloofs forming the southwestern almost rectangular face of the Kaga range. The homestead ('Maastrom') was a mile away from the forest proper but it could be approached to within a quarter of that distance under shelter of thick mimosa thorns [*Acacia karroo*] and to within twenty yards of the premises by means of a deep and wooded branch of the Kaga River on which the homestead was situated ... the house having extensive undulating flats in front of it and the enclosed land. This deep and wooded branch of the Kaga River had been partially dam'd up, the garden being reached by a wooden bridge and almost encircled by fullgrown weeping willows [*Salix babylonica*] ..." [p. 55]

1848 Baines, T. in Kennedy (1961)

5 March

Probably Settler's Vlei, just southwest of Sidbury:

Baines had crossed the Bushmans River at Rautenbach's Drift *en route* to Sidbury and Grahamstown. "We crossed the Bushman's River before sunset and about eleven halted on a hill, near a long-deserted Kaffir Kraal ..."

6 March

"Light mists were rising from the valleys and the course of the Bushman's River might be traced for many miles by the vapour which filled almost to overflowing the space between the hills on either side; and on the other side of the road was a vlei or small pool in the clear bright surface of which the overhanging trees were mirrored; alas, that its purity should be only superficial, but it seemed to me too true a picture of life and not less perhaps of travel in Africa. Nevertheless the coffee tasted well... In the afternoon a detachment of artillery arrived from Grahamstown and encamped around the vlei." [p. 27]

7 March

The Kariega River crossing between Assegaaibosch and the southern entrance to Howison's Poort:

"... with the *riemschoen* or drag beneath the afterwheel, we launched down the steep slippery banks of the Karreiga [Kariega River]. Abram volunteered the information that this was a nasty little place which, so far as the road was concerned, I felt in no wise disposed to call in question, though to the fertile lawns around, dotted with mimosa and enlived with the light-green leaves and lilac flowers of the *specboom* [*Portulacaria afra*], the epithet was far from applicable."

Howison's Poort, 4 km southwest of Grahamstown:

The road was in course of construction "...at a cost of about six thousand pounds ... a few euphorbias and aloes overhung the cliffs of sandstone at its entrance. The heights ... were covered with the large white *Protea* [possibly *Protea subvestita*] and the *wagenboom* or *Oldenburgia arbusculus* [*Oldenburgia grandis*], a highly combustible resinous bush, which, about the close of the year, puts forth its splendid flowers. The lower slopes were richly clothed with the hottentot fig [*Carpobrotus edulis*], a species of *Mesembryanthemum* of which nearly 300 have been enumerated, its stems spreading along the ground to a distance of many yards from their common centre, shooting up their short succulent leaves and brilliant red or yellow flowers, and covering a sandy soil where nothing else will grow with refreshing verdure, or imparting to the grey rocks the appearance, at a little distance, of ivy-mantled ruins; and the bubbling rills shaded with the leafy screen of the fan-like palmiet [*Prionium serratum*] and adorned with the pure white flowers and cool green leaves of the beautiful *Calla aethiopica* [*Zantedeschia aethiopica*, the arum lily]." [p. 28]

March

Grahamstown:

Describing High Street: "The Street is shaded at intervals by rows of trees among which the most conspicuous is the wide-spreading *kaffirboom*, *Erythrina caffra*, which is alternatively covered with leaves and rich clusters of brilliant scarlet flowers ...

"The northward of the town is the picturesque and slightly-wooded kloof called Oatlands, the residence of Major-General Somerset; to the east the burial grounds and the Hottentot and Fingo Locations ..." [p. 34]

16 March

Ecca Pass, 14 km northeast of Grahamstown:

"We reached the Ecca Heights five miles farther ... and descended into the deep and tangled kloof in which the bright flower of the *Aloe* and the light grey stems of the gigantic chandelier-like *Euphorbia* were relieved against the dark foliage of the moss-covered thorn, by the 'Queen's Road' [now the Ecca Pass] hewn with immense labour in the mountain side ..." [p. 36]

Probably near Fort Brown, 20 km north northeast of Grahamstown [after crossing the Fish River Baines passed under a high cliff, arrived at the Koonap and stayed at Tomlinson's, which was a local hotel]:

"We crossed the swollen and turbid waters of the Great Fish River at 'Vyge Kraal' drift, so-called from the 'Turk fig' or cactus [*Opuntia* sp.] which abounds in that locality." [In 1973 no heavy infestation of prickly-pear was visible, but the area was seriously infested with another *Opuntia*, the jointed cactus, or *katji*, which was not present in South Africa in 1833 when the place was already called Vyge Kraal. The old road to and from the drift on the Great Fish River passed that way originally.]

25 March

From Elands Post [Seymour], 29 km northeast of Fort Beaufort, to Elandsberg, 12 km northeast of Seymour:

"... came to the foot of a pass called Bush Neck, to the north of the Elandsberg and between it and the mountains which enclose the settlement [Elands Post] on its northern

side. The sides of the hill at a small elevation were ornamented by the beautiful white and crimson bell-shaped flowers of the *Sparaxis pendula* [*Dierama pulcherrimum*] waving lightly in the breeze and bending with their weight their slender reedy stems into a delicate and graceful curve; and the narrow road as we ascended was overhung by tall timber trees interlaced with bush-rope, or luxuriantly covered with wild vine ...

"Continuing our journey we passed over a succession of rounded hills covered with rank sour grass, and, but that the clouds rested in heavy masses upon them, might have obtained a view of the Elandsberg, Gaika's Kop and the Amatola ..." [p. 63]

21 June — Koonap Heights, on the road towards Fort Brown on the Great Fish River; Baines went down through the Fish River Bush near the junction of the Koonap and Fish Rivers:

"... from the thick and matted jungle on either side of the road rose the tall grey stems and prickly succulent leaves of the euphorbias, looking like gigantic candelabra and festooned with numberless creeping plants; and, to the brilliant flower of the *Aloe* was now added that of the magnificent *Strelitzia regina*[*e*], rising, in form almost like the head of the tufted crane, and in colour of the brightest orange and the richest purple, from a cluster of cool green leaves whose colour spoke, in language not to be mistaken, of refreshing moisture beneath the earth ..." [p. 108]

1848 Black, W.T. (1901)

1848–1852 — Fish River Bush:

"The Great Fish River Bush begins principally about Junction Drift where the Little Fish enters and covers the valley, thence to the sea.

"It traverses all the numerous tributary valleys that pass into the great valley, such as those of the Botha's River [12 km north of Grahamstown], Kowie, Ecca River [Brak River, 30 km east northeast of Grahamstown], and Blaauwe Kran's River [Bloukransrivier], Sheshago [Sheshego] River [16 km south southwest of Alice], Clusie [Ngqushwa] River [at Hunt's Drift, 45 km east northeast of Grahamstown], and Kap Rivers [24 km east northeast of Port Alfred], and a considerable way up the Kat River nearly as far as Howse's Post [the Kowie and Blaauwkrants Rivers do not feed the Fish River].

"To the southwest it may be said to cover a large triangle of country formed by the Fish River, north and east, and the course of the Kap River [Bathurst], along the summit of Governor's Kop, 17 km east northeast of Grahamstown, Botha's Hills, and the Fish River Berg [Riebeek Hills] on the southwest.

"The Kat River Bush [Fort Beaufort] to the north is connected with the Great Fish River Bush lying east of Graham's Town ...

"About Junction Drift it becomes connected with the Bushman's River Bush and the fastnesses of the Zuureberg, across the Commadagga ... [all running southwards].

"By various large kloofs east between Trumpeter's and Victoria Post [13 km south southwest of Alice] as Foonah's and Doda's Kloofs [23 km south southeast of Alice] it becomes connected with the Keiskamma Bush of similar character extending from Kayser's Station [Knapp's Hope Mission, 11 km southwest of Middledrift] to the mouth of the Keiskamma River.

"The Ecca Bush [between Pluto's Vale and Committees, 27 km east northeast of Grahamstown] was the scene of the exploits of the notorious rebel Hottentot, Jan Pockbaas ...

"The Koonap Hill road through the Bush, near Koonap Post has also witnessed roadside robbery ... [p. 10]

"The river runs in a vast valley bounded by grass covered hills which are in "numerous places from twelve to sixteen miles or more apart and it is this entire valley that is covered with bush.

"The boundaries of that part running due east are the Fish River Berg [Riebeek Hills or Riebeek Mountain] and Botha's Hill [7 km northwest of Grahamstown] on the south, and the Fish River Rand, or Caffre Berg, on the north [35 km north of Grahamstown].

"The Bush country above the Kat River junction [northeast of Fort Brown] is habitable for sheep-farmers during peace time but totally abandoned from its untenableness during the war. That part below has seldom been occupied at all except by the military posts here and there. [This shows that the country from about Fort Brown to Hunts Drift had not been given out as farms by the time of the 1851 war.] [p. 11]

"The Fish River valley in ordinary seasons is almost entirely destitute of water except what the river itself contains, so that the soil is universally very dry and ... almost totally unfit for agricultural purposes ... no good soil of any depth exists except in the flats along the margins of the river and that is of sandy reddish clay ...

"The small streams running to the main river soon dry up, stagnate, and become very brack, e.g. the Botha's River and the Kingo [the tributary running north of the Fish River Rand to the Koonap River, 15 km north northwest of Fort Brown], and nearly all others.

"The Fish River itself is often stagnant, and sometimes stinking with animal refuse and vegetable remains in long dry seasons especially about March and October."

When good rains up country bring down the river, it becomes so muddy that "…even the horses and cattle will scarcely drink it. Its rise on these occasions amounts to from 15 to 30 feet ... and carrying down a great quantity of bush and dead timber torn away from its banks."

The sea is tinged red at the mouth for many miles and debris is deposited along the beaches.

"In wet seasons vleys or ponds of water may be found here and there in flatter parts of the valley ... but these soon become dried up... During the dry seasons the game of the larger kind repair to the banks of the river for water ... [p. 12]

"It is a circumstance of astonishment that such vast areas of land should support such quantities of bush without any visible sign of running water anywhere which one would also imagine necessary for its numerous animate inhabitants. Deep kloofs and shady ravines are in numbers everywhere without this source of vegetation and alleviation of thirst, and where one would expect a cool rill of water to be springing out to moisten the ground. The succulent nature of some of the vegetation of the bush is said to supply this deficiency to some extent to its herbivorous frequenters ...

"The valley country, when viewed from the ridge of its boundaries, presents a chaos of hills, kloofs and krantzes with intervening patches of more level ground ...

"... deserted repose, its sombre dark green or brownish green appearance, according to season, its interminable extent and the absence of any cultivated spot of ground, or even a house.

"As part of the whole, the valley of the Ecca looking east from a favourable height presents a gradually diverging valley entirely covered with bush some 8 or 10 miles long by 6 miles broad, at the termination of the view which is closed in by the bushy hills and kloofs of the east side of the Fish River Valley at Committee's Drift. Forming the south boundary of the valley is a range of disrupted bushy hills with intervening deep and rugged kloofs and ravines... The north side of the valley is filled up by high lands about the Grass Kop [13 km east northeast of Fort Brown] the sides of which are deeply broken by dark kloofs and bushy ridges. In the extreme distance at the left, and situated on the banks of the Great Fish River may be discerned a yellow spot, Committee's Post, now untenanted since the last war.

"... ostriches, *Struthio,* used in former years to pick the grass in the open glades at that flat spot of ground below. [Thus grass did grow in the Fish River valley.] [p. 14]

"The bush-covering to this part of the country does not add variety of scenery to the confused assemblage of hills, valleys, flats and krantzes, as it covers all inequalities of ground with a sameness of appearance and makes almost every kloof and koppie exactly resemble each other, except in size. Its impenetrability is so great that no person is able to make any way through it except through passages made formerly by the gigantic elephant which are well adapted for bridle paths and were the only roads existing in an early state of the Colony.

"Smaller footpaths, made by the present denizens of its cover, as the larger bucks, etc. ... are also means of access to the interior of its recesses ...

"The only use of the more accessible parts of this impracticable country is the more open and level parts constituting fine pasturage for sheep - the bushes affording them abundance of food even should the grass fail in dry seasons, but then the flavour of the mutton distinctly alters, though not by any means to a disagreeable taste. [pp. 16, 17]

"The bush is denser and more tree-like in the kloofs, and opener on the more level and elevated grounds where the koodoo and the buck graze and the wild pig ploughs the ground for its food, as the open glades abound after rains with abundance of sweet grass and other such fresh vegetable productions.

"The jungle is never seen to have grown either more extended or higher in the memory of the inhabitants of this country, and no encroachments are made on it except when grass fires on the hills burn away its borders which remain for a long time scarred and black.

"... composed of numerous kinds of plants, shrubs and trees, mostly ... of the thorny, prickly character (*Acacia*) entangled by their own branches, and by various creepers (*Pelargonium*) and are rendered more impassable by thick underwood.

"Few trees ... are of such size or such a kind as to furnish good timber which is chiefly procured for use in eastern districts from the forest kloofs of the Kat River District [Fort Beaufort], and those of the Cowie Forest in the Mancazana [Bedford and Adelaide] and the Kaja [Kaga, Bedford] Districts ...

"Stunted euphorbias grow in abundance in every direction, as well in the kloofs as on the koppies and flats; and the ... giant candelabra *Euphorbia E. ?triangularis* rears its hydra-headed form above its neighbours in the deep hollows, or on the sides of the kloofs... Abundance of milky juice distils from incisions in its trunk, or the rupture of a branch from a stem which very probably would furnish india-rubber or caoutchouc if the proper means were taken to obtain it, and, if successful, the material would be in abundance.

"The sweet-scented jasmine, *Jasminium* [probably *Jasminum angulare*], entwines ... with numberless white flowers, the different shrubs and trees... Numberless bulblike Amaryllides and *Narcissus* shoot up their leaves and single-stemmed crown of flowers after rains in the spring from the ground in the lower parts of the valley.

"The *speckboom*, *Portulacaria*, abundantly relieves the monotonous evergreen colour of the bush with its lilac clustered flowers, and its succulent gummy leaves formerly afforded the principal food for the elephant and are now partaken of by the thirsty traveller with relish, and often cooked by the native inhabitants into a kind of stew. [pp. 18, 19]

"The tops and sides of the hills are garrisoned by stumpy aloes with their thin bristling head of leaves ...

"The prickly *Acacia* [*Acacia karroo*] covers the level lands, throwing out, when its yellow clustered flowers are in bloom, a delicious fragrance.

"The spear-shaped but scentless flowers of the *Strelitzia* [*Strelitzia reginae*] may be seen shooting up amidst their dark green elongated leaves, enlivening with their bright colours the sombre hue of the sides and heads of the kloofs.

"The River Bush is of a different nature to that covering the rest of the country and marks the course of the stream distinctly to the spectator from some height overlooking the valley; it is greener and loftier, and completely overhangs the water in most places so that one can scarcely obtain a view of the stream itself till passing through to the bank of the river.

"Coarse Willow trees, *Salix*, constitute its largest bush... Weaver birds nest on its branches. [p. 19]

"That white smoky line advancing along the undulations of the bush-covered valley, like the progressing margin of a grass fire, is a squadron of winged locusts (*Acrydium*) in line, the hindmost of which are constantly flying over their comrades ahead to take up the unconsumed vegetation while they leave behind them a leafless desert.

"On near inspection, the bushes are seen completely covered by their brownish-grey bodies, heaps of which may be knocked off like snow-wreaths by the stroke of a stick, while your horse may be seen with avidity clearing another bush of its devastators. [His remarks seem to infer that the locusts were eating the leaves of the bushes. Did they do this? It is worth further study.]

"Clumps of prickly-pear [*Opuntia* spp.] with their leaflike, succulent branches studded with golden-yellow flowers ... grow here and there luxuriantly, the fruit affording rich food for wild pigs, and giving the name Vyge Kraal to a locality of the Fish River. [p. 20]

"Fire makes no impression on the everlasting verdure of the bush, and if a grass fire stretches to its margin, it merely consumes a little at its edge that is of a more open character, but never penetrates into the recesses of a kloof ...

"In every respect there seems the character of eternity implanted on it. No one knows how, or where, or when, it began to grow, no one has noticed its increase in any way, no one its decay. No fall of leaf takes place to any appreciable extent, the foliage only undergoing in the winter season a brown shade of colour ... it partakes more of a character of a stratum on the surface of the earth than anything proper to organic life." [p. 22]

Notes that Colonel Armstrong, Cape Mounted Rifles, had said that "... it was a common practice for the men of the detachment to hunt elephants on the Committee's Flats in the valley of the Ecca.

"The buffalo, *Bubalus caffer* still haunts, though in few numbers, the bushy kloofs and sides of hills between the Grass-kop and Double Drift [15 km east northeast of Fort Brown]…

"The fawn-coloured koodoo, *Antelope strepsiceros* ... may be observed in small herds, or solitary, about the Fish River Rand where they graze in the open glade on the summit of that range but their refuge is in the bushy kloofs of the Kinga [15 km north northwest of

Fort Brown, between the Fish and the Koonap]. Their spoor ... may often be seen leading from thence to the banks of the Fish River on one side or the Koonap or the other in search of water, though the gratification of this appetite does not appear to be daily necessary in any kind of buck. They also frequent the country between Double Drift and Grass-kop, and that eastward of the Fish River, and some have been seen up as far as Liewfontein [Leeufontein is beyond the Koonap] on the road to Fort Beaufort. They come out to feed in the early mornings and late evenings in the open spaces of the bush and also browse on particular kinds of delicate shrubs. During the heat of the day they lie down in the recesses and cool shade of some bushy kloof near where they had been feeding. [The bush had open spaces here and there.] [p. 23]

"The River Bush is the most frequented resort of these animals [antelope] during the dry seasons and their resort in any favourable numbers is easily ascertained by the quantity of spoor." Trapping of buck in these narrow tracks of bush along the river is done by the locals.

Thus, much of the country was not occupied by farmers in the years 1848 to 1852 while Black lived there. His book appeared only in 1901, nearly 50 years later, and in it he writes: "Considerable alteration will no doubt have taken place in the condition of nature since then owing to colonisation and cultivation of the primeval wilderness then existing. Farming and agriculture will have invaded the valleys and their flats, and established dwellings and tillage. The wild animals, as elephants and hippopotami, tigers and hyaenas, koodoo and bushbuck, will have disappeared by now but most of the birds may still remain denizens of the woods." [Of elephants, hippo, leopards and hyenas, he was correct. Kudu and bushbuck still survive well. Farming has taken over.]

1849 Baines, T. in Kennedy (1961)

26 January

Eildon Farm, upper Baviaans River Valley, Bedford:

Referring to the poetic works of Thomas Pringle, Baines writes: "Next morning many of the spots hallowed by the poetry of the British emigrants' earliest and sweetest bard were pointed out to me. The 'umbra' [Latin for shade] tree from under which his horse was stolen by a lion, and which is shown in the vignette prefixed to his works shading his 'rustic cabin thatched with reeds', still stands, honoured by the distinctive appellation of the Eildon tree, before the door of the present, more comfortable, dwelling; and is of a kind known by the Colonists as the *witte gaat boom* [*Boscia albitrunca*], an evergreen with small dark leaves and light grey stem, generally attaining a height of from 10 to 14 feet.

"... mounting a horse lent me by Mr Pringle ... I rode with him up the valley ... to a sequestered spot where his sheep, as at the farm of Mr Stokes, were being washed beneath a couple of spouts projecting from a ledge of rock that stretched across the river; and, a little farther on, dismounted beside..." a krantz with Bushman paintings, described by Baines. [pp. 115, 116]

27 January

Ainslie's farm in Cowie River valley, Bedford [Baines rode there from Adelaide village site to Cavers Farm and Spring Grove Farm]:

"... I sketched the house which is, or was before the brand of the savage was applied to it [1851], pleasantly situated facing the morning sun, with the thick forest clothing the mountains and hiding the rivulet in front, and rendering the mimosas which dotted the green slopes in the rear more thin and meagre by comparison ... [p. 123]

"Next day I walked a mile or two up the valley to the house of Mr Ainslie, Senr ... and walking with me through the forest, a considerable tract of which he had purchased from the Government, pointed out with no little pride his miniature cascade, a bubbling rill that trickled over a moss-covered rock through an opening in the woods ..." [p. 123]

18 October

Ecca Pass:

"About half-way up the Queen's road we off-saddled, and Edwards searched the ground till he found a small green stem without leaves. Here he began digging until he came to a root like a turnip and perhaps 7 or 8 inches in diameter; slices of this served for breakfast ...

"The magnificent *Strelitzia* or Queen flower [*Strelitzia reginae*] grew in abundance on both sides of our path and I had gathered two or three of the finest, but they got broken during the ride ..."

Arrived in Grahamstown. "Here I found most of the parcels I had sent home from the country, including the two bread fruit, which, having become dry, had burst with a loud report, scattering their seeds about the room, to the great alarm of Mr and Mrs Potter who were sleeping immediately under it ..." [p. 216]

1851 Ainslie, W. (1899)

Fort Beaufort and Adelaide:

"Col Fordyce had collected a force of some 400 men at Gilbert's farm, Sipton Manor [west of Fort Beaufort]. They started from the farm early in the morning, and halted at the foot of Kroomie range. (I should mention that this range of hills is covered by dense bush or forest, extending from the Blinkwater in the east round to the Koonap in the west, and joins the Koonap near where Adelaide now stands.) On top of this range and round the top of the Waterkloof there are open grassy glades extending for some miles; there are slip paths and bridle-roads cut through the forest at different parts ..." [p. 186]

1851 Baines, T. in Kennedy (1964)

14 March — Flats just north of the Great Fish River near Carlisle Bridge, after coming down Fish River Rand:

"... after a breakfast on the fruit of the cactus [prickly pear, *Opuntia*] which grows here abundantly and, when well washed, may be eaten without inconvenience from the downy thorns that cover it, we crossed the Fish River ..." [p. 190]

8 July — Between Kroomie and Adelaide:

"Leaving behind the open grassy plains and winding through patches of mimosa, we crossed the Koonap at the old Gola Post, or Haddon [immediately south of Adelaide], and turned to the northwards along its banks, the 74th [Regiment] effecting the passage a little higher up where a ridge or blue rock formed a small cascade and afforded to the sure-footed Highlanders the means of crossing dry shod ..." [p. 208]

14 July — From Haddon Camp to the Mngwala River and into the Waterkloof [eMthontsi, 14 km northeast of Adelaide]:

"... we proceeded slowly up the Gwala valley... Turning abruptly to the right we entered the Waterkloof, a deep bushy defile with thick forests and some of the boldest precipices I had yet seen, more especially on its northern side... We halted for breakfast on a slope of rich, dewy grass... About eleven we were on the way again and, at half past, emerging from an avenue of over-arching trees which for some distance converted the road into a shady bower...we saw a number of Kafirs ...

"A steep and narrow path used formerly by wood-cutters and up which, our guides told us, a buggy had once passed, now led through the dense forest at the head of the kloof. Tall yellow-woods [*Afrocarpus* or *Podocarpus*], with bare straight stems and scanty foliage towered above us, mingled with iron-wood [*Olea capensis*], white and red pear [*Apodytes dimidiata* and *Scolopia mundii* respectively], and other varieties; the space between them filled with jungle and the branches interlaced with bush-vine." [p. 209]

13 October — Kaalhoek, near Didima, 23 km northeast of Adelaide:

"... after ascending the northwestern extremity of the Kat berg and crossing the upper Blinkwater we sent our wagons ... to Post Retief... We halted for the night at Kaal Hoek to the south of the Didima on a rich grassy slope near a little rivulet on the other side of which were two small patches of bush ..." [p. 229]

14 October — Fuller's Hoek on the Blinkwater, 13 km northwest of Fort Beaufort:

"The tableland on which we stood extended to the south forming a bold promontory or plateau surrounded by steep krantzes and kloofs with ridges sloping down on the left into the Blinkwater, and on the right into a still more densely wooded hollow called Fuller's Hoek, the reputed stronghold of Chief Macomo [Maqoma ... its western side bounded by a line of forest connecting Fuller's Hoek with the Waterkloof ..." [p. 230]

27 November — From Kat River Poort [Baddaford Farm], 5 km north of Fort Beaufort:

"Our course lay up the right, or northern, bank of the Kat River... Nature, indeed, seemed to be putting on her gayest livery. The Star of Bethlehem [*Ornithogalum dubium*] mingled its pale yellow flowers with the more deeply-coloured marigolds; numberless bulbs with long slender leaves, their green polished surfaces conveying refreshing ideas of coolness and moisture, were putting forth their many-coloured buds of promise; *Convolvuli*, wreathing along the ground, displayed their beautiful but fragile flowers; and different varieties of the *Mesembryanthemum* or hottentot fig [*Carpobrotus edulis*] carpeted the earth with large parterres of pale yellow or crimson flowers; while the golden-blossomed mimosa [*Acacia karroo*] impregnated the gentle breeze with its fragrant smell ..." [p. 255]

1851 **Stubbs, T. in Maxwell & McKeogh (1978)**

March — Swartwaterspoort, 52 km north northeast of Grahamstown:

Chasing rebels from the north entrance: "On arriving at the other end he saw two of the rebels on the side of the hill (this part is very thickly studded with prickly-pear and bush ...)" [p. 165] [This area was still very heavily infested with prickly-pear, *Opuntia* sp., in 1982]

1853 **Shaw, W. in Sadler (1967)**

Birklands [Healdtown], 11 km north of Fort Beaufort:

Reverend Shaw "...visited the spot and selected the ground for the Mission. The place is extremely well suited for the purpose of a mission village. A ride of 5 or 6 miles up a deep mountain glen is terminated by a rocky precipice covered with a forest of trees; the various streams which rise still higher up the mountains, are precipitable over this rock and, joining at its foot, flow to the Kat River at Fort Beaufort. The site of the village is at the top of this rock on a kind of plateau having a view down the entire valley with Fort Beaufort at the distance of 7 to 8 miles which stands upon open country... The most material points, however are, the soil is good; wood, water and grass abundant ..." [p. 226]

1863 **Dobie, J.S. (1945)**

6 September — From Cradock down the Fish River; crossed the Tarka River near its confluence with the Great Fish River, 20 km south of Cradock:

"At a stream the road turned; a fine pile of trap clothed with cactus or prickly-pear opposite." [p. 125]

9 September — De Beers Pass, 40 km north of Bedford, into Baviaans River Valley:

"On through a deep stony and thorn-clad gorge, then up the high range and across through snow into a valley of Baviaans River watershed... The road took us through a pretty thorny and wooded ravine to a farm which turned out to be Leonards... On again, pretty place that of Leonard's but confined, hills rising fast and stony to a high level. Ravine still bushy. Fine big thorns, evergreen bush like Australian lightwood, willows, etc. Got to young Pringle's on Baviaan's River and then to 'Haining', as the old head of the family calls the place. An extensive place surrounded by lots of enclosures fenced with turf dykes and then groves of trees, oaks, pines, cypress, etc. ..." [p. 127]

10 September — Returning up Baviaans River Valley:

"The stream ... very small, barely running. Valley widened out but soon narrowed again, the road winding along the course of the river which it crosses about 40 times from its junction with the Fish River to its course.

"Exceedingly pretty, clothed with fine large thorns, kray bush [probably Kei-apple, *Dovyalis caffra*], willows and other varieties, the trap-bouldered hills rising quickly on either side and thickly dotted with *speck-boom* [*Portulacaria afra*], aloes, etc. This *speck-boom* is a soft lozy [spongy] tree with little thick round leaves making capital food for sheep, cattle, or elephants. By-the-bye, remarked to old Pringle that the Cape broom [possibly the Spanish Broom, *Cytisus scoparius* is meant] made a very pretty hedge for a garden, he had never heard of it; when I got my eye on a bush of it growing in his flower garden and pointed it out ..."

Called at Eildon Farm belonging to William Pringle. Passed "Clifton", the first place the Pringles settled on. [p. 128]

11 September — "... up river ... scenery changed to open grass veldt. No bush, only willows on the riverside ... then down into the watershed of the Tarka, fine short-grassed hills and valleys ... but bare of bush." [p. 129]

1866 **Chamberlain, J. (1974)**

Great Fish River Valley:

Chamberlain, writing in *The Field*, 24 April 1869, vol. 33: 340: "In May 1866 the regiment to which I belong was quartered at Grahamstown... One morning ... I started for Fort Browne ... Fort Brown]. About 6 miles from Grahamstown, the Beaufort road (on which is Fort Browne) descends by a tortuous path for about 5 miles down what is called the Eckar Pass [Ecca Pass]. The scenery here is wild in the extreme; dense bush through which no one but a Kaffir could make his way, meets the view on all sides, and rocky steeps clothed with *Euphorbia* and bitter *Aloe* [*Aloe ferox*]... After coming out of the

pass we came into the valley of the Fish River through the centre of which the [Brak, or Ecca] river takes its course between steep muddy banks densely clothed with underwood and overhung with willows. The valley itself is very thickly clothed with vegetation suited to the sterile nature of the soil - the speckboem [*Portulacaria afra*], *Aloe*, prickly-pear, *Euphorbia*, and stunted thorns are the chief shrubs, whilst there is little or no grass, a kind of heather [karoobush, *Pentzia incana*] taking its place; yet immense flocks of sheep thrive on the *speckboem* and other juicy shrubs." [p. 26]

1867 **Rose Innes, J. (1949)**

Bedford forests:

Kagaberg at Bedford: "Along the eastern end of the berg, the timber had been destroyed by fire, and the contours, lightly veiled by high grass and scrub, were distinctly outlined. But the middle and western sections were thickly wooded, an indigenous forest clothed the slopes and hid the framework of the mountain ... at the back [of Bedford] along the winding course of the Kaga River the forest crept down to the outskirts of the village. Indeed, yellowwood and other timber trees grew within a stone's throw of our garden ..." [p. 6]

Maastrom Farm, western outskirts of Bedford:

"... no objection was taken to our wandering freely over the property and exploring the 'bush' which formed part of it. Axe and saw have since worked havoc with the forest but in those days it was a forest primeval upon which the woodcutter had made little impression ..." [p. 7]

1876 **Ballantyne, R.M. (1879)**

Cookhouse, 21 km east of Somerset East:

"... the prickly-pear [*Opuntia* sp.] was very prolific, and the bush so dense that it formed a pretty safe retreat to escaped convicts ..." Describes eating the fruit and mentions that monkeys also ate them. [p. 93] [These areas became densely covered in prickly pear and were only cleared in the 1940s, firstly by biological control with larvae of the *Cactoblastis cactorum* moth and, secondly, with Cochineal insects, both introduced from Australia. Finally Italian prisoners-of-war gathered the prickly-pear stumps into heaps and poisoned them *in situ*.]

1882 **Bayonean, A. (1970)**

From Pluto's Vale, 21 km northeast of Grahamstown, to Committees through Fish River Bush:

"To Committees from the Vale (which he calls Cloete's) is a succession of Nature's displays. Rugged hills, covered with golden russeted impenetrable bush round which the wild chili clings [probably *Kedrostis* sp.], growing right down to the sides of the eccentric road, curving so peculiarly that the same stream, gurgling from the mountains, is crossed eighteen times in as many minutes." [p. 101]

1885 **Hutchins, D.E. (1886)**

Alexandria Forest (Langebos), 5 km southwest of Alexandria:

"Formerly remarkable for the abundance of sneezewood [*Ptaeroxylon obliquum*] of large girth, the Alexandria forests still show a good re-growth of this valuable tree."

Fish River Valley Bush:

"... in the Fish River. Here the sneezewood [*Ptaeroxylon obliquum*], once abundant, has, over large areas, been cut out entirely by the Peddie Fingoes." [pp. 149, 150]

1950s **Van Wyk, G.F. (1960)**

Great Fish River Mouth [estuarine survey conducted in the 1950s]:

Estuary: "This portion extends from the mouth to about three miles upstream and follows a more or less straight course for its entire length. The estuary lies against a steep bushcovered hill on its left bank [Peddie side].

"On the right bank [Bathurst side], the water flows against a perpendicular eroded earth embankment about two or three feet high... A broad flat area stretches from the embankment to the more gradually sloping hills to the west. The plain is broadest near

the sea but tapers gradually until it ends at a point three miles upstream. Its seaward surface is well covered by a dense mat of *Salicornia* (mixed with other halophytes) but further upstream this vegetation is succeeded by other shrubs and thorn trees where the ground is raised and drier. Near the mouth a number of narrow side-channels penetrate the flat, and connect at right angles with the main stream. Most of this area is about level with the ordinary highwater mark in the main estuary but exceptional high tides and floods must cover most of the surface. Such periodic inundations leave small to large areas covered with shallow water after subsidence…Extensive sandbanks are present near the sea but no *Zostera* or other aquatic vegetation is found on these banks ..." [p. 46] [In 1974 alarmingly powerful floods swept down the Great Fish River temporarily affecting the course of the estuarine mouth and washing away many holiday cottages at the resort there. By 1980 natural forces had almost restored the *status quo*.]



11 EASTERN CAPE

1752 Kirby, P.R. in Bullock (1960)

Peddie District:

Translation of Ensign Beutler's record: "We passed through it, the Great Fish River ... not without trouble and danger. We took an easterly course setting out towards the mountains in front of us. At the foot of this mountain ran a small stream. We trekked across it and came to a plain of grassy veld." On the following day the party travelled eastwards, their route winding a great deal as the country was mountainous and it eventually reached the Keiskamma, beyond which, according to Beutler, was "Cafferland". [Kirby doubts the first reference to an eastward journey and reports that the map shows they went northwest first, crossed the upper reaches of the Gwanga River, passed what is now Bakke Kraal (or Buckkraal [18 km north northeast of Peddie]) and crossed the Keiskamma at about the present Line Drift, 20 km north northeast of Peddie.] [p. 3]

1779 Paterson, W. (1790)

February

Probably Trompettersdrift, on the Great Fish River:

Impenetrable woods for waggons ... went through Fish R. bush by means of elephant paths. Crossed Fish River and entered spacious plain. [p. 88]

After crossing the plain, entered a wood eight miles broad (numerous herds of buffalo, and a herd of 80 elephants). Out of the wood up a steep mountain. Could see the sea to south, and hilly country covered with trees and evergreen shrubs for about 30 miles northward. Bounded by Amatolas on which grass and a species of bamboo grows. To east, pleasant country with a great variety of plants. [p. 89]

1789 Von Winckelmann, F.C.P. (1948)

East of Great Fish River, Ciskei:

"Once one has left behind Hermanus Craal [Fort Brown, 20 km northeast of Grahamstown] and the Fish River which flows closely past it, and travels along unbeaten paths over the long steep and wooded ridge up towards the south-east, one feels, the higher one ascends, a mild cooling and refreshing air which is maintained on the beautiful plains of Kafferland by alternate land and sea breezes.

"Awe-inspiring are the high, wooded ridges, the deep wooded kloofs, which one sees on all sides of a difficult road. From the top of these ridges one sees the Fish River, with dark wooded banks, coming from the north. And the grotesqueness of this region prevents one from forming a favourable impression of Kafferland until one has stepped on to the last wooded height and has reached the first plain. Here, the impression of a high-lying country, a most terrible place of desolation, full of wild marauding nations, disappears. Here one finds beautiful and vast flat strips of land. The eye sees in nearly every valley, at each small wood, large and small Kaffer villages or kraals. In almost every valley one finds springs which unite and form streams ... [p. 45]

"When I reached the beautiful plains of Kafferland they were covered, at that time, with thick, high grass. Herds of the fattest cows and oxen were grazing on the plains; and plentiful springs and streams flowed in the valleys... All round the dwellings of the nation were considerable areas covered with the best and most beautiful kaffer corn, a kind of millet (milium) [*Sorghum*], with the most delicious maize, Turkish, or Welsh corn, etc." [p. 47]

1790 Van Reenen, J. in Kirby (1958)

4 October

Possibly up the Boma Pass, Keiskamma River, 5 km south of Keiskammahoek, and on up the Dontsa Pass, 10 km northeast of Keiskammahoek on the road to Stutterheim:

"We had to cut our way through a dense forest on the mountain in order to get through ...

5 October

"Passed over the mountain and crossed the river [Thomas River, 3 km south of Cathcart]." [p. 97]

1797 **Barrow, J. (1801)**

September

Crossed the Great Fish River a short way up from the mouth into Peddie District [Ciskei]:

"... we passed the Great Fish River... Some fine trees of the willow of Babylon [actually the Cape willow, *Salix mucronata*], or a variety of that species skirted the river at this place. The opposite side presented a very beautiful country, well wooded and watered, and plentifully covered with grass among which grew in great abundance a species of *Indigo*, apparently the same as described by Mr Masson as the *candicans* [*Indigofera candicans*]." [p. 190]

Across Peddie, apparently to about Debe Nek, Chief Ngqika's Great Place, 25 km west of King William's Town:

"... no part of the Colony we had yet passed through could be compared to that portion of the Kaffer's country which lay between the Great Fish River and the Keiskamma ... during the two days we were in Kafferland no human being had made an appearance. [All the huts, etc. were still standing there.] [p. 191]

"That part of the Keiskamma where we had encamped was not fordable by waggons; had it even admitted a passage, the country on that opposite side was so very mountainous and woody that, so far from wheel carriages making the attempt, it was scarcely passable by horses... Though the distance from the Keiskamma to the residence of the king was not more than 15 miles, it took us about 4 hours riding. The hills were mostly covered with thick underwood, and on the plains were so many straggling trees of the thorny mimosa [*Acacia karroo*], just distant enough from each other for their spreading branches to meet and annoy passengers, that we were obliged to quit the direct road which was no more than a footpath, every moment ... [p. 192]

"Though the country between the Keiskamma and the residence of the king had been rugged, poor, and mountainous, it here [Ngqika's Great Place] began to assume a different appearance. The knolls of grass were thickly covered, and the hanging woods on the steep sides of the high mountains to the northward were extremely beautiful... It was situated upon the Kooquanie [Xhukwane River, west of Debe Nek], a small stream that fell into the Keiskamma ..." [p. 199]

From camp on the Keiskamma River somewhere to the east of the present village of Peddie to the mouth of the Keiskamma River, 36 km southeast of Peddie:

"... our next step was to examine the mouth of the Keiskamma... No part of the Kaffer coast has ever been surveyed nor even visited by any one who thought of placing it in a chart ... we turned off the southward towards the sea coast. In the dusk of the evening we came to a small clear stream upon the bank of which we pitched our tent. It intersected one of the most beautiful parts of Africa that had yet fallen under our observation. The bold eastern bank clothed with hanging wood, and the extensive meadows rising gradually on the opposite side into fine swells, covered with grass and interrupted here and there by clumps of tall shrubbery and straggling trees, gave to the country the appearance of a suite of English parks or pleasure grounds... The land had evidently been under cultivation no long time past." [p. 221]

1803 **Kirby, P.R. in Bullock (1960)**

Ciskei:

Quoting Captain Lodewyk Alberti: "The country between the Great Fish River and the Keiskamma, especially towards the seaside is, even as far as the plains, almost all covered with forest timber, of which by far the greater part consists of mimosa [*Acacia*] ...

"Between the Great Fish River and the Keiskamma many herbivorous animals find abundant nourishment, especially in years in which there is a sufficiency of rain. Along the rivers and streamlets, and also in the valleys and plains, the land is provided with excellent pasturage for horned beasts and sheep ...

"Beyond the Keiskamma River the grass grows to an extraordinary height ... [p. 9]

"The mountain ridges cross each other in all directions from deep ravines and bases, and here and there enclose quite considerable plateaux. On some of these mountain ridges the soil is stony, on others, including the plateaux, it is composed of a mixture of lime and fine sand.

"The numerous valleys ascending the mountain ranges to the north [the Amatolas, c. 40 km north of King William's Town] are thickly covered by a large number of tall varieties of woods, suitable for all purposes, as well as, for the most part, impenetrable thorn-bushes.

"In the rest of this part of the country one sees tall trees only on the banks of the rivers and streams, and here and there in the ravines and, for the rest, the area between the Great Fish River and Keyskama [Keiskamma], particularly towards the sea, is covered

almost completely by bushy trees of which the mimosa [the sweet-thorn, *Acacia karroo*] is the most prevalent.

"Between the Keyskamma and the Key [Kei] Rivers, apart from the vicinity of the rivers and streams and isolated valleys, the land is only sparsely covered with dwarf trees. Frequently one finds aloes and *Euphorbia*, and the latter plant in particular reaching the unusual height of thirty-six to forty feet.

"Between the Keyskama and Buffalo Rivers there is a region which on account of its unusual character deserves a special description. It is traversed by undulating hills separated by clefts, and covered only with grass, which border on the mountain range to the north and run along the whole country, and which, for the rest, particularly in the south, is enclosed in high mountain ranges. The length of this area from west to east, in a straight line, measures about one and a quarter miles while the width might be about one mile. Everywhere the level of the ground is broken by holes, which in appearance and circumference differ greatly and do not exceed three feet in depth.

"Some of the dwarf types of wood varieties bear edible berries among which I have not however discovered any spices. All of them had a certain sour or unpleasantly watery taste at the end of the journey.

"One also finds various kinds of onions, some of which can be eaten without any preparation and some which can be roasted or cooked.

"The thirst-quenching property of a certain reed [rush] comes in very handy when the water in which it grows is too salty or spoilt.

"At the mouth of the Key [Kei River], the sand dunes along the beach provide a mass of wild bananas [*Strelitzia nicolai*]." [p. 14]

East of Keiskamma River, on the coast of the East London District, a very sparsely travelled area in historic times. Alberti gives some idea of what the country must have been like, telling of how it had to be fired by the natives in order to make it fit for stock to use:

"On the other side of the Keyskama [the eastern side] the grass, which reaches an uncommon height there, is nearly everywhere, indeed in the utmost degree, sour. In consequence of this characteristic, it attains such harshness after a long journey that it cannot be eaten by any animal, which is why the Kaffirs go in for burning such grass so as to cause young grass to come on. Without such precautions they would not be able, owing to the lack of nourishment for their cattle, to live in this stretch of country. Only in the area adjoining the sand dunes bordering the beach is the nature of the soil fairly favourable for grazing animals." [p. 17]

[This region was occupied by Gonaqua Hottentots from about the 16th Century (Derricourt, 1973: 48), long before the Xhosas arrived and gradually ousted the Gonaquas in the late 1700s. Thus it is possible that the Gonaquas had also been firing the veld for many years.]

1804 Lichtenstein, H. (1815)

Keiskamma River:

Notes that animal species differ on each side of the river. The western side abounds with numerous herds of small antelope and quaggas; the eastern side has only larger antelope, especially eland, with an abundance of elephants. Sweet grass on one side of the river, sour grass on the other. [p. 349]

1809 Collins, R. in Moodie (1860)

From Komga District, through King William's Town, past the upper Nahoon River near Kei Road, to the Buffalo River; past the Mngqakhwebe River, 3 km west of King William's Town, and across the Kommetjievlakte to Debe Nek:

"... we arrived at a place called Buy's Kraal remarkable for a number of woody kloofs meeting there and producing a stream which, after running a few miles, receives another and then, under the name of Kahoona [Nahoon], proceeds to the sea. We were employed nearly four hours on the morning of the 21st in crossing a succession of hills and hollows, more wooded than any part of the country we had yet seen. We were repeatedly stopped during a considerable time to make passages for the wagons; but this delay was amply compensated by the view of a fine, though deserted, country.

"The road opened afterwards during a couple of hours, but on arriving at the first branch of the Kognie [*Qonce* in Xhosa] (called by the colonists Buffalo) River, we again came among bushes, very thickly planted and rendered still more difficult by a quantity of underwood, having forced our way to the second branch and not far from a deserted kraal.

The following morning we crossed the third branch, and a mile farther, a fourth one... Having again got onto the wagon-track we continued to proceed west southwest along the feet of the lower mountains (which are thickly covered with various kinds of trees) through a country rather open but which, from its extreme ruggedness, is exceedingly unpleasant to ride over. On our way we crossed the Guacovi [Mngqakhwebe], a small stream near which we saw another abandoned kraal. Our wagons travelled this day about six hours exclusive of the necessary halts to prepare passages through rivulets and kloofs. We stopped for the night at a pass, a little south of which Gyka [Gaika or Ngqika] lived before he was deserted by Zlambe [Ndlambe] who, prior, to that event, occupied the country we had this day traversed." [p. 44]

February Hintza's kraal, probably near Butterworth [Gcuwa]:

"We passed several kraals, at all of which we saw kaffer or indian corn [*Sorghum*] and, at some, plantations of tobacco and pumpkins. The stem of the kaffer corn is sucked by the natives in the same manner as the sugar cane by the negroes of the East India islands... After a ride of six hours we reached Hinsa's residence... The ride to it resembled a progress through the finest English park which, indeed, was the appearance of all the country we had seen east of the Kyba [Kei River]." They were now going towards the sea, which they could see. [p. 41]

1809 Stockenstrom, A. (1887)

Tsomo:

"As soon as we got through the Kei we found the country very thickly inhabited, extensively cultivated with kaffir corn and covered with vast herds of fine cattle, some goats without a single sheep, and here and there a solitary horse ..." Proceeded to Hintzas kraal. Then returned west across the Kei. [1: 42]

1819 Burchell, W.J. (1822)

Ciskei:

In Hints on Emigration to the Cape of Good Hope, 1819: "The country to the eastward of the Fish River is known to be superior in fertility to that lying to the westward." [p. 31]

1819 Varley, D.H. (1956)

Between Great Fish and Keiskamma Rivers:

"In these territories he [Delalande, the French naturalist] found magnificent forests, watered by fine rivers whose mouths were obstructed by sandspits stretching the length of the coast, so that it was impossible for even the smallest ships to penetrate them." [p. 8]

? early 1820s Thompson, G. (1827)

Gonubie River, East London:

Quoting from a report by Mr Brownlee, who travelled in eastern Ciskei and who described the country generally: "On the Gonubi River I found a species of *Strelitzia* [*Strelitzia nicolai*] surpassing all the others in the beauty of its foliage. The whole exterior of this plant is so like *Musa* that it can hardly be distinguished from it. The seeds are much larger than those of *regina* and are very palatable when roasted. The leaves grow to about 6 feet in length including the peteolus, and the foliated part is about 3 feet in height and 2 in breadth. I had not an opportunity of seeing this fine plant in flower but from what I could gather it much resembles the abovementioned species ..." [2: 372]

1820 Moodie, J.W.D. (1835)

From Kaffirdrift, 25 km south southwest of Peddie, towards the Gwalana River, c. 15 km south of Peddie:

After crossing the Great Fish River at Kaffirdrift: "When we gained the open country above the river, I perceived a great alteration in the grass which grew very luxuriantly, there being no cattle to eat it down. We had now entered the Ceded Territory which had not been occupied since it had been evacuated by the Kaffirs. All their curious beehive huts were still standing and the palings which they had erected to protect their little patches of millet and Indian corn ... we still had 17 miles to ride."

His party lost the way "...and got thoroughly perplexed among a multitude of old Kaffre

tracks crossing each other at all angles and leading anywhere, to nowhere for all that we knew of them ... [2: 64]

"Sometimes we descended a long ridge, then we would follow the course of a deep valley, or groping our way through a forest of mimosas [*Acacia karroo*]... Hundreds of these trees had been torn up by the elephants and were turned in a reversed position with their roots in the air. The roots of the mimosa form a great part of the food of the elephants in this part of the country ..." [2: 65]

Fredericksburg, on the Gwalana River [a place set aside for white settlers but never developed]:

"After crossing the head of a periodical river and ascending a grassy hill we came in sight of our new village... It was seated in the bottom of a picturesque valley surrounded on all sides by lofty hills studded with clumps of small wood and mimosas [*Acacia*].

"The streets of the future town had already been laid out with exact regularity along the banks of a little stream which formed several level and verdant peninsulas in its progress through the valley. Some of the hills terminated in perpendicular crags with brush-wood and creeping plants growing among the shelves ...

"On the opposite side of the village the stream, being obstructed by rocks, formed a long deep pool between its level banks which were ornamented along the margin by a skreen of trees and graceful shrubs. At one place, which I afterwards chose for the site of my cottage, two venerable and wide-spreading yellowwood trees, standing on opposite banks of the stream, united their branches and formed a verdant arch over the glassy pool, covered with a rich drapery of climbing plants which drooped into the water beneath.

"All the 'erven', or building lots, had been marked out, and were divided from each other by turf walls, or artifical hedges of mimosa; and several comfortable cottages had already been erected by the new settlers." [2: 72]

Many elephants were there, keeping under cover by day, "...but in this part of the country which had remained without inhabitants since the Kaffres had been driven beyond the Keiskamma, they had become bolder and whole troops of them were often seen quietly browsing among the scattered mimosas [*Acacia karroo*] in the open fields ... [2: 74]

"The beautiful stream called by the Kaffres the Gualana, after leaving the village, took its course through an extensive wood or jungle, and again made its appearance in an open meadow running close under the high hills on one side of the valley for several hundred yards, when it again entered a long strip of jungle." [2: 79]

Building a house at Fredericksburg: "We found also plenty of rushes to thatch our huts along the banks of the Gualana and the other streams. Many of the cottages were built of turf and thatched with long grass. [2: 93]

"The country, though it abounded in grass, was exceedingly deficient in water, and, being entirely without springs, the only places which could be occupied were along the course of the rivers, many of which were merely periodical streams drying up entirely in hot seasons or standing in stagnant pools in the ravines. The Gualana was the strongest of these streams and the site for the village of Fredericksburg was therefore chosen on its banks." [2: 96]

They were informed by Sir Rufane Donkin that the area "...on which we had been located had been established by a treaty with the Kaffres as neutral, and not a ceded territory, and that the acting governor had unwittingly infringed the said treaty by forming the settlement in question." People then left. [2: 103]

early 1820s

Lovedale, Alice District:

"Lovedale is situated in a picturesque valley sprinkled with mimosas [*Acacia karroo*] and clumps of small trees, and surrounded by high rocky hills." [2: 252]

Describes a smith using a crude form of bellows for working iron bars into assegai heads: "By means of the singular bellows I have described, the Kaffres can smelt out the iron from the ore which is found in great abundance between Lovedale and the Buffalo River." [2: 260]

Tyumie Mission [Tyhume], Victoria East, 15 km north northeast of Alice:

12 miles from Lovedale: "...under the Tchumic Mountains [Tyhume] and near the river of the same name. The scenery became exceedingly beautiful and romantic as we approached the station where a small village has been formed in a kind of amphitheatre at the base of the mountain.

"The Tchumic Mountain, which rises to the height of at least 1 500 feet above the village, is covered with a broad belt of wood at its base but higher up its steep slopes it is clothed with verdure to the summit which terminates in rugged and perpendicular crags... The missionary station ... has been selected with little judgement, the soil being

extremely poor and thin and the extent of pasturage limited on one side to the mountains." [2: 263]

From Lovedale to King William's Town on the Buffalo River:

"We set out to visit a station of the London Missionary Society at Tzatzoe's Kraal [Tshatshu's] near the Buffalo River which is between 40 and 50 miles from Lovedale [actually 52 km]. We travelled along the base of an extensive chain of lofty mountains thickly clothed with fine woods to their summits ... Present King William's Town. [2: 262]

"In the course of our journey we crossed a rapid stream between the mountains [Keiskamma River, probably near Middledrift - the branch north of this is called Amatola River]. The steep sides of the mountains on either hand (of the valley) were densely wooded to a great height and overtopped with perpendicular crags, the summits of which were crowned with beautiful trees and brushwood ...

"In the background an extensive forest spread itself over the face of the highest part of the mountain range which was also girt with rocks and precipices. The lovely glen between the mountains was partially wooded or sprinkled with groups of thorntrees, and here and there we observed a few scattered Kaffre huts and patches of cultivation on the rising grounds near the banks of the Amatoli [14 km east of Alice] which could be traced by the eye for several miles winding its varied course among the mimosas [*Acacia karroo*]. [2: 265]

"We next passed over an extensive plain [Debe Flats, 17 km west northwest of King William's Town] at the foot of the mountains where there were fewer habitations than we met with in the first part of our journey. The surface of the plain was everywhere broken with round holes 2 or 3 feet deep at the bottom of which we observed a hard crust of rich iron ore. It is hard to say whether these holes are natural or artificial. They may possibly have been excavated by the Kaffres to obtain iron ore for their assagays before they had any intercourse with Europeans but, if this had been the case, the Kaffre guide who rode with us had no knowledge of the fact. It is, perhaps, more probable that the ironstone has formerly lain bare and that the grass has taken root in the cracks of the stone and gradually created a soil which in time might produce the present singular appearance." [The hollows are called *kommetjies*, the area Kommetjie Vlakte.]

Arrived at the mission station on the Buffalo River and met 'Mr B.' [King William's Town Mission, established in 1825 by Reverend John Brownlee].

c. 1825/6 King William's Town, Buffalo Mission:

"The soil in the neighbourhood of the mission station was exceedingly hard and dry so that the Kaffres on the establishment were obliged to use iron hoes in turning over the ground in their gardens ...

"Where the soil is sufficiently moist, the Kaffres use wooden spades resembling paddles to dig their gardens. They are exceedingly judicious in selecting those spots for their gardens which are least likely to suffer from drought. I particularly observed that most of them were situated on the shady sides of the hills and that they care little for the steepness of the ground provided there is sufficient moisture for their crops. Those who live near the forests fell the trees on patches along the margin where they know the soil is particularly rich, for they never use manure." [2: 268]

mid-1820s Rose, C. (1829)

Bhirha River, Peddie District, at Nqeno's Kraal:

"The situation of a kraal is generally chosen with an apparent attention to picturesque effect, and that which old Enno [Nqeno] then occupied on the Beka River was particularly so: the habitations lay on the side of a gentle hill that sloped down to a stream ... the stream flowed coolly below in its rocky channel while the trees bending over almost met above it, dipping their flexile branches into its waters. The low ground was thickly covered with tall trees and blooming shrubs intersected by cattle tracks. While, in parts, the rank vegetation of Nature was partially cleared away and made to yield to small patches of kaffer and indian corn, roughly inclosed." [p. 83]

Through Peddie, East London and Komga to the Kei:

"The general character of these streams, with the exception of the last [Great Kei] is the same. The banks, which are thickly covered with trees, are steep but not high, while the water looks almost black from the effect of the branches that bend over it. The trees are various ... the rich foliage of the wild fig [probably *Ficus natalensis* or *Ficus sur*], the plum [probably *Harpephyllum caffrum*] and that of the gnarled and twisted *else*-wood [probably *Cunonia capensis*] are contrasted with the cold grey green of the bending willow [*Salix mucronata*]. There are also to be seen the assegai and the ironwood, with many others, while the water's edge is fringed with tall, light, feathery-blossomed reed, and with the glossy palm-leaves of the kaffer coffee [*Phoenix reclinata*].

"The country, in approaching the rivers, becomes hilly and is then covered with flowering shrubs but, in proceeding, the rider crosses vast grassy plains over which the mimosa [*Acacia karroo*] is thinly scattered ..." [p. 125]

Keiskamma River, somewhere near Thwecu River Mouth, towards Wesleyville Mission, 35 km west southwest of East London:

"The situation of our bivouacs was strikingly picturesque. That on the Keiskamma ... particularly... Our tent was pitched in a green valley on the banks of the river from which the jungle appeared to have been cleared away by the hand of art for, except in the direction of our approach, and, in that of the ford, the bush grew thickly and luxuriantly around, and the blue smoke of our fires curled up among mimosa [*Acacia karroo*], jasmines [*Jasminum angulare*], and many other scented shrubs ..."

Great Kei River, probably Komga District:

"The Kei is by much the largest river I have seen in southern Africa and bears a character distinct from all those we had crossed in our course. There are few trees on its banks, which are covered with large grey rocks ... in come places there is a narrow line of ground broken by rocks and covered with rich clustering vegetation." [p. 171]

He explored the hills in the neighbourhood of the Kei: "...wooded ravine where I found a tree whose fruits looked and smelt most temptingly. Some of the wild fruits of the country are poisonous and I therefore dared not eat until the example had been given by my guide.

"The *incagolo* [*umQokolo,* kei apple, *Dovyalis caffra*] (for that is the Kaffer name of the fruit) grows on a dark-leafed thorn of about 20 feet in height and resembles a small apricot in appearance. It is juicy and its flavour is clear, cool acid, while its seed, of which it contains seven or eight, is something like the pip of a pomegranate. It appears peculiar to the hills of the Kei River for the Kaffers we had brought with us knew it not, and called it poison... On producing some however, it was generally voted delicious though I think that heat and thirst added not a little to its merit... It is strange that the missionaries to whom I mentioned it were ignorant of it and that, until introduced by us, the Incagolo was wholly unknown in the Colony." [p. 175]

1825 **Philipps, C. (1827)**

Fredericksburg:

On a one-day visit, coming from Kaffirdrift, where they had crossed the Great Fish River from Bathurst: "After an hour's cantering we reached a village called Fredericksburg, in compliment to HRH the Duke of York, but it was now deserted. The situation was well-chosen and very beautiful, with a fine river meandering, and almost insulating, the ground on which the village stood ..." [p. 75]

1825 **Philipps, T. in Keppel-Jones (1960)**

A Kaffir Fair on the Keiskamma River, probably at Fort Willshire, 23 km south southeast of Alice:

"There used to be a considerable quantity of gum collected from the mimosas [*Acacia karroo*] but so little care was taken in selecting the transparent part that it became unsaleable in England. Amongst the minor articles were reed hats, mats, and baskets, but all very serviceable ... There was also a kind of cordage which was made from the bark of a tree on which grows a small fig and which is also common in Albany (Footnote: Probably *Ficus ingens*, the Xhosa name of which is *uluzi*)." [p. 293]

1825 **Philipps, C. (1827)**

Chumi Mission [Tyhume], north of Alice:

"We were shown a plant, a species of *Solanum*, the root of which was described to us as a deadly poison, and when thrown into the water would affect the largest animal, even the elephant should he drink it, occasioning a drowsiness which would remain for a considerable time. It has some of the properties of the American cassava for, when boiled and prepared, the natives eat it." [p. 184]

1829 **Kay, S. (1833)**

Between Butterworth and Morley, a mission 24 km southeast of Mqanduli:

"In many places a man on horseback might ride for miles together without being seen even by persons at a distance of twenty or thirty paces from him. This, of course, sometimes

places the traveller in imminent danger, as the only paths he is able to pursue are, in general, such as have been made by elephant which may be plodding along at the same time." Notes how the Bantu burn off this long grass before the spring rains. [pp. 324, 325]

1833 **Kayser, F.G. (1833)**

Letter from the Brownlee Mission Station at King William's Town: describing the Pirie Mountains and forests, Eastern Amatola Mountains:

Mentions a shortage of timber for building purposes "…and we have to fetch it from the wooded mountain range, one day's journey from here where our river [Buffalo] has its source. This mountain range is covered with woods which well can be used for timber; the flat top of it is covered with grass and offers good pasture for the Natives' cattle during the summer."

1835 **Mitford-Barberton, I. (1970)**

31 March — Just east of Keiskamma River, at Fort Willshire:

From Holden Bowker's war diary: "Crossed the Kieskama, water rather deep. Halt after an hour and a half's march through a country studded with small mimosa trees [*Acacia karroo*]." [p. 115]

12 April — Gonubie Heights, 40 km northeast of King William's Town:

"Reach the top of a hill on the other side, the east side of the Gonube. From this place there is a prospect all round you. You see the crags in the neighbourhood of the Kye [Kei] and Hintsa's country [Butterworth] beyond it. Halt for the night at the head of a grassy valley. Plenty of water but little wood." [p. 120]

24 April — Between Butterworth and Tsomo:

"The country here is open, no mountains or bushy kloofs but abundance of grass. Not sweet grass. [p. 124]

25 April — "Our march today was through a beautiful champagne [open grassveld] country. Scarcely any bush and but little water on the road.

"Blesbok, quaggas and other game to be found here. Saw hartebeest horns." [p. 125]

7 May — Southern Transkei:

"Hear that we shall eventually march towards the sea between the Bashee and the Kye. This is said to be a beautiful tract of land, the finest pasturage in Kaffirland." [p. 131]

10 May — South side of Kei, c. 7 miles from the river [12 km east of Komga], near Fort Warden, Tyityaba area:

"Lots of bullocks sick with eating tulp [*Moraea polystachya*]." [p. 133]

1835 **Alexander, J.E. (1840)**

Vicinity of Ntaba kaNdoda, Middledrift:

He was there with a force: "…the two squares of wagons were strongly fortified with mimosa bushes [*Acacia karroo*] drawn in between them... Kaffir fires were noticed among the woods of T'Slambiel's Kop [Ndlambe's ... a broad cattle path led between the woods; we toiled up this but gained the summit without opposition... The men lay down at the top of the ridge - the castellated and remarkable summit of the Intabakandoda rearing its head above us ...

"When light broke ... we renewed our march, passing magnificent woods on either hand over pasturage of the richest kind and across many streams. The mountain glens through which we wound were picturesque and beautiful to a degree far beyond all power of expression ..." [2: 66, 67]

11 April — Yellowwoods River, possibly near Frankfort, 18 km north northeast of King William's Town [his unit had been at the 'Buffalo Poorts', i.e. near Maden Dam under the mountain, before being sent on to Kei Road, then known as Hangman's Bush, 24 km northeast of King William's Town]:

"On 11 April we crossed the Buffalo, its bed composed of compact green stone, and took the direction of a fine valley in the midst of which there was a convenient outspan called the yellow wood trees on the banks of the Nameka River [Ncamerha, or Nchamerha, known as the Yellowwoods River] ... [2: 91]

"After a march of 18 miles we established our bivouack in a beautifully wooded glen of the Cahoon River [Nahoon] at a place classically named by the Kaffir traders 'Hangmans Bush'." [2: 92]

August — Yellowwoods River, possibly near Peelton or Hanover:

"... fifteen men of the first provisional battalion went from King William's Town to collect corn at the yellow wood trees on the Nameka River ..." [2: 248]

6 April — Kommetjievlakte, Debe Nek and the region near Pirie:

"... passing Deba neck we came upon a plain full of holes like large basins, hence this plain is called Commatje flats. One of the guides, old Holder, explained the cause of these scientifically: 'The earth here' he said 'had been once much slaked with rain and had got the shivers: *ergo* them holes and cracks had been made!'

"On our left was a glorious mountain on which the woods and grassy slopes were arranged and alternated in the most delightful manner, reminding me of the beloved Ochills about Alva in 'the north countrie'.

"We passed the missionary station of Pirie, now levelled to the ground but occupying the richest soil and amongst the finest pasture which I had seen for a long time." [2: 74]

Arrived at the Buffalo River "...rushing clear and bright over its rocks and pebbles, and encamped between the spruits, or sources, of the river.

"The headquarters division was on very beautiful ground here in a park gently sloping towards the river and within a mile and a half of the mountains of the Buffalo, 1 000 feet in height. Two poorts, or openings, into these, filled closely with forest which extended along the face of the mountains, formed the sources of the river ..." [2: 77]

The 72nd Regiment "...advanced up the western poort of the Buffalo [Pirie Mountain] and for some time took up a position on a small knoll commanding all the forest below. We were now in the midst of a glorious and most impressive scene... The sublimity of the spectacle consisted in its vast extent of primeval forests where, in places, there were not even Kaffir paths, so thick and entangled were these ancient woods ...

"Looking up the glen of the poorts, its bottom and sides were seen to be closely set with dark, pale, and bright green foliage, and to our right and left the great forest stretched far and wide across the mountainside.

"The els [*Cunonia capensis*], sneeze [*Ptaeroxylon obliquum*] and yellowwood trees [*Afrocarpus*, *Podocarpus*], assegai [*Curtisia dentata*] and *kaffir broom* [sic] (*Erithrina corallodendron* [*Erythrina caffra,* coral tree]).

"The bare summits of the range on either hand were composed of green pastures or of naked precipices." [2: 82, 83]

Of plants there: "... among the branches were seen that strange parasite *Cassina capensis* [*Viscum capense*], or Cape mistletoe." [2: 87]

May — Valley at the source of the Nahoon River, possibly on Bell Rock or nearby, 5 km southeast of Kei Road Village:

"We reached the sources of the Cahoon [Nahoon River]... The richly wooded and beautiful glen in which we breakfasted is now named Glen Aberdeen, and here, among other plants, I found *Grewia* sp. and *Buddlea* [*Buddleja*] sp."

Next day "...we reached the Buffalo River and encamped on a fine plain on its banks. Hills of 200 or 300 feet elevation were round us, lightly covered with bush; and looking up the stream beyond the walls of the burnt mission station we saw, at a distance of 9 or 10 miles, the very picturesque mountain ranges at and beyond the sources of the river. [? King William's Town, where the Buffalo Mission Station was burnt down, but his distances seem a little short.] [2: 191]

"Among the plants about King William's Town are the following: *Acacia caffra, Olea capensis, Celastrus* sp., *Buddlea* [*Buddleja*] sp., *Tecoma capensis, Kiggelaria africana*], *Asparagus* sp. (hanging on the *Azima tetracantha*), *Cassia tomentosa, Sida sonneratiana* [probably *Abutilon sonneratianum*], *Hibiscus* sp., *Aizoon sarmentosum.*

"The splendid *Strelitzia regina*[*e*] with its golden crest and red and green neck darted its pointed sheath, like the beak of a magnificent bird, among the vegetation by the river bank." [2: 195]

May — Near Fort Warden in the Tyityaba Valley, 12 km northeast of Komga:

Alexander's force had been in southeastern Transkei and had crossed the Great Kei River into Komga District. "On leaving the bed of the Kye we discovered, rather late, the dangerous situation in which we had been. There is a blaauw tulp, or pale blue *Moraea* [*Moraea polystachya*], which grows there in considerable abundance, and this, when other vegetation is scanty, the cattle devour with fatal effect to themselves.

"As we ascended the heights we passed ox after ox in the agonies of death, and we lost by the poison plant, which inflamed and swelled their insides, at least a hundred head of cattle. Some Fingoes also died from eating the tainted flesh.

"We passed a high and isolated knoll overlooking the deep bed of the Kye with its shrubby islets, and all the country around. This was selected as the site of a permanent work to be called Smith's Tower ...

"We then encamped on the banks of a small stream called the Impotshana near to a long ravine 300 feet deep with precipitous sides which almost approached each other, throwing the bottom, filled with trees, into deep gloom... We were 5 or 6 miles from the Kye and on a fine commanding site [Fort Warden, Impotshana River]." [2: 157]

April — Gonubie Hill, at Post Wellington:

"Our next march was to Gonubee River ... and then up the Gonubee Hill from which a very grand and extensive prospect was obtained. The country near appeared open, undulating, and with scattered bush ...

"After a march of 14 miles we encamped on the side of a hill in a valley called Tunglalaba... In the valley was a chain of vleys, or pools ... [2: 191]

May — "Under the Gonubee Hill, Dr Murray found the *Fugara armata* [*Xanthoxylum davyi*] and named it 'the Adelaide spice-tree'. It is elegant but not large; its branches are thorny like those of almost every tree in Kaffirland; its leaves lanceolate and many paired; and its seeds, the size of allspice, enveloped by the coriaceous orange-coloured capsules hung in irregular racemes. The seed is aromatic but the strong spicy pungency and the delicious fragrance of the lemon-peel essence resides chiefly in the seed capsules which would yield an excellent perfume by distillation.

"The seeds have been sent to England, and the Adelaide spice-tree will ere long, we hope, be found there in many conservatories." [2: 190]

August — Mount Cox, ? the site of Fort Cox, near Burnshill, 18 km east of Alice:

"On Mount Cox there grows a most remarkable tree…from the leaves of which, from eleven to four daily, water drops. Dr Murray gave me a shoot of it which I planted in Government Gardens, Cape Town. It may be called the Adelaide Fountain-tree [identity unknown]."

Probably up the valley from Seymour towards Mitchell's Pass and up over the mountain past Elandsberg and Gaika's Kop:

Alexander's force passed the remains of a burnt-out defence post which "…adjoined a wooded kloof... Before us, and on the opposite side of the valley was the broad face of the Elandsberg whose masses of dark green forest were contrasted with the light brown of the pasture ... clear streams were around and a noble yellowwood tree ... waved above us in the foreground ...

"... we ascended the hill behind us, and then diverging to the left through *Proteas* and *Gladioli*, looked down on ... the missionary institution of Chumie [Tyhume]... Our view now took on the grand panorama from the Winterberg to the ocean and from thence to Bushmans River mouth ... whilst the most conspicuous object in the scene was the lofty conical mountain called Gaika's, or 'Quira, the doctor' ...

"We passed across a face of a mountain and descended by a path cut by Capt Warden to the lower ground. I collected here specimens of the: *Gnidia imberbus* [*Gnidia squarrosa*], *Rhus viminalis* var., *Watsonia iridifolia* [identity unknown], *Muraltia* sp., *Relhania* sp., *Sebea* [*Sebaea*] *aurea, Watsonia meriana* [actually *Watsonia pillansii*], *Athanasia* sp., *Buddlea* [*Buddleja*] sp., *Pelargonium* sp., *Weinmannia* sp. [*Platylophus trifoliatus*], *Halleria lucida.*

"The side of the mountain was an elysium of wild flowers. In the South African spring month of October the splendour of these and their diversity of colours, with the myriads of strange insects among them, would ... fascinate a naturalist." They returned to Fort Beaufort from whence they had started. [2: 241, 242]

1838 Bunbury, C.J.F. (1848)

30 April — Crossed the Great Fish River at Trompetter's Drift, 13 km southwest of Peddie:

"... Fort Peddie which is situated on an elevated grassy plain near the little river Chusie or Clusie [Ngqushwa]... The Fish River Bush (which we entered immediately after leaving Fraser's Camp [in Albany]) does not extend to so great a breadth in this part as in many others, probably not more than 6 miles on each side of the river but it is of most intricate and formidable character ...

"The Great Fish River, where we crossed it ... had but little water in it except in some places where it formed deep pools among the rocks; between these hollows its stream was rapid and shallow with a hard rocky bottom, its margin beautifully fringed with the weeping willow and other trees of a like graceful character. This willow, which abounds also on the Kat River, and other streams of the Caffer country, is not the true Babylonian Willow commonly cultivated in England but a distinct species very similar in mode of growth and almost equally beautiful (Footnote: Apparently the *Salix ghariepina* of Burchell [*Salix mucronata*])." [p. 150]

1839 Backhouse, J. (1844)

12 January — From Blinkwater, 22 km north northwest of Fort Beaufort, to Philipton area, 8 km north of Seymour, Stockenstrom:

"A ride of a few hours brought us ... close by a branch of the Kat River which flowed in a deep hollow under an arid hill clothed with caulescent aloes. The river was bordered with Willows... In the afternoon we continued our journey to Philipton, passing through Fort Armstrong, a military post situated on a little hill nearly surrounded by a cliff and the river... The country in some places was bushy and dry, the roads hilly and stony ... the mountains ... their slopes are verdant and their kloofs, and portions of their sides, are woody. [p. 184]

18 January — "Some of the hills near Fort Armstrong are ... dry and sterile. The lower ones are covered with thin grass and besprinkled with *doornboom Acacia*: the loftier ones are clothed with thicker bush and caulescent aloes. Some epiphytes of the orchis tribe were growing on the trees in a thick, steep wood. *Streptocarpus rexii* was producing its handsome blue tubular flowers; it occupies the place in this country that the Primrose occupies in England. A species of *Impatiens* [*Impatiens hochstetteri*] allied to the Balsam was also growing in these woods." [p. 194]

22 January — Backhouse met a Christianised Hottentot at Philipton. "Some time ago this man went to the Baviaans Rivier about 60 miles distant [really 70 km west] to cut timber." [p. 198]

23 January — Philipton area and in vicinity of Katberg, 15 km northwest of Seymour, over the mountain to Shiloh, Queenstown District:

"The open parts of the mountain are grassy and green. From the woods of the kloofs on the side towards the Kat River much timber is cut, which is conveyed towards Cradock and beyond the colonial boundary as far as the missionary stations on the Caledon, those parts of the country being destitute of timber.

"These mountains form the boundary of the Colony. Formerly they abounded with game but huntsmen from Fort Armstrong and other neighbouring military posts have destroyed or driven away most of the wild animals ...

"... we observed several remarkable plants such as a large *Lyperia* [probably *Jamesbrittenia* sp.], a bulb [probably *Schizocarphus nervosus*] bearing a blossom like a white variety of *Scilla peruviana*, a *Sparaxis* with large pendulous cylindric crimson flowers, and another with small irregular flowers [probably *Dierama* sp. and *Tritonia* sp. respectively]; also a scarlet *Satyrium* [possibly *Satyrium hallackii*] and a *Lobelia*, blue on the under lip, blue and purple on the upper lip, and yellow on the palate [*Monopsis decipiens*]. The last two were on the margin of the little stream ...

"Further from Philipton the mountains became stony and dry. On their ridges there was a remarkable *Zamia* [*Encephalartos*] with a root stock about 3 feet high and rigid palm-like leaves of yellowish hue ..." [p. 199]

29 January — Philipton, upper Kat River Valley, 7 km north of Seymour:

"I visited a steep wood contiguous to the river to see the tree known in the Colony by the name of *pruim* or caffer-plum, *Pappea capensis*. It attains to 40 feet in height and has pinnate leaves and spiked flowers. The fruit is about an inch long and has a thick orange-red skin covering a thin viscid pleasantly acid pulp of a flavour like the Tahitian-apple *Spondias dulcis* which the tree greatly resembles.

"There is also now ripe in the woods a small oval red berry called *zuur-bezy*, sour-berry [possibly *Carissa bispinosa*]. It is of moderate and sweetish flavour when thoroughly matured, and is produced by a thick bush having small leaves and opposite straight green thorns." [p. 205]

6 February — Chumie [Tyhume] Mission Station:

"It is situated on a streamlet issuing from a range of bold basaltic hills among which wood and rock and grassy slopes are beautifully intermingled." [p. 210]

13 February — Between Alice (Lovedale), on the Tyhume River, and Knapps Hope Mission on the Keiskamma River, 15 km southeast of Alice:

"Between these places there are low grassy hills which were now dry and brown. They are besprinkled with small *doornboom* trees [*Acacia karroo*], and but thinly peopled. The banks of the Keiskamma at this place are woody and in most places steep ..." [p. 220]

15 February — From Knapps Hope to Igquibirha Mission [iQhibhirha, 23 km south southeast of Middledrift]:

"The milk baskets of the Caffers are made of the stems of a species of *Cyperus*, a rush allied to the Paper-reed. These are sewed so closely together, when dry, as to be watertight when in use for any fluid. After being used for milk, the dogs are allowed to lick the baskets and cleansing is completed by a small species of Cockroach, *Blatta*, which eats the remaining portion of the milk from the interstices between the rushes. So important are these insects for this purpose that on erecting a new hut, a Caffer will take a milk-basket into an old one and, as soon as a sufficient number of *Blattae* have entered it, will carry it to the place where their services are required.

"The intervening country was low hills covered with dry short grass and besprinkled with small *doorn-booms*. In some places the wood was thicker, and in two places single plants of a scarlet *Amaryllis* were seen in blossom." [p. 225]

Near Igqibirha Mission:

"At a short distance from the house there is a remarkable copse consisting chiefly of the chandelier euphorbia, *Euphorbia grandidens*. The leaves of this tree are confined to the young portions of the shoots and are so small as to pass almost unnoticed. The thick, erect, angular stems seem to form its verdure, and its trunk which may be 30 feet high is, in some instances, as thick as a man's waist.

"At this place I first noticed a small species of coral-tree (*Erythrina humeana* ?). It was about a yard high and bore long spikes of large crimson, pea-like flowers. It is scattered thinly over this part of Caffraria." [p. 226]

18 February — From Igquibirha to Burns Hill, 12 km southeast of Keiskammahoek:

"The low grassy hills between Igquibirha and Burns Hill are besprinkled with *doornboom*." [p. 229]

20 February — From Burns Hill Mission to Pirie Mission, 15 km northwest of King William's Town:

"Our route lay over some hills covered with *doornboom* [*Acacia karroo*], past a kraal, through a steep wood and over an undulating portion of the Debe Flats. We passed Fort White [6 km east southeast of Middledrift] in ruins and skirted a woody range of mountains at the foot of which the grassy land was in some places so rough as to render riding difficult. This was thought to be occasioned by the large earthworms ... constantly working up the soil out of wet places. Caffer kraals were numerous in this district which is generally favoured with rain sufficient to keep the grass green... Not far from Pirie we crossed the bed of the Umquesha [Mngqesha, 17 km west northwest of King William's Town] which had a few trees on its margin ...

"Pirie is situated on a branch of the Buffalo River and in one of the places where Dr Vanderkemp laboured for a season. The tree is still standing under which the doctor fixed his residence on first bringing 'the glad tiding of great joy' into this benighted country. It is a kaffirboom *Erythrina caffra* a species of coral-tree which attains to a considerable magnitude. It casts its large trifoliate leaves in winter and produces considerable clusters of deep-crimson pea-flowers before the leaves appear in spring." [p. 233]

23 February — King William's Town:

"The traffic between King William's Town and the Cape Colony is considerable. Three wagons are sometimes despatched in a week to Grahamstown from this place, with Gum and Hides. Of latter times, a coarse kind of silk has also been extensively collected. The cocoons, or balls of silk, are found adhering to the *doornboom* trees in which the caterpillars that form them feed. These balls are coated with a sort of glue which is removed by boiling. The silk then resembles fine wool and, by carding, may be manufactured as spun silk.

"The gum arabic of this country exudes abundantly from the trunks and branches of the *doornboom Acacia* [*Acacia karroo*]. It is collected by the Caffers for a small sum per pound." [p. 238]

26 February — From King William's Town to the Stutterheim area:

"In the course of the forenoon we set out for Bethel [just north of Stutterheim], a distance about 26 miles [really c. 35 km]. The route lay over dry grassy hills succeeded by a verdant undulating country full of Caffer kraals. [p. 240]

"Our route now lay up a steep mountain from the top of which there was an extensive view over grassy country interspersed with woods. On the more elevated land the grass was long and sour. In some places the people were burning it off in order to obtain a tender blade, and the atmosphere was loaded with smoke. Descending gradually toward the foot of an elevated range of mountains we came upon the Kabousi River [Khubhusi River]... Flowing up the river which is small but clear and flowing, and striking off at Cumakale [Cumakala], one of its branches, we came to Bethel where we met a cordial reception from Johannes Ludwig Doehne ...

"Bethel is a station of the Berlin Miss. Soc. It is situated in the territory of the Caffer Chief Gacela [Gasela] who had ceded a considerable piece of land to it." [p. 241]

27 February — Bethel Mission to Itemba, c. 11 km east southeast of Stutterheim:

"... we set out accompanied by JL Doehne to visit Itemba, another station of the Berlin Society. The distance is about 10 miles over an elevated grassy country intersected by many footpaths from one Caffer kraal to another and perforated by the Anteater *Orycteropus capensis* which makes holes as large as those of a fox. These holes are dangerous to horseback travellers, being generally concealed among the grass which is often most luxuriant around them." [p. 242]

1 March — *En route* from Stutterheim to the drift on the Great Kei River, heading for Butterworth, Transkei:

Backhouse tells of how the blacks there have meals which "…often consist solely of sour milk... In consequence of living chiefly on this article, and rarely using salt, these people are, however, almost universally affected with a species of tapeworm, *Taenia*. To expel the tapeworm they use vegetable remedies such as the roots of a fern, and of a species of *Oxalis*. The Caffers rarely eat animal food... They use Caffer Corn, Caffer-melons, and pumpkins in summer ...

"The caffer-melon, *Citrullus caffer* [*Citrullus lanatus*] is a native of the country; it is produced by a slender trailing plant with deeply-divided leaves and small pale flowers. The fruit is oval and about 1 foot long. It is firm, and requires to be cooked; the Caffers generally roast it among the ashes of their fires. The general appearance of this fruit, and of the plant that bears it, is like the water-melon, *Citrullus jace* ..." [p. 249]

Arrived at the Great Kei River (Komga side):

"As we approached the Great Kei the country became mountainous and was intersected by deep ravines. The descent to the river by the track we took was very rocky and steep. On coming to the top which was also full of large thick bushes, our extra guides wished to return ..." The river was in flood and they could not then cross and had to wait till morning. "... after eating a little gum collected from the acacias that bordered the river ..." and rested.

2 March — Next morning: "I collected a little more gum ... which is not easily digested unless first dissolved in the mouth... I also roasted a few roots of an orchideous epiphyte that was growing at the roots of some bushes, and ate a little wood-sorrel but this was not sufficient to recruit my strength.

"When seeking gum among the acacias, which were considerable trees by the side of the river, I found a small snake living, and able to attempt defending itself notwithstanding that, and striving to pass some half-dried gum, it had stuck fast in it.

"Here I first saw in blossom that beautiful scarlet-flowered climber the Cape Trumpet-flower *Tecoma capensis* which is very abundant in bushy places in Caffraria."

Crossed the Great Kei into Transkei [Butterworth District] at a ford about 800m from Umboni's Kraal. [p. 251]

"We now had another steep mountain to pass, on which a few Caffers were feeding their cattle; missing our way in descending we got into an intricate rocky bush that detained us till sunset. [p. 252]

3 March — "We travelled on over a series of grassy hills that were green from the late rains. The intervening valleys were filled with kraals and patches of corn till we came to a trader's station. Afterwards the country was without inhabitants till we arrived at a large kraal of Fingoes about a mile from Butterworth... Most of the inhabitants of this part of the country had left it because of the late drought and the threatened attack of an enemy ..."

Butterworth Mission, 1 km south of Butterworth:

"The rivulet is now reduced to a chain of pools. By the side of this rivulet there was a fine clump of Yellowwood trees; and, on some bushes, a species of *Loranthus* [probably *Agelanthus prunifolius*], with linear leaves, was profusely in blossom and very gay; its flowers grew in threes and were of an orange-red, and rather like those of the Honeysuckle." [p. 254]

5 March

En route from Butterworth to Clarkebury, "…distant 45 miles", 31 km southeast of Engcobo:

"William Fynn [Diplomatic Agent of the Colonial Government at Butterworth] accompanied us a few miles; he pointed out the site of the kraal of the late Hintza and the Council-tree near it, the preservation of which was once stipulated for in one of the treaties with the British; at the same time, a road, with a space a mile broad on each side of it for outspanning upon and passing through Hintza's territory, was also agreed to be conceded instead of cattle which had been demanded to an unreasonable amount. Both were afterwards abandoned by Lieutenant-Governor Stockenstrom.

"We offsaddled by a clear streamlet under a sloping wood which was remarkably gay with flowers. *Tecoma capensis* hung among the bushes in festoons of bright red. The blue *Streptocarpus rexii*, a blue and white *Moraea* [*Dietes iridioides*], and a plant of the *Ixia* tribe with branched stems bearing sub-reflexed orange flowers [*Crocosmia aurea*], grew by the side of the brook.

"On some of the lower trees there were orchideous epiphytes and a mistletoe, *Viscum*, with flattened leafless stems and tubercled white fruit. None of these appeared to attach themselves to the Yellowwood trees which were the loftiest in the wood.

"A white *Clematis* [*Clematis brachiata*] was in blossom at our next stopping place at which a rivulet passed through a low ground, on a marshy part of which there were large plants of an *Amaranthus* resembling the Princes Feather of English gardens ...

"Generally the country was destitute of wood except on the margins of rivulets, and on some sandy grounds where there were a few *doornbooms* [*Acacia*], but it was grassy and undulating.

"We entered the territory of the Chief of the Amatembu Caffers, or Tambookies, about 20 miles from Clarkbury [Clarkebury ... the country now lay desolate, being entirely without inhabitants. [The Mfecane had driven them out.] Here we crossed the rivers Bolota and Umguali [Bholotwa and uMgwali]." [c. 3 km south of Clarkebury] [p. 256]

20 March

From Butterworth to the Great Kei River:

"…villages and herds among the grassy hills." At the Kei: "Among the grass on the south side there was abundance of the species of *Moraea* [probably *Moraea polystachya*] known in the country by the name of Tulip or Tulpe which is very destructive to cattle, especially if they be turned in a hungry state to browse on places where it abounds.

"The Kei runs in a deep mountain-ravine, the sides of which are bushy in many places. Near the river, and in various little copses, *Tecoma capensis* was clothed with a profusion of brilliant red blossoms. Many other shrubs had become gay with flowers since the rain." [p. 276]

22 March

King William's Town:

"... the grass was springing up in all quarters. Much loss was sustained by cattle overeating themselves, or eating young poisonous plants. Among the shrubs now in blossom was one with flowers like those of the snowdrop tree, *Hallesia tetrapters* [*Halleria*], but allied to *Gardinea* [*Burchellia bubalina*]. Some species of *Gardinea* found in this neighbourhood have large fruit which is pleasant when decayed like the Medlar.

"The fruit of a small *Lycium* which forms a low thick bush and has small red berries is also said to be eatable and agreeably acid." [p. 278]

23 March

King William's Town to Mount Coke Mission, 12 km south southeast of King William's town:

"... The road to it lies over hilly, grassy country thickly inhabited, especially in the valleys... The grass was beautifully enamelled with flowers, among them were white, lilac, and crimson species of *Oxalis* and a yellow *Mesembryanthemum*. One of our horses became violently ill from eating young grass; he laid down several times and rolled through severity of pain." [p. 279]

25 March

From Mount Coke to Wesleyville Mission on the Thwecu River, 41 km west of East London:

"The road lay over grassy hills, some of which were rather stony, and across the Kalumna, an insignificant brook excepting in rainy weather ..." [Chalumna, 35 km west of East London, *iTyolomnqa*.] [p. 285]

Wesleyville Mission. "In a copse by the side of a brook the beautiful climber *Cephelandra quinqueloba* [*Coccinia quinqueloba*] allied to the Bryony displayed its elegant fruit; this is about the size of a pigeon's egg and is delicately shaded with purple; the flowers are of a golden yellow. This plant is also met with in adjacent parts of the Colony." [p. 286]

27 March — Crossed Keiskamma River, probably just above the ebb-and-flow:

"We forded the Keiskamma which is here a considerable river. Its woody banks were very gay with *Tecoma capensis* and *Plumbago capensis* [*Plumbago auriculata*]. The last is a low bush with handsome blue flowers." [p. 187]

From Peddie village to Newtondale Mission, 14 km south southwest of Peddie:

"... after a ride of 12 miles over a grassy undulating country of not very fertile aspect ..." he arrived at Newtondale.

1 April — "Newton Dale is pleasantly situated. In dry weather the pools in the bed of the river are brackish; this is also the case at D'Urban [Peddie] and at the Beeka [Bhirha] yet not so much so as to render the water unwholesome ...

2 April — "We left Newton Dale and traversed a few grassy hills, stony in some places but diversified by copses gay with flowering shrubs. Flowers were also numerous in the open grounds. In some of the shallow pools *Crinum aquaticum* [*Crinum campanulatum*], a lily-like flower of purple-red shaded into white was very abundant and beautiful. About 4 miles from Newton Dale we entered the Fish River Bush ..." [24 km south southwest of Peddie] [pp. 288, 289]

1846/7 Kirby, P.R. in Bullock (1960)

Quoting Surgeon-General William Munro, who lived at Peddie in 1846–1847: "Ascending from the valley of the Fish River by Trumpeter's Pass [Trompetter's Drift] and emerging from its belt of thick and almost impenetrable mimosa forest [*Acacia karroo*], one came south upon an irregular table-land intersected by thickly-wooded narrow valleys through which flow shallow streams, and between which stretch open grassy plains.

"On a rounded bluff, approached on the east by a steep ascent, covered with thick low brushwood and lying between two of these valleys, stand the fort and station of Peddie, overlooking an extensive undulating plain which stretches eastwards to the sea ... [p. 14]

"To the west and north-west of the station was a long strip of undulating table-land, bare of trees and brushwood, and bordered on the south by deep-wooded kloofs and by the edge of the impenetrable Fish River bush; and on the north by the more open forest ground ran the road or track to the nearest drift over the Keiskama into Kaffir-land proper." [p. 16]

1848 Board, C. (1962)

King William's Town to the Great Kei River:

"A note on Jervois' map of British Kaffraria of 1848 reads: 'The road from King William's Town to the Kei [c. 70 km], excepting on the descent of that river, is free from bush nearly all the way.'" [p. 135]

1848 Baines, T. in Kennedy (1961)

22 March — From Fort Hare, Alice, northwards up the Tyhume valley, 10 km along the river, towards the mountains:

"Crossing several tributary streamlets of the Chumie we outspanned towards evening by a beautiful clump of tall yellow-wood trees, their dark massive foliage over-hanging a secluded crystal pool." Next day Baines crossed the mountains there. [1: 43]

23 March — Near Seymour [Mpofu], 30 km northeast of Fort Beaufort:

"A little to our left, under the cool shade of a patch of forest, a fine log of yellow-wood was elevated upon tressels, and two men were engaged in sawing it into beams of which four, each of 10 inches or a foot in diameter were chalked upon it, though many trees are capable of yielding three or four times that amount of timber. The wood commonly called the Cape Fir, of which there are two varieties, one nearly resembling the American pine, and the other harder and not so easily worked, though extensively used throughout the Colony and exported even to the country beyond the Vaal, is brittle and liable to decay and in every way inferior to deal." [1: 59]

1849 Baines, T. in Kennedy (1961)

7 August — Line Drift, Keiskamma River, between Peddie and King William's Town, 19 km northeast of Peddie:

"... crossing the river at the Drift where it expands into a broad sheet of water with steep hills clad with *Euphorbia* [*Euphorbia grandidentata* and *E. triangularis*] on its right,

or western, bank and a fringe of gracefully waving willows with the pendant nest of the yellow finch waving from the slender boughs on the other…" [p. 129] [It was like this in the 1970s, 120 years later—C.J. Skead.]

10 August — Fort Grey, 9 km west of East London:

"I left ... Fort Grey, and after riding about 9 miles more over a beautiful succession of grassy plains and valleys sprinkled with mimosa [*Acacia karroo*], reached the Buffalo (River) ..." [p. 133]

14 August — Eastern Ciskei [the East London, Komga, and King William's Town Districts]:

"The country all through Kaffraria is nearly all of the same character. A rich green sward, at the present season like a smooth-shaven lawn, sprinkled with solitary mimosas [*Acacia karroo*] or clothed with thicker clumps of them. The tall chandelier-like *Euphorbium* [*Euphorbia grandidentata* or *E. triangularis*] grows to thirty feet height amid the thick and tangled brake by the river sides, and its shade relieved by the beautiful *Strelitzia regina*[*e*], or Queen Flower, and others almost equally beautiful ...

"... In the afternoon I crossed the sources of the Goonobe [Gonubie] or Goneep, the Cahoon [Nahoon] and the Yellowwoods River, so called from the numerous trees of that kind growing on its banks ..." [Kei Road flats, etc., c. 30 km northeast of King William's Town] [p. 143]

17 August — Mountain slope between Seven Kloofs Mountain and Hogsback Peak, c. 20 km northeast of Alice:

"Two miles further on stood a bare and precipitous rock, with a small wood of tall yellowwood trees whose naked stems, unencumbered with the usual undergrowth of bush, gave an idea of wildness and desolation that contrasted strikingly with the luxuriant forest below it. Into neither of these would my guide enter. An old witchdoctress, now in custody in Graham's Town for procuring the crime of murder while the actual perpetrators of the cruel deed are allowed to go at large, had made it her residence, and when I persisted in going nearer he sat down upon the grass and waited sullenly for my return."

22 August — Near Lenye and Wolf River, Keiskamma Valley, 9 km southeast of Keiskammahoek:

Describes an *Encephalartos* with three cones: "The weight of the two cones proved to be 38 pounds Dutch or rather more than 40lbs., their length was 18 inches and their circumference the same, and each contained from five to seven hundred seeds, two inches in length and three-quarters of an inch in breadth, covered by a soft shell of bright scarlet, more or less compressed on all sides. These, when roasted like chestnuts in the fire, were not unpalatable, but when raw were so sickly and insipid that it was impossible to eat many of them ... [p. 152]

"The stem of the *Zamia*, which is still sometimes called the 'Hottentot's bread' was formerly used as an article of food among the poorer tribes of that people, who, after steeping it for several days in water, were accustomed to prepare a kind of cake from the pith." [p. 153]

28 August — Upper Keiskammahoek valley, mountain northwest of Rhabhula:

Baines had a meal with the local 'queen'. Apart from beef, and both sweet and sour milk "... the Queen herself honouring me by presenting, with her own tapered and delicate fingers, a goodly junk of the succulent root of the *noyen boom* [nooiensboom, *Cussonia spicata*, umsenga in Xhosa] which, after so plentiful a meal of animal food, formed a most acceptable dessert ..." [p. 155]

7 September — Near Stutterheim:

"About 2 miles farther I saw overhanging a small rocky bank a number of the most splendid zamias [*Encephalartos*] I ever met with. One of them was at least fifteen feet; its stem must have been as many inches in diameter, and its crown of dark-green palmated leaves slightly curving upwards formed a hollow in which reposed four cones of the most brilliant orange." [p. 162]

8 September — Crossing the Bontebok Flats:

Baines had left King William's Town, travelled to Stutterheim and then to Toise River [29 km southeast of Cathcart] where he met two officers of the Rifle Brigade whose wagon had broken down and who were going "to the north-east in search of game". The next day he parted company with them, each group going its own way. The northeasterly direction the officers would have taken might have been towards the eastern sector of the Cathcart District towards the Thomas River and Henderson areas [18 km east of Cathcart], or they might have been going to the northeastern part of the Stutterheim District. But this is conjecture. At least we know that they were not going to the Bontebok Flats proper because Baines travelled over them.

"Riding over a succession of stony hills and parched and arid plains, I passed the south-western angle of the Winvogels berg [Windvoelberg, just west of Cathcart] about sunset, and some hours later, off-saddled my horse and spread my blankets upon the dreary flats, without a stick to make a fire or a stone to shelter me, and illuminated only by the fires that were consuming the dry grass in every direction around." [A footnote to this refers to another manuscript of Baines in which he mentions seeing one hartebeest and two springbok on the flats, and also that he had "…off-saddled on a patch of dry grass that had fortunately escaped the fury of late conflagrations."]

9 September — Western end of the Windvoelberg, just west of Cathcart:

"I breakfasted off part of a biscuit and some *Zamia* [*Encephalartos*] seeds, washing them down, as soon as the sun had melted the ice in my bottle, with a scanty draught of water ..." [He mentions no ill-effects.]

Moving down the Klipplaat River "... I discerned Shiloh in the plain below... My way thither lay for about five miles through a succession of rugged kloofs and a scene of more complete desolation than met my eye at every turn it is impossible to conceive; mimosas [*Acacia karroo*], stripped of their leaves, shewed their dry black stems and long white thorns like a grey thicket in the valley where water should have been; aloes with brown stems, sere and yellow leaves, and flowers faded to dust brown, were sprinkled on the hills; and the dry withered grass and red stones reflected ... the intolerable glare of the scorching sun ..." [1: 163, 164]

Along the Klipplaat River, southwards from Whittlesea:

"... a tall almost perpendicular cliff in the fissures of which a number of *Zamias* [*Encephalartos*] managed to find hold, some growing to a large size and shooting upward or hanging down in all directions ..." [1: 165]

12 September — Whittlesea, 31 km south southwest of Queenstown:

"Gave several of the *Zamia* [*Encephalartos*] nuts to Hottentots and Kafirs; none of them knew anything of them, but Ben Josef, my attendant on a former trip, said that, when roasted, they were mealier than a potato." [1: 172]

13 September — Left Whittlesea, passed Shiloh, and went up the Klipplaat River to Een Doorn and to Diep River, *en route* to Seymour, etc. in the Kat River valley:

"We rode through a long deep kloof with barren hills and dry grass relieved only by black and bare mimosas [*Acacia karroo*] with their white thorns, and varied occasionally by a steep and stony ridge with a few zamias [*Encephalartos*] upon it—a striking contrast to its green and fertile appearance when I passed through 16 months ago on my way to Shiloh. We passed the well-remembered thorn tree [Een Doorn] where we outspanned last year and in about 16 miles came to Diep River, a tributary of the Klipplaat ..." [1: 175]

19 September — Just north of Buxton, 28 km north of Fort Beaufort:

"I now looked with wonder and perhaps some awe on the thick forest that clothed the steep sides of the mountain from which I came the previous night (Footnote 55: Botha's Bush), and was much comforted by the assurance that had I but struck into the slip-path where trees are drawn down I might have reached the bottom by dark.

"A little south from the village is a small marshy spot where a crimson flower [*Scadoxus puniceus*] with innumerable yellow filaments inside grows on a short thick strong stem, not quite round, and is called by the Hottentots *bloem bol* and by the Kaffirs *impoombo*…*Haemanthus,* or blood flower, called by the Dutch and Hottentots, on account of its being used by the Bushmen in the preparation of their envenomed weapons, *gyf bol* or the poison bulb, and by the Kaffirs *impoomboo*. [p. 182]

"We halted in a thick wood on the banks of the Balfour River ... we pushed on again. In the thickest part of the wood we found an immense yellow-wood tree, dead and stripped of its leaves, and in its trunk, about 40 feet up, a large hole to which a ladder formed of rough poles with spars lashed across it, advantage being taken wherever possible of the bush vine that festooned the branches, afforded means of access." There was an empty robbed bees nest there. [p. 183]

26 September — Philipton, 33 km north of Fort Beaufort:

"The zamia [*Encephalartos*], Caffer or Hottentot bread, was formerly eaten by the Hottentots but they have abandoned the use of it. The only part they used was the pith or interior of the skin which they allowed to rot, and then roasted it.

"The pith of the aloe [possibly *Aloe ferox*] is also good and tastes much like a cabbage stalk but rather more bitter.

"When thirsty and unable to obtain water, relief may be obtained by stripping off the interior bark of the mimosa [*Acacia karroo*] and chewing it. [p. 188]

"The zamia [*Encephalartos*], caffer or hottentot bread, was formerly eaten by the Hottentots but they have abandoned the use of it. The only part they used was the pith or interior of the skin which they allowed to rot and then roasted it.

"The pith of the *Aloe* is also good and tastes much like a cabbage stalk but rather more bitter.

"When thirsty and unable to obtain water, relief may be obtained by stripping off the interior bark of the mimosa [*Acacia karroo*] and chewing it." [1: 188]

Description of the country from King William's Town in the Ciskei to Shiloh, presumably over the Bontebok Flats:

"Mrs Shepstone seemed well acquainted with the country between King William's Town and Shiloh and described it in certain seasons of the year as one immense garden with beds and patches of differently coloured flowers, each kind growing by itself: here a brilliant scarlet, next a patch of vivid green, then a bed of yellow, and, near that, another of deep crimson, bordered perhaps by a small azure creeper; and beyond that the ground would be covered by the wild *Convolvulus*; while the hillsides were clothed with every variety of *Aloe*, with its crimson flowers and the little hollows filled with the brilliant queen flower (*Strelitzia* [*Strelitzia reginae*]), the white lily [possibly *Crinum macowanii*], and a variety of others: while the plains were over-spread with the light and gracefully drooping bell flowers of the *Sparaxis* [*Dierama*] of every variety of colour from a deep purple to crimson and the palest rose tint to pure white, and waving on their slender stems with the slightest breath that passed over the plain, a striking contrast to the dry and desolate scene that presented itself to my eye in passing over it." [1: 200]

27 September — Results of recent flood in upper Kat River valley:

"As I rode up the valley the course of the river was seen, full of trunks of trees, the wreck of the late flood, and at the foot of the hill, one place, perhaps 100 yards wide and of considerable length, seemed one chaos of dry rocks, light-coloured earth and broken timber... Along the valley the course of the torrent was indicated by the bare and dry sandy-coloured patches contrasting at intervals with the dark green forests that clothed the base of the Elandsberg ..." [p. 191]

10 October — Tributary of the Swart Kei River, while heading for Haslope Hills and Twee Tafelberge [Martha and Mary], 10 km south of Tarkastad:

"... entering a narrow but deep and rocky kloof, I kept on for 5 or 6 hours more by the side of the river, a branch of the Zwart Kei which rises in the Winterberg. The scenery on hand was wild and magnificent; the river, winding along the bottom of the valley formed a succession of deep clear pools... The cliffs were scattered over with numerous and brilliant aloes, with a collection of scarlet flowers drooping from the summit of a slender stem... I now abandoned the course of the river and, gaining a higher and more open ground ..." [1: 210]

1851 Baines, T. in Kennedy (1964)

26 June — Amatola Basin, Middledrift, and adjacent mountains:

"... ascended the neck which connects the Great with smaller Amatola... It was the brow of the rocky steep covered with bush overlooking the spacious basin of the Amatola, with steep hills, clad with almost impenetrable forests and crowned with huge perpendicular faces of rock, ... into the deepest shadow beyond. At the head of the valley, a little on our left, rose the Hogs Back, or great Amatola Peak ..." [p. 197]

13 October — Fort Armstrong, near Buxton, 29 km north of Fort Beaufort:

"Leaving Fort Armstrong a few miles upon our right we halted in the valley just below the village of Buxton, the General [Sir Harry Smith] and his suite availing themselves of the shelter of a noble tree to which had been affixed at some former time a board with 'Head Quarters' painted on it ..." [p. 228]

28 November — Between Readsdale and the top of the western end of Elandsberg:

"We off-saddled on the little Read's Dale River... And, in the afternoon, striking into the road I had travelled twice before, commenced the ascent of the Elandsberg. The same familiar trees overshadowed the road ...

"I had been frequently struck during my wanderings in Africa with the fact that the vegetation of the country is regulated more by its altitude than by its geographical position, the same flowers occupying nearly the same level in almost every part I had visited. On the height we had now attained, the sugarbush, or *Protea*, precisely similar to that I had found on the mountains of the upper part of the Vaal River, was expanding its crimson cones into lighter but still beautifully coloured flowers, and as we rose still

higher the bright red flowers of the *Gladiolus* and the pink bells of the graceful, drooping, *Sparaxis* [*Dierama* sp.] with which the General delighted to wreathe his hat, studded the mountainside." [p. 257]

29 November — Een Doorn, between Diep River and Shiloh:

After coming down the Diep River valley. "We halted for the night at 'Een Doorn', the well remembered solitary mimosa... I gathered a number of mushrooms of excellent flavour which, David informed me, were not food. I might eat them, if I liked, but they were 'poison to a black person' ..." [p. 258]

1 December — Shiloh:

"The willows, verdant and fresh as ever, overhung the desolate village, and here, as in the lovely country through which we had lately passed, it might indeed be said: 'All save the Spirit of Man is divine'." [p. 260]

2 December — Southern Klaas Smits River:

"Instead of the *Proteas* and *Gladioli* that had clothed the lofty mountains [the Elandsberg, over which Baines had just travelled], the hills were studded with compact hummocks of the green and prickly *Euphorbia*; and the flats with anthills between which crept *Convolvuli* of every hue, or rose at every step some fresh variety of *Amaryllis* [possibly *Crinum* is meant here], its corona of flowers radiating from a common stalk and varying in colour from pure white to the deepest crimson ..." [p. 262]

5 December — Bramnek to the Bholotwa, Glen Grey District:

"... leaving Bram Neck upon the right, it slowly crossed the mimosa [*Acacia*]-covered plains of the Bolota, sometimes known as the 'Inklaaka' or 'Gum' flats from the quantity of gum collected from the thorntrees by the kafirs, from whom, Mr Hoole informed me, he once bought in one morning by retail, in exchange for blankets and other articles, enough to load three wagons ..." [p. 263]

21 December — Probably in southern Engcobo District:

"A fine spreading tree covered with milk-white blossoms [possibly *Dombeya cymosa*] which I had never seen before attracted my attention as we passed the darkening forests on our return. I asked my more experienced companions what it was called but, finding that my question related neither to war nor the cattle-lifting, they scarcely considered it worth an answer. Upon the plain before us, near a little crystal stream overhung by a tall cliff and shaded by lofty trees, we now saw a dense mass of some thousand cattle ..." [p. 279]

1852 Baines, T. in Kennedy (1964)

2 January — Junction of Cegcuwana and Gcuwa Rivers, Butterworth District:

With Mr William Macdowell Fynn, Government Resident to Kreli's tribe "... who requested me to sketch his former house burned by the Kafirs in the last war, and the graves of his family covered with a heavy slab of unwrought stone and overhung by a beautiful mimosa.

"On the face of a picturesque krantz at the junction of the Geguana with the Gua Rivers, he showed me a natural likeness of Sir Benjamin D'Urban, not far from the spot where he encamped in 1835. A patch of lichens on the face of the rock certainly made a very tolerable profile, with a prominent nose, receding chin, and a somewhat darker skull-cap similar to that worn by the good old Governor. The delusion was perfected by the neck, just where the outline became confused, being shadowed by a light waving *Acacia* that rose gracefully from between two blocks of stone below ..." [p. 285]

1850s Fleming, F. (1853)

Kaffraria [Eastern Cape, Ciskei, and Transkei]:

"The valleys and all low undulating grounds are, generally, thinly dotted over with a kind of straggling bush, or underwood, which in these localities is composed principally of the mimosa [*Acacia karroo*]

"This is a shrub which grows all over Kaffraria in great abundance and luxuriance. In the positions which we are now speaking of, it attains usually to a height of 10 or 12 feet. But when found along the banks of rivers, or in the vicinity of water, it reaches a larger growth, averaging there about 20 feet. It is a very beautiful shrub of that class of leguminous plants which takes its name from *mimos*, or mimic, with reference to the irritability of its leaves, as if imitating animal sensibility.

"One species of it is commonly styled in England, the 'sensitive plant'. The foliage of the mimosa is most beautifully and delicately leafleted, and the flower of a bright yellow colour, emits a sweet perfume. The branches are covered with long spines or thorns which grow in pairs on either side of the twigs, usually to a length of two and a half or three inches. These are white and glazed, and much resemble ivory and, appearing amidst the bright pale-green foliage and dark brown stems, give a very pleasing effect to the *tout ensemble* of the tree.

"This shrub is also useful as well as ornamental, the bark being used by the natives as a tan-coloured dye for their blankets and karosses (or skins); and it has lately been similarly employed by our soldiers to render their clothes less discernible by their enemies in the bush. It produces, besides, an important article in the present limited export commerce of Kaffraria, viz. gum which exudes from the bark in the sun and, being gathered by the Kaffirs, is then bartered by them with our traders for blankets and beads.

"Although in most of the lowlands of this district the mimosa-tree composes the principal part of the bush or underwood, yet, in the more mountainous and rugged parts it is not of such common and universal occurrence, being there displaced and intermingled with various other plants of different sizes and characters." [p. 29]

Discusses the *Euphorbia* (or milk-wort) and refers to the white milky juice exuded: "The native tribes avail themselves of this latter quality by turning it to medicinal use. They excoriate the skin with a sharp instrument or the point of their assegais, and then apply this juice to the wound, and, by running it into the blood, they establish an open sore which acts as a blister in such cases as pains in the chest or head where European physicians would adopt a like remedy. [pp. 30–33]

"The timber found in these vast forests of Kaffraria is of the finest description, and it can but be a matter of wonder and regret, even to the most casual observer, that an endeavour has not been made long since to turn this commodity to some better account as an article of export commerce.

"An ample trial has been made by the European settlers of its durability and its appropriateness for all common purposes of building, furniture, and general use. For the little village of Pierre [Pirie], about 16 miles [really 18 km] from King William's Town at the foot of the Amatola mountains was inhabited solely by sawyers and their families who earned an easy and, it may be said, abundant livelihood by the felling and sale of this timber.

"The woodwork of such parts of the military barracks as have been erected, and of all the private and Missionary dwellings hitherto built throughout Kaffraria, is composed entirely of this native wood. It has been found to answer all ordinary purposes, and, further, it has been supplied at a very moderate price to the purchaser although at one quite sufficient fully to repay the labourer and seller with a fair profit." Fleming then refers to the number of jobs timber exploitation would entail and mentions various trees available there. [p. 34]

"... on the summits of the mountains, long tablelands frequently occur ... fields of lilies and wild flowers of all descriptions, the only shrub appearing in such localities being the *Protea* (*grandiflora* [probably *Protea caffra*]) growing to a height of 8 or 9 feet and covered with its rich cuplike flowers of white and pale pink.

"Amidst the flowers, the most numerous and the most varied in colours and magnificence are of the *Gladiolus* species covering the surface in some places for several square yards together and presenting to the eye almost every tint of colour."

He gives for the hills: *Haemanthus, Amaryllis* [unidentified Amaryllidaceae], *Ixea* [unidentified Iridaceae], marigold, *Cynararia* [probably *Senecio*], *Sparaxis* [*Dierama*] "... all of which grow in rank abundance one very side." [p. 36]

Firing the veld:

Cattle herdsmen move stock from one pasture to another. "These pastures he selects for them in the best localities, as, in many parts, what is called the 'zuureveldt' (or sour fields) [sour veld] preponderates, which the cattle will not touch. Besides which, even in more verdant plains, the heat of the sun soon scorches up the grass. The Kaffirs then drive off their herds to another part and set fire to the grass on the old ground. This fire runs often for miles together until some intervening road or rivulet intercepts its progress, and leaves the country behind it a large tract of black ashes as far as the eye can reach. The first thunderstorm with its accompanying shower of rain should change this into a fresh green pasture of young tender grass, springing up from the uninjured roots beneath which the ashes protect, while they enrich the land. [p. 99]

"The 'knob-kerrie' deserves a little notice. It is merely a stick about 4 feet in length and an inch in diameter, terminated at one end by a knob or round ball. These are usually made from young trees of the wild olive, *Olea verrucosa*, or *O. ferruginea* [*Olea europaea* subsp. *africana*], the bend at the root being formed into the knob. They are also

made some times of the assagai wood, *Curtisia ferruginea* [*Curtisia dentata*], the Kaffrarian pear, *Pyrus africana* [*Prunus africana*], and various other native trees.

"They make use of them principally in killing game or in defending themselves against reptiles." Describes how they are thrown with an end-over-end projection. [p. 102]

Sihota [Moordenaarskop], 10 km north of Komga, Ciskei:

Refers to the "... *spec-boom* (which grows profusely in most parts of the bush [*Portulacaria afra*]). Footnote: This plant is the principal or favourite food of the elephant and is closely covered with small round juicy leaves, each about as large as a four-penny bit, and possessing not an unpleasing acid taste somewhat similar to that of sorrell. Small bits of the tender branches or a few of the leaves are often useful and refreshing to the traveller through Kaffirland as, by being kept in the mouth, they allay thirst when water may not be found in the vicinity." [p. 40]

1862 Dobie, J.S. (1945)

13 October From Bashee River to Umgwali River, 29 km southeast of Engcobo. The Umgwali is a tributary of the Bashee and the two are only 10 km apart at this site, with Clarkebury Mission on this same road:

"... plenty of wood, grass and water [at Bashee]. Travelled over easy undulations to the Umgwali for breakfast."

On to Tsomo River, c. 8 km north of Tsomo:

"... over long and gentle undulations with very little grass, not only scorched and eaten off, but very thin. Passed a remarkable conical hill... The country round at back of the amphitheatre prettily dotted with thorny-bush. Camped on a brackish creek... On again over similar style of country... Camped near a creek with a large waterworn ravine and water holes brackish... Fred taking a sketch of a very pretty line of bushy thorny-bush in a low valley ahead and distant range with bush. [p. 42]

14 October "Up along better grass and almost level ground to the pretty thorny-bush. Camped near creek with large brackish water holes ... on over easy undulations and encamped in another thorny-bush gully, one of the heads of the creek ... country again very burnt up and thinly grassed. Must have shared the drought of the Eastern Province. On again over long rise to top of range behind amphitheatre. Then winding along ridges to a different watershed, a good many sharp conical hills in the distance... Got to creek with good grass and hunted up a waterhole.

15 October "A gradual ascent and then over low ranges of sandstone and thorny bush to the valley of the Tsomo... On over long rises and noticed some new and peculiar looking flowers, red and yellow, in bunches like the Australian fuchsia, but larger, and bunches on single stems (Footnote: Probably *Kniphofia*, popularly known as red-hot pokers). Camped on a creek called Ningnalocha (Footnote: Ngqongqolova, a small stream running east towards the Tsomo River)." [p. 43]

16 October Tsomo District westwards to Cofimvaba (St Marks) District, and to White Kei River, 22 km west of Cofimvaba:

"Over low rises and small creeks and up a pretty valley, right hand range very ragged in outline... On again, rising at right hand branch of the valley and over a ridge, a pretty view presented itself, a thorny-bushy valley, flat and prettily dotted and lined with the fresh green foliage of the thorns, all surrounded by sharp-edged ridges. A gap leading into another beyond with its thorn wood and ridges and the distant tier beyond... On and down through thorns towards a gap and camped near water and wood. Looking back, a ridge had very peculiarly arranged trees on it, as above... Started again and found road led through gap, a narrow defile between two ridges, the stream running down through, and which we had to cross twice. This small bush very pretty and varied. Trees like willow, tree-ferns, aloes, like palms, locust tree, etc., growing in clumps and forming scrub not unlike that on the edges of the Mallee or that on the coast near Brighton, in Australia. The gap itself prettily broken by rocks, among them some of those beasts seen at Umtata called rock-rabbits [Rock Dassies, *Procavia capensis*]. Met an old Kafir on horseback who told us the name of the stream was Tamata [Qamata, 14 km west of Cofimvaba], also that Queenstown was only another day ahead.

"The valley portrayed is that of the River Kei ... and our road leads across it. Passing through the scrub, came to thorny-bush bordering an open plain and the road took us to the mission of St Mark [19 km west southwest of Cofimvaba ... hurried on expecting to have a good opportunity at our camp on the river, but were grievously disappointed - too low. Feed very scarce." [On the White Kei River.] [p. 44]

1863 **Dobie, J.S. (1945)**

10 August — Between Bashee and Umgwali Rivers, c. 29 km southeast of Engcobo [only about 10 km apart]:

"... many of the *Acacia* trees without leaves, but there are also plenty of evergreens, and the aloes in flower look very gay ... plenty of grass this year and fully more water... On to thorny valley and camped ... in a gully before getting to stony ridge where was good grass and water."

11 August — Near Tsomo River, c. 10 km north of Tsomo:

"... over a stony ridge where we saw a very neat kraal made by planting aloes in a circle, still growing, good dodge for concealing stolen sheep, might pass for a natural clump!

"We are now in that beautiful valley with the occasional thorny bush, the prettiest we have seen ... camped for the night in the valley after crossing the head of the Ik-quik-gun [not found]...fine grass for horses ... [p. 108]

14 August — "... across Ning-K-nalocha [Ngqongqolova River, a small tributary of Tsomo River], and camped on an old 'burn' [burnt grass] where was good feed ... across Ning-K-nalocha up snake valley passed 'Mt. Bracket' [not found] and camped in pretty thorny bush valley [probably Cofimvaba District], all intervening ground burnt bare here, both old and new grass. Reached White Kei and camped on Queenstown side." [p. 109]

1864 **Hook, Major (1906)**

Southern Transkei, notably Idutywa District and the vicinity. British soldiers stationed at Ibeka:

"Veldt fires, when the whole prairie would be ablaze, were of frequent occurrence and, as the Tambookie grass was several feet in length, and the ordinary grass luxuriant to an excess, these fires in windy weather swept over the country in a most destructive manner, preceded by dense volumes of suffocating rolling clouds of smoke, mixed with fire-brands, along the veldt and through the air, spreading danger to camps and travellers, destroying pasture.

"More than once, when off-saddled on patrol, there would be panic as a fire suddenly broke out through the act of a careless smoker or a zealous cook... Sometimes a whole camp built of inflammable material, such as thatch-huts and reed-stables, would be burnt, and the men great losers of property, horses burnt to death, saddlery fried, etc. I venture to assert that few people could realise the magnitude and extent of these Transkei veldt fires in those days when the country was denuded of population after good seasons." [p. 140]

"The army instituted special fire drill. "The rapidity of motion required to repulse a fire during a westerly gale on the prairie can be imagined, but not justly described by me. For it was not acres or morgen of veldt in flames but hundreds of thousands of morgen rushing with a lightning zigzag advance to the accompaniment of roar and crackle of wind and flame." [p. 141]

1850–1885 **Burton, A.W. (1950)**

Forests in the Border region of Ciskei:

"In 1859 forests which had suffered severely during the early wars were protected under the 'Herbage and Forest Act' but burning and wasteful felling of timber continued, and in 1877 forest rangers reported great destruction at Katberg and along the Amatola Mountains ...

"Large quantities of timber – yellowwood [*Afrocarpus* and *Podocarpus*], sneezewood [*Ptaeroxylon obliquum*], and *saffraan* [*Cassine crocea*] had been felled at Fort Grey [9 km west of East London] for the building of the wharves and cargo boats at East London. There were no fixed boundaries against encroachment.

"In 1885 a Forest Commission was appointed and in 1888 Act No. 28 secured better control ..." [p. 216]

Pirie Forest and Evelyn Valley, on the Pirie Mountains, 22 km north of King William's Town:

"The felling of trees increased in the valley in about 1850 when a company of Royal Engineers worked in the forest. At that time much timber was required for barracks and other buildings in King William's Town. The outbreak of war (1850/53) put a stop to the felling which increased after the war when the Military Reserve was extended.

"In 1859 Messrs H and T Perks, on an annual licence, owned a private saw-mill with limited acreage, and in that year Mr W Haynes came out to erect the first steam saw-mill in British Kaffraria... Timber was sent all over the Colony... In 1880, Mr W Haynes, Victoria Sawmills, imported machinery for preparing yellowwood flooring boards; the wood was considered superior to anything ever imported for flooring purposes ...

"At that time white pear trees were felled for making waggon felloes ...

... the *kaffirboom*, *Erythrina caffra* ... was used for making waggon-brakes and sleighs ..." [p. 223]

1882 Port Alfred Budget and Shipping Register of 29 June 1882:

"The East London Despatch [sic] states that on a farm near Tonga River [also Toa or Tuwa River, which enters the Keiskamma River c. 8 km from the mouth] 30 000 sneezewood poles have been cut. The amount received for the poles alone has paid for the farm. We are, however, sorry to learn that sneezewood and other hardwoods in Kaffraria are diminishing so fast that in a few years there will be none left."

c. 1882 Bayonean, A. (1970)

From Committees Drift, on the Great Fish River to King William's Town via Debe Nek:

"From Committees to Breakfast Vlei [12 km to the northeast] is as dusty a drive as could be imagined. Hills are climbed so steep that ... the horses seem about to topple over them ...

"Crossing the Keiskamma River, a glorious pastoral scene meets the eye, requiring only to be scratched to produce any quantities of cereals. Aristocratic and economostic Kafirs abound owning fields of maize, wheat, and forage, with abundance in cattle.

"Undulating meadow lands, covered with flowers, reach as far as can be seen, and scattered on the elevations, too slight to be called hills, are collections of Kafir kraals ...

"From the Keiskama, the country is full of interest as being the scene of former Kafir Fights, and when Debe Nek is reached, Sandilli's [Sandile] stronghold, the Pirie Bush is pointed out... After leaving Umdizini, a toll station, about an hour from Debe Nek, a fortified farmhouse is passed, the only farm that was not deserted during the war... As the sun goes down, the roadside loses its meadow appearance and begins to be covered with bush, a glimpse of 'King' is gained nestling in the valley through which the Buffalo River flows ..." [p. 102]

1885 Brownlee, F. (1923)

Southern Transkei Districts of Idutywa, Gcalekaland, and Fingoland (Ngqamakhwe and Butterworth):

"The country is covered with long grass and was once adorned with great numbers of mimosa [*Acacia karroo*] trees which of late years have been destroyed for fuel. There is still a little valuable timber left in the small forests which are found in recesses of mountains facing seaward ..." [p. 1]

1885 Hutchins, D.E. (1886)

East London and surrounding forests:

"The East London forests are valuable from their position between the East London and King William's Town markets, and their surroundings which are those of a settled country.

"As the bush on the neighbouring farms becomes cleared, there will be a better market for the wood from the Government forest." [p. 150]

The Amatola Mountain forest, c. 40 km northwest of King William's Town:

"The Perie [Pirie] mountain range is the best wooded, the forest usually covering the entire side of the mountains, and sometimes crowning the summits.

"To the north of the Evelyn Valley there is, what is very rare in the Colony, a fine strip of dense ever-green high-timber forest—the Rabula forest [Rhabhula]—on the northern slope of the mountains ...

"In the Amatolas, the forests cease at a general elevation of about 5 000 feet and in every case the summits are bare of forest but the greater extent of the Amatola range renders the Amatola forests larger and more important than those on the Perie range.

"The area of demarcated Amatola forest is estimated at 870 square miles ... Altogether the total area of the King William's Town mountain forest is about 140 sq. miles ..." [p. 151]

c. 1912 Brownlee, W.T. (1975)

King William's Town to Pirie forest, 22 km north northwest of King William's Town:

Taken in 1971 from files of Borough Engineer, King William's Town: "As you leave King William's Town, just on the outskirts, and passing Brownlee Location [since dismantled] along the Izelu [Zele] road, on the left is the old Mission House built by John Brownlee, the founder of King William's Town. The old missionary was a keen botanist, and one genus of orchids takes its name from him [*Brownleea*]. In the mission garden surrounded by its Kei Apple hedge are still a few botanical specimens not commonly met in gardens. An ancient *Aloe bainesii* [*Aloe barberae*], one or two fine old specimens of *Aloe ferox* and *A. arborescens*, a cork-barked *Erythrina, Bauhinia bowkeri, Strelitzia regina*[*e*], etc.

"A short distance beyond the mission, we entered the new cutting along the hillside, facing west. Down below, on the left, lies the Buffalo (Qonce) River. The slope above is clothed with a dense growth of *Euphorbia tetragona*. The undergrowth consists of *Tecoma*, *Plumbago* [*Plumbago auriculata*], pink and scarlet *Pelargonium*, the parent of all the so-called 'geraniums' of our gardens, *Sansiveria thyrsifolia* [*Sansevieria hyacinthoides*], *Cissus*, and other climbers.

"At the further end of the cutting, you cross the dry bed of the Guma River valley, the steep slopes of which appear to the right. In the dense growth of the southern face will be found, *Odina caffra* (kaffir plum [*Harpephyllum caffrum*]), *Dombeya dregeana* [*Dombeya tiliacea*], *Tecoma capensis, Dracaena hookeriana* [*Dracaena aletriformis*], the only representative of the genus known in South Africa, and, among the rocks, smaller Crassulaceae and a few hardy ferns, *Pellaea hastata* [probably *Cheilanthes viridis*], *Asplenium furcatum* [*Asplenium aethiopicum*], *A. rutifolium, Gymnogramme cordata* [*Asplenium cordatum*] and on the rocks in scanty places, *Polypodium lineare* [? *Lepisorus schraderi*]. Orchids are represented by *Habenaria arenaria* and *H. clavata*. Among the dolerite boulders in dryer situations, tufts of *Cheilanthes hirta*, and *Pellaea calomelanos* will be met with here and there, the latter fern is easily recognised by its stiff wiry stems and ivy-leafed glaucous pinnules.

"Beyond the 'Guma' the country opens out. Here the mimosa, *Acacia horrida* [*Acacia karroo*] is the most common tree. Scattered among these you have *Grewia occidentalis*, wild olive, *Zizyphys* [*Ziziphus mucronata*] etc. and quite a prominent object is the quaint *Cussonia spicata* (kippersol, *umsenge*) with its bare stems and umbel-like crowns of palmate leaves. Aloes are not common along this road. An occasional clump of *Aloe saponaria* or *A. latifolia* [*Aloe maculata*] may be met with. On the left of the road, just before crossing the Balassi stream, is a colony of *A. striata* [a colony was still there in the 1970s—C.J. Skead] on a krantz facing northwest, and up the Buffalo above Dunbar Lake, a few *A. ferox* will be found.

"The Buffalo River is crossed by the Everitt Bridge. [This was an iron structure superseded in the 1950s by a concrete bridge built beside it on the National Road, 5 km north of King William's Town.] Along the river the principal growth is *Combretum, Salix*, and Cat-thorn [*Asparagus*], *Acacia caffra*. Among the mimosas [*Acacia* spp.], a bright spot of colour is furnished here and there by clumps of *Cotyledon* now in flower. *Asparagus* sp. is common, and often associated with it is the glossy-leaved '*droog-mykeel*' *Scutia indica*, and *Schotia speciosa* [*Schotia afra*] which, in season, is aflame with crimson blooms. White flowered jasmin, *Jasminum angulare*, and wild vine, *Vitis cuneifolia* [*Rhoicissus tridentata* subsp. *cuneifolia*] with autumn tinted leaves are frequent. Bulbous plants with striking flowers are not common in this region, the most remarkable perhaps being the *Buphane* [*Boophane disticha*].

"Very much the same type of vegetation is encountered all the way until the bare grassy slopes facing the mountains are reached.

"The forests on the south-east face of the Amatolas are a veritable paradise to the botanist. Mr J Leighton [a nurseryman at King William's Town] is furnishing a check-list of ferns. The orchids are chiefly epiphytal and although some are graceful and charming, none are very striking. The following are to be found on tree trunks: *Polystachya pubescens, P. otteniana, Listrostachys arcuata* [*Cyrtorchis arcuata*], *Angraecum saundersiae* [*Aerangis mystacidii*], *A. bicordatum* [*Tridactyle bicaudata*], *A. conchiferum* (rare), *Mysticidium filicorne* [*Mystacidium capense*], the last is frequently found on the stems of *Euphorbia tetragona*, it is highly scented and is the most charming of our epiphytal forms. The most notable of our forest ground orchids are *Calanthe natalensis* [*Calanthe sylvatica*], and the tiny *Stenoglottis fimbriata*, with its spotted leaves, found on tree trunks and on rocks where humus has collected. *Brownleea caerulia* [*B. coerulea*] is also found.

"A note of this nature must necessarily be brief; in closing it I only refer in passing to masses of *Streptocarpus* found on the shady faces of boulders or damp banks, and pink-flowered *Impatiens* [*Impatiens hochstetteri*] in moist places.

"Some remarkable flowering trees and shrubs also call for notice. *Burchellia capensis* [*Burchellia bubalina*] with its clusters of scarlet heath-like flowers. *Gardenia thunbergia* a magnificent sight in full bloom, flowers large, pure white, and highly scented. *Gardenia rothmannia* flowers campanulate, *Calodendron capensis* (wild chestnut) now in flower out of season.

"On the outskirts of the forest bordering the streams we will meet *Richardia aethiopica* (arum [*Zantedeschia aethiopica*]), *Schizostylis coccinea* [*Hesperantha coccinea*], *Nerine undulata, Kniphofia*, yellow-flowered *Moraea* sp. [*Moraea spathulata*]. These however unfortunately will not be in flower now."

[Written and signed by John Innes Brownlee, Doctor of Medicine and grandson of missionary John Brownlee. From personal experience from 1950 to 1972, as director and biologist at the Kaffrarian Museum, King William's Town, the vegetation had remained much the same as described by Dr Brownlee for 1912, except perhaps for somewhat reduced density in the bushy areas mentioned in his fourth paragraph above—C.J. Skead]

1950s Van Wyk, G.F. (1960)

Coastal belt of Peddie, where a survey of river mouths had been conducted in the 1950s. This region passed from white to black ownership in the late 1970s:

"A low coastal ridge runs parallel with the shore along the whole Peddie coast. It is most luxuriantly covered with indigenous bush to the landward side. At places, extensive blown sand-dunes are present between this ridge and the sea, and many morgen are thus under desert conditions ..." [p. 41]

Mtana River Mouth, west of the Keismamma River Mouth:

"The sea-dune in this vicinity is well covered with 'sea-bush' and this fact no doubt prevents the outlets of these streams from being cut off from the sea altogether ..."

Gusha [? Gqutywa] River Mouth:

"Near the sea its bed is found in a deep ravine and the left bank of the estuary is exceptionally steep and densely covered with bush ..." [p. 42]

Gwalana [Mgwalana] River:

"When its mouth is blind, the lagoon is navigable with an outboard-driven boat for about six miles. At this distance from the sea the river is narrow and runs between high precipitous bush-covered hills."

Mtata [Mtati] River, 14 km from the Great Fish River Mouth:

"The seaward portion of this river is situated between steep hills, densely covered with natural bush on the slopes. The mouth is blind and the lagoon narrow but deep. To the southwest of the outlet, extensive blown sanddunes exist, and a steep, high, sandhill has encroached on the mouth and seems to threaten the river with total obstruction." [p. 45]

Great Fish River Mouth:

"The estuary lies against a steep bush-covered hill on the left bank." [p. 46]

12 WILD COAST

1622 **Axelson, E. (1960)**

November — Probably inland of the uMzimvubu and Bashee (Mbhashe) Rivers:

Survivors from the wrecked Portuguese ship 'Joao Baptista' "... commented on the beauty of the countryside, with rolling hills and wide valleys, with grass as tall as lances; and the abundance of cattle made it ever more beautiful in their eyes." [p. 198]

1790 **Van Reenen, J. in Kirby (1958)**

6–11 October — Vicinity of White Kei River, c. 30 km northeast of Cathcart, *en route* to Tsomo River:

"Beautiful plain, covered with thorn trees." [p. 98]

1 November — Crossing Mtakatyi River, c. 10 km east of Ngqeleni, Pondoland:

Crossed Umkatyi River. Had to cut way through woods in order to do so. [p. 101]

12 November — Egoso Forest, c. 10 km southeast of Lusikisiki:

"We crossed the river and travelled forward to the forest. There we had to stay in order to cut through the forest ...

13 November — "Passed [through] the aforementioned forest and again had to cut through another [Ntsubane Forest]." [p. 103]

9 December — Between Bashee and Nqabarha Rivers, c. 10 km east of Idutywa:

"We departed this place (and) took another route about three hours higher up than the one by which we came here, because the country there (afforded) a better road and is level land and, over and above this, is very much nearer. Crossed the River Nabagana." [p. 108]

1826 **Steedman, A. (1835)**

Inland Transkei areas:

"From the Bashee River to Natal, the want of rain is seldom experienced and the grass is always green, the bush and forest extending along the mountains for several miles ... [1: 252]

"The districts, however, bordering on the Colony frequently suffer severely from continued drought. During the summer months the grass is generally brown and dry." [1: 253]

c. 1830 **Shaw, W. (1860)**

Transkei:

"In various sheltered parts of the high mountains there are extensive forests containing trees in great variety and of a very large growth, capable of affording a supply of valuable timber abundantly sufficient to last for a long time whenever a growing population, requiring materials for the construction of their dwellings and other purposes, may occupy the country. The Kaffirs have hitherto made little or no use of these forests. The smaller bush or woods found in all parts of the country supply all their wants for fuel, and for implements of war and agriculture.

"There are some large and noble forests at various points along the tracts near the sea, but I fear they cannot easily be made available to furnish a valuable export from Kaffraria to the neighbouring colonies because this long line of coast is destitute of ports or harbours for ships ... [p. 401]

"The best grazing districts, more especially for sheep, are at a distance from the sea. The grass near the coast, being constantly fed by the heavy dews which prevail in that region, becomes long, coarse, and 'sour'. However, when it is kept heavily stocked, as I have often seen among the Kaffirs, the cattle bred upon these lands usually thrive and do well."

c. 1833 Morgan, A.N. (1833)

Transkei:

"…the northern side, it is bounded by an extensive chain of mountains; the country to the northwest is occupied by Bushmen; to the northwest by Tambookies, the eastern part by the Bashee River and the Tambookies; the western part joins the Colony, and the south-east borders the sea. It is 150 miles in length; its breadth is uneven, being from 30 to 90 miles; containing about 10 000 square miles. [p. 1]

"These mountains are very high, and are covered with large forests in which various timber trees, most of them common to the Colony, flourish luxuriantly. The woody summits intercept the clouds that are wafted by the winds from the ocean, and furnish constant supplies to the numerous springs which form the sources of the many rivers flowing from them to the sea. Though the distance from their source to their union with the ocean is comparatively short, yet the body of water in these rivers is very considerable: and the unevenness of the ground through which they have cut their tract, the rocky projections that frequently divide the streams ... cause them to impart a ... freshness ... to the surrounding country ...

"The face of the country is very uneven, the higher ground being formed of plains and ridges from which branch a number of kloofs and ravines, each of which opens into some stream or river.

"The upper part of the country, or that nearest the mountains, is the least intersected by these ravines and is also more open than the lower part next to the sea which is full of ridges.

"The whole country abounds with the mimosa tree [*Acacia*], and the courses of the rivers, streams, ravines are frequently concealed by thick bush, the different species composing which are the same as met with in similar situations in the Colony." [p. 2]

1839 Backhouse, J. (1844)

7 March — From Clarkebury Mission to Morley Mission, 24 km southeast of Mqanduli:

"For 40 miles not a human being was to be seen, but the country had been too short a time desolate to have become the resort of wild beasts... About 10 miles from Morley, a few people were at a kraal minding the gardens... In the neighbourhood we observed the Caffer Melon in the wild state…Wood and grass are abundant here, rain being frequent [Morley Mission]…" [p. 259]

9 March — From Morley Mission to Buntingville Mission, 16 km west of Ngqeleni:

Had to cross the Umtata River "…which runs in so deep a ravine that it took us about two hours, from our beginning to descend on one side to reaching the top of the ascent on the opposite side [on horseback]. In some parts of the steep ascent the winding path would not admit two horses. The labour of the ascent was well repaid by beautiful views. Craggy rocks, picturesque woods, mountains ... and the sea distant about 20 miles ...

"The grass north of the Umtata was in some places so high as to render it needful to keep near to our guide lest we should lose sight of him. The wife of a missionary informed us that, near a ford higher up the river, she tied the grass in a knot over the top of the tent of the wagon. The whole land is now a meadow with all the verdure of spring, but the country is without inhabitants. Alas for the desolations of war.

"In this neighbourhood a large *Brunsvigia* [*Brunsvigia grandiflora*] bearing an umbel of numerous lily-like flowers of deep pink on long foot-stalks, rose above the shorter grass. Some pretty plants of the Asphodel tribe [*Bulbine* or *Trachyandra* spp.] attracted our attention as we rode along, as did also a *Gladiolus* [*Gladiolus ecklonii*] with dense spikes of flowers of a dingy hue covered with minute purple spots, and some other plants of the *Iris* tribe.

"A fine red and yellow *Tritoma* [*Kniphofia*] was growing by the side of a brook near which we stopped. We had observed a rigid yellow one on the hills a few days previous.

"A remarkable plant of the Cucumber tribe was climbing among the bushes by the margin of a brook where we halted. Also a *Dolichos* (?) with clusters of large fragrant purple pea-like flowers. In a copse at this spot there was a species of *Erythrina* [*Erythrina latissima*] which became more abundant further northward; it formed a low spreading tree with very large rounded trifoliate leaves. [p. 261]

"Continuing our journey we passed Quba [iNquba], or Turvey's Bush [c. 24 km east of Mqanduli ... to this place the Buntingville station was about to be removed on account of the want of pasturage, garden-ground, and wood, and of a liability to the failure of water at the present site. We now came upon a peopled country... The descent to Buntingville was very steep and intricate." [p. 263]

10–11 March — Old Buntingville, 15 km east of Ngqeleni:

"... we walked into a wood in which a *Rhipsalis* [*Rhipsalis baccifera*] was growing as an epiphyte upon the trees. This was the only plant of the Cactus tribe that we had yet seen in Africa.

"This station was visited by locusts a few months ago and their young were now coming out of the ground to make a second desolation ..." [p. 264]

12 March — Buntingville to Morley:

"About 2 miles from Buntingville we turned aside to see the place where the Umgaziana [Mgazana River] falls into a deep rocky ravine of grand and picturesque features. There is seldom much water in this river except in pools; although heavy rain had fallen lately the quantity of running water was insignificantly small. Among the rocks at the bottom of the cliff there were numerous small trees and bushes. Among them was the date palm, *Phoenix reclinata* which has small edible fruit and elegant pinnate leaves. A species of fig, *Ficus* [*Ficus sur*], having oval leaves distantly and bluntly toothed, was bearing spherical fruit an inch and a half in diameter, but it was rather insipid.

"We stopped likewise at Turvey's Bush where also some species of fig were growing. Two of them formed lofty trees. One of these which had pointed oval foliage and long foot stalks with small oval fruit, was intergrown with a strong vine and another tree so as to form a singular arch about 40 feet high, the columns of which were trunks that formed a sort of network. The fig-trees had the appearance of having been parasitical but the foster-trees had died and decayed away out of the midst of them." [p. 267]

Reached the Umtata River at 4 pm. Crossed the river and reached Morley before sunset. [p. 269]

15 March — From Morley Mission to Clarkebury Mission:

Between Morley and the Bashee River "...where the blue water-lily [*Nymphaea nouchali*] was growing in the pools of a streamlet." Reached the Bashee and continued to Clarkebury. [p. 272]

1850s — Brownlee, W.T. (1975)

Probably in the Mount Fletcher District, judging by the vague description and from the general context of the book. The rivers, Brownlee says, rose at a mountain 9 000 feet a.s.l., but his subsequent description of their courses is vague and would need to be explored *in situ*:

"Of the two streams which, uniting, form the Tine [Thina], the one flows for a time north and then, taking a sudden turn to the east, drops into a chasm of black rock 300 to 400 feet deep, and then rushes into a wild gorge whose sides are covered from the bottom to the summit by a dense forest of mountain bamboo [*Thamnocalamus tessellatus*] ..." [p. 62]

1850s — Fleming, F. (1853)

Kaffraria [in this case, Eastern Cape, Ciskei, and Transkei]:

After noting how black stockowners move stock from deteriorating sour grassveld during drought, he adds: "The Kaffirs then drive off their herds to another part and set fire to the grass on the old ground. This fire runs often for miles together until some intervening road or rivulet intercepts its progress and leaves the country behind it a large tract of black ashes as far as the eye can reach. The first thunder-storm with its accompanying shower of rain soon changes this into a fresh green pasture of young tender shoots springing up from the injured roots beneath which the ashes protect, while they enrich the land." [p. 99]

1862 — Dobie, J.S. (1945)

27 September — From Umzimkhulu River to Ibisi (Bisi) River, c. 20 km southwest of Umzimkhulu:

"After breakfast, crossed the river [Umzimkhulu ... and are now in 'Nomansland' [East Griqualand]. Valley here very broad and the hills, more particularly on this side, taper very gradually into it... Camped on the ridge of a long range... On again over a beautifully-grassed country, with now and then little wooded 'kloofs' of rocky breaks... Down to the valley of the Ibisi ... camped." [p. 32]

29 September — Still in Umzimkhulu District:

"... down a steep hill to the River Umzimkhulwana crossing which our road led over long gentle slopes, pretty-looking country for sheep, and then up a long hill shrouded in mist,

came to a bush and camped. Bush in Africa means a forest of big trees, and these almost invariably occupy the rocky breaks on the south or south-easterly faces of the hills or table land; underneath the trees there is generally dense underwood." [p. 33]

1/2 October — Crossed the Umtamvuna River, on a wrong road, turned west and crossed the Ludeke River, which runs into the Umtamvuna River 15 km northwest of Bizana; proceeded towards Insizwa Mountain, 7 km west northwest of Mount Ayliff:

From Ludeke River "... over beautifully grassed rolling country.

"Pretty country again, becoming however more hilly and abrupt and consequently more picturesque. Lots of banks and ravines with bush and very pretty small trees called sugarbush [*Protea caffra* or *P. rouppeliae*] scattered on the hillsides make a great improvement to the scenery. Camped ... on the saddle of a ridge commanding a view of two very pretty valleys, one with a flat-topped hill or mount terminating the distance [probably Ntabankhulu]." [p. 34]

3 October — Mount Ayliff District:

"On again, road leading across range and down a deep valley winding into the main valley of the Umzimhlanga [? Mzintlava, which passes east of Mount Ayliff]. This main valley is here bounded on its right by a high rocky range called Insizwa [7 km northwest of Mount Ayliff], its southernmost front being the most broken and abrupt... Camped at the head of the small valley among rocks, sugar bush opposite. Some pretty flowers seen today like *Ixias*, and a small white and pale blue *Iris*, or fleur-de-lis [probably *Dietes iridioides*].

4 October — "... on through thick forest of sugarbush and low undulations well grassed, the Insizwa range close on our right rising rocky and abrupt, like a one-sided Highland glen, ahead and to the left the resemblance ceased and it became South African. Camped at sunrise ... at a pretty little rocky burn and sugar bush. On again, along the green bases of the mountain which seems to form an extensive table range." [p. 35]

Went on to the Umzimvubu River crossing, 28 km west southwest of Mount Ayliff:

"Some pretty anemones seen."

5 October — Crossing Umzimvubu River, 9 km northeast of Mount Frere:

"Made a move after sunrise as the feed here very bad, and got to a tableland for breakfast, but grass not much better and water scarce... On over undulating country to a saddle or ridge leading to higher ground. Here finding good grass and wood, and scrambled through bush in search of water; very little of that, no waterhole, had to make a spout!" [p. 36]

7 October — Thina River, 16 km southwest of Mount Frere:

"... on to the valley of Tina down a steep stony hill with a succession of stone steps on the road... Valley pretty, but bare and stony... Extensive mealie fields on each side of the road with women at work. On to Qumbu." [p. 37]

From Thina, 12 km north of Qumbu, to Tsitsa River 8 km south southwest of Qumbu:

Qumbu: "Trees, thorny acacias, etc. and a species of cactus tribe (seen before but not noted) growing up like a tree on one stem and, near the top, branching out regular and turning ends up, like a huge candelabra (Footnote: probably *Euphorbia tetragona*). Another like the cabbage tree, or pawpaw, in style and leaf but branching at the ground forming many stems, looked quite tropical (Footnote: *Cussonia spicata*) ... [p. 38]

"... we then followed our route and down to the valley of the Tsitsa or Tsit-tsa where was another mission called Shawbury [12 km southeast of Qumbu]."

8 October — Tsitsa River [10 km northeast of Tsolo] to Umtata River [4 km northeast of Umtata]:

"Camped on bank of river to breakfast, and wash. On again, and ascended a very stony hill and down again to another valley, very bare of grass, have had no rain here, till lately, for 9 months. Trees like those of Tina [River]. Cactus [*Euphorbia*], candelabra [*Cussonia*], palm, etc. Up another hill and then on tableland... Camped for dinner. Overlooking valley... On over undulating country and old dried grass, and got down into a little valley with a small stream running over sandstone flags... A little Niagara in miniature in rainy season!

9 October — "Another long pull, and we got again to undulating tableland with green grass, and camped by a pretty bush with water... Some new ferns and the tall trees had their top branches clothed with long waving moss hanging from them like the trees in Sweden ... [p. 39]

"... over undulating well-grassed country, high tableland away on the right. Camped in grassy valley with plenty of water... Crossed a small river where the bed was one

enormous block of flat sandstone, then across a low ridge to the Umtata." Visited the Umtata River Falls, 4 km east southeast of Umtata.

10 October — Umtata to the Mbhashe [Bashee River], 42 km southeast of Umtata:

"Over undulating country again towards some high ranges with bush. Camped on good feed but had a long search after water and wood. [p. 40]

11 October — "... camped near a creek or chain of water-holes with good grass on hillside... On again and camped on hillside over bush, but our man Lachan had a long way to go for water. About the lowest undulations and flattest horizon we have seen, overlooking the Bashee... On again and on top of range, before descending, came in view of a remarkable looking amphitheatre... A winding easy descent brought us to the River Bashee which crossed at a good drift over flat flagstone ... aloes and cabbage-trees [*Cussonia*] on hillsides. Above, a high hill clothed with bush shut the view... Had a jolly fire, plenty of wood." [p. 41]

1863 Dobie, J.S. (1945)

27 July — Near Ingeli, 18 km southeast of Kokstad, Mount Currie District:

"Grass rather coarse here and like that of Cotswold i.e. farm near Lions River, Natal Midlands, lots of *Ixias*, and pretty little clumps of bush [forest] scattered about." [p. 98]

28 July — Head of Ibisi [Bisi] River, c. 25 km west of Umzimkhulu:

"Crossed what seemed to be the main head of Ibisi here... Grass however very scarce; no spring or burnt ground and old grass very dry.

29 July — "Over tableland spurs, and got a fine view of valley of upper Umzimhlanga [probably Mzintlava, which passes through Mount Currie District]; Currie's Mount [Mount Currie, 8 km north of Kokstad]. Rugged range and ranges to right and left of our former route, the Berg all clothed in white, ending the distance like a barrier of snow. Country all burnt and very bare of grass. Camped in a rocky gully and got old grass and water, about 3 miles from the laager of Kok [Kokstad]. [p. 100]

31 July — "... along the gently undulating valley to some old burnt ground where the appearance of grass made us pull up about half past seven. On again and camped on further bank of river, plenty of old grass... Camped near the old spot at the head of the gully and had a roaring fire of sugarbush ..." [p. 102]

1 August — From Insizwa Mountain down into the Umzimvubu Valley, 29 km west southwest of Mount Frere, and up towards Mount Frere:

Camped on the Umzimvubu [Valley of St John]. "What a prettily situated kraal that is on the other side among thorns and aloes ... aloes are now in full bloom.

3 August — "Plenty of fine sweet grass this year." Met a man, Hulley. "Tells me there is a much finer country than Adam Kok has got, lying about 30 miles from here and extending from the Umzimvubu to the Stormberg [Molteno District]... There are no Kafirs in that fine country under the Berg." [p. 103]

6 August — Near Umtata:

"Before us again the fine low undulations of Umtata country with sweet grass rolling away to the foot of the high bluffs." [p. 106]

8 August — From Umtata 45 km southwest to the Bashee River:

"Still nice grass, but rather ranker than below... Glad to get to that friendly little bush where we camped before... Gathered several varieties of seed, one of a large forest tree bearing bunches of pretty lilac blossoms, seed vessel fully 1½ inches in diameter divided into four semi-detached compartments, the back of which are roughed something after the style of a large beech-nut, seed inside black, long-shaped and partaking of the angular form of the compartments. These were found lying on the ground (Footnote: Cape Chestnut, *Calodendron capense*)." [p. 107]

Dower, W. (1902)

1861–1862 — Kokstad and its flats [below Lesotho], East Griqualand:

Adam Kok and his Griquas entered East Griqualand to settle. Had entered from southern Free State [near Philipolis] over Lesotho mountains via Ongeluksnek, 53 km west of Matatiele; 2 000 people and about 20 000 large and small stock.

"Away before them lay the rolling grass prairies with abundance of water, not fountains only but in rivers ... unfailing, and these at every few hours trek. Timber ... in the deep

mountain kloof, the huge trunks ripe for the woodman's axe... Fertile arable land... Game too in abundance ... [p. 13]

"... there were very serious drawbacks, unavoidable in a new country. Cattle and sheep, unaccustomed to such rank grass, died by hundreds ..." [p. 14]

1869 Dower himself went there first in 1869 for 3 weeks. [p. 23]

Very few Europeans in the country; some traders and farmers. [p. 24]

"The virgin soil on which we stood had never tasted spade or felt the tear of the ploughshare. There was nothing on all the ridges to be seen but the brown winter grass, knee deep ..." [Near Kokstad.] [p. 27]

From Maclear District to Matatiele:

May 1870 Dower spent 3 weeks at Kokstad in 1869 but returned to settle in May 1870. "From the Gatberg settlement, now Maclear, there was only the roughest track... Drifts were the most serious difficulties. From Gatberg we saw no human habitation until we reached the vicinity of Matatiela [sic]. Our way for many miles lay through the ashes of burnt-off veldt." [p. 29]

1874+ Europeans started buying land cheaply from the Griquas. [pp. 65, 66]

The extent of Adam Kok's Land was about 5 000 square miles. [p. 80]

1887 "Early in 1887 a small party of Dutch Boers settled around the Umzimvubu District... These early settlers ... were joined by others until the district around the drift became almost occupied by Dutch." [Does not indicate whether this was the drift on the flats near Cedarville or the main drift between Mount Ayliff and Mount Frere, but it can be taken to be at Cedarville, c. 35 km northeast of Kokstad.]

Between 1877 and 1891 the township of Cedarville was laid out. [p. 97]

Trouble with the Basotho at Matatiele; much fighting. [These occupations of East Griqualand by Griquas and whites started the decline in natural conditions. No blacks were there in numbers before.] [p. 110]

Late 1800s Sim, T.R. (1907)

Northern Transkei (Pondoland):

"The flora above the rocks is exceedingly peculiar, both near the Magwa [c. 20 km south of Lusikisiki] and Dawkins [Dawkins, or Dorkins, was in iNshubane Valley at Egosa Forest], and at Port St Johns, having a most striking connection with that of the Cape Peninsula. Heaths are plentiful, the species being *Erica cerinthoides*; *E. aspalathiflora* [*Erica aspalathifolia*]...; *E. cubica*; *E. uxeolaria* [identity unknown]. *Protea* is represented abundantly by one large tree form (probably *P. compacta* [actually *Protea roupelliae*]) while among the proteaceous shrubs are one small *Protea* [*Protea simplex*], a *Nivenia* [probably *Leucospermum innovans*], and a *Leucodendron* [*Leucadendron spissifolium* subsp. *natalensis*]." [p. 9]

c. 1900 Henkel, C.C. (1903)

Transkeian Districts:

"The Districts of Libode and Nqeleni, or Coldstream, are thickly populated parts of Pondoland... The kloofs and valleys are thickly wooded, and some fine timber is found in the coast forests which, especially the Umtata Mouth Forests, Hluleka, Umnene and Nomadole, are of great extent. The Umlengana Hill and the Macibi Rock as well as the whole of the Big Umgazi Valley are remarkable spots, and the charming forest scenery all along the main road from Umtata to Port St Johns delights the traveller by its tropical aspect ...

"Eastern Pondoland is also well watered and fertile, a strip of 'sourveld' occurs just above the Egosa Forest and a short distance from Lusikisiki, where the country is overgrown with sugar-bush, *Protea hirta* [*Protea welwitschii*], the same as the Drakensbergen ..." [p. 22]

Gates of Port St Johns:

"Inside the 'Gates' ... is an expanse of blue-green water nearly 500 yards wide between stately mountains and luxuriantly-wooded hills. The steep wooded slopes come down close to the edge of the water, and in many places the thick tangled forest overhangs the margin forming beautiful arcades ... long silent vistas of forest ... tumbled masses of rock covered with mosses, ferns, and flowering creepers of the Tecoma family [*Podranea ricasoliana*] in most bewildering luxuriance, twining in heavy clustering masses around majestic old trees... The exquisite semi-tropical vegetation, African in its type and almost Brazilian in its beauty ..." [p. 36]

Slopes of the Southern Drakensberg in northern Transkei:

"The slopes of the Drakensbergen are more or less covered with grass and Sugar-bush, *Protea hirta* [*Protea welwitschii*], and in some places with *wagenboom*, *Protea grandiflora*, Linn. [probably *Protea caffra* is meant]; the kloofs with *oude bosch* [*oubos*: *Leucosidea sericea*] and *kreupel bosch* [perhaps *Protea roupelliae*] with here and there a few stunted Yellowwood trees [*Podocarpus latifolius*]. Numerous spurs of the Drakensberg Mountains run in a southerly direction: on the slopes of these spurs, which are of considerable height, the better class of timber trees are found.

"A belt of undulating grass country runs along the foot of these mountains and spurs, in some parts almost level, as far as the secondary ranges." [p. 38]

Transkei:

"While it rains during some years almost every day in some parts of the territories, others suffer from severe drought, but drought seldom occurs all over the territories in the same year. The rainfall is also variable in amount, but much larger near the mountain ranges and forests. While plains or flats are parched up with the heat of the sun, the slopes of the mountains are green and cool. By the cutting down of trees and the burning of the veld the permanence of the springs has been affected, and some streams once permanent have dried up all over the territories. When the bushes and grasses are eaten or burnt off, the sun bakes the soil and the rainwater runs off into the rivers, forming new 'sluits' as it runs, and is lost in the sea without replenishing the underground supplies. [p. 40]

"The Flora of the Transkeian Territories varies very little from that of the eastern province of Cape Colony with the exception of the subtropical portion of the coastal belt. There is abutting on St John's territory a strip of land of extra fertility and where no frosts damage the almost Brazilian vegetation.

"Here grows a most remarkable tree, vulgarly called the 'flat crown' *Albizzia fastigiata* Oliver (synonym '*Zygia fastigiata*' E. Meyer [*Albizia adianthifolia*]), a tree 20 to 30 feet high and 1 to 3 feet in diameter, greatly sought for by waggon-makers and coach builders for naves of wheels. The colour of the wood is a rich lemon yellow.

"Another remarkable tree that grows in the coastal belt and called 'bitter bark' or wild quinine tree [*Bersama tysoniana*] is said by Kaffir doctors to be a specific for fevers.

"The *Tecomas* reach here to a great height... Fine tulips, lilies, and other flowering plants are found in abundance.

"The grenadilla grows wild all over the forests as well as many varieties of *Tacsonia* [*Adenia* is meant], the Zimancu monkeys [Samango Monkey, *Cercopithecus mitis*] having carried the seeds into the very centre of the forests where they grow luxuriantly.

"Another peculiar tree in the Transkeian coastal belt is the Transkeian cork tree, *Erythrina latissima* E.M. (Syn. *E. sandersoni*, Harvey). Its leaves are as large as pumpkin leaves and its bark similar to that of the cork oak.

"A species of sandalwood [*Spirostachys africana*] called by the natives '*umtomboti*' and carried in small pieces round the neck as a necklace, grows also here.

"But above the botanical wonders of the Transkeian forests is the remarkable *Ficus natalensis* (*umtombe* of the Kafirs), the Banyan tree of South Africa and a near relative of *Ficus indica*. Should any of the seeds of this wild fig tree be carried by birds or other animals close to, or even into, a cavity of the bark or fork of any large forest tree, it will grow there and become a parasite, encircling like a huge boa-constrictor the tree in its folds, assuming at the same time the exact colour of the bark of the tree thus encumbered. After a number of years the tree dies and crumbles gradually into dust, but the wild fig lives on and assumes a most gnarled and grotesque shape ...

"With regard to the Native, or Indigenous, Forests of the territories, they are identical with those of the eastern province of Cape Colony and classified according to their distribution and nature into 'High Timber' forests, 'High Scrub' and 'Low Scrub' ...

"But there are also some high timber forests in the coastal belt intermixed with High and Low Scrub forests, notably the historical Manubi, D'wessa [Dwesa], M'pame, and Gxwaleni forests.

"But by far the finest forest in the Transkeian Territories is the Egosa Forest in Eastern Pondoland and within 5 or 10 miles of the Magistracy at Lusikisiki. This forest is said to be 30 miles long by 2 to 3 miles in width. Undoubtedly the finest South African timber is found here.

"Springs, streams, and waterfalls abound everywhere in this locality. The Insubane Valley, a portion of the Egosa Forest just below Mr Dorkin's [or Dawkins'] homestead, is one of the finest sights in South Africa, as also the Magwa Falls a short distance from St Andrew's Mission Station and Lusikisiki." [p. 55]

13 HIGHVELD

1777 Gordon, R.J. in Cullinan (1992)

23 December — Orange River, at a point southwest of present Bethulie, on the northern bank in the Free State:

"Four of us rode ahead to look for water and saw some fires in front of us. The countryside, falling steeply away, promised nothing. Then, in the flat stretch which was about five hours further on, we saw some green shrubs half an hour away, past the edge of the mountain. These we found to be thorntrees and all of a sudden we came upon the steep bank of a great river... The southern bank was about 40 feet high and steep, though it was possible to get to the water. There was reed growing in the direction of the gateway [to the east and upriver] in places, and there were high thorntrees. The northern bank was lower, with reed and many willow and some thorntrees. This bank had stony ridges and coarse, shining sand but the soil in the river itself was clayey and vegetal... We called this river the Orange River; it is the same, we believe, that flows out at the Namacquas, the Garie or Great River." [p. 44]

1809 Collins, R. in Moodie (1860)

January — Burgersdorp and Molteno Districts:

"The country we had just visited is one of the finest I had ever seen. It is bounded on the west by the Colony and the Zuureberg Stream [c. 40 km north northwest of Steynsburg], on the north by Orange River, on the northeast by Grey River [Kraairivier, near Aliwal North] and on the south by the Storm Mountains [Stormberg range at Molteno]. That part of it lying west of the Storm Berg stream is, in general, flat, and composed of a rich vegetable mould producing what the farmers call sweet-grass in the utmost luxuriance. That part to the eastward is rather hilly and lighter soil; but the occasional elevation of the land, and the mixture of sour with sweet grass, render it more healthy for horses. The country beyond Orange and Grey Rivers, as far as we could see, is not inferior to that on this side of them." [p. 5]

February — Near the Stormberg, probably near Burgersdorp:

"Small plains abounding with fine water and pasturage are often found among them and even the grass that covers their summits is of superior quality." [p. 5]

Bamboesberg:

The Bushmen in the area were found by Collins to be in a precarious plight. "About five or six years since, the country was almost totally unprovided with the roots that compose their usual food in consequence of the want of rain for several successive seasons. Many of them were then saved from perishing by the supplies of sheep and game which they received from the farmers ..." [p. 3]

Probably across the Bontebok Flats, between Cathcart and the Amatola near Hogsback:

7 February — "On the 7th we proceeded through Gnoo's Poort, and having travelled nine hours, rounding the hills, in which time we did not gain above a dozen miles in a straight direction. We stopped at another pass called Prinsloo's Poort, where we found water and a few mimosas [*Acacia karroo*], the first trees we had seen this day. Two bontebucks [blesbok in this instance] of the smaller species were killed, and a great number of gnoos, quaghas, and hartebeests were seen ...

8 February — "On the 8th crossed another small stream called Thorn River about a mile from where we had camped the preceding day and, at the end of a winding march of five hours, we found a large stream called Thomas River... The country we had traversed the last two days consisted of smooth hills thickly covered by a hard sour grass and is much inferior to that situated between it and the Colony; on our left were the mountains that border the T'ky [Kei River]; on our right those that give rise to the Kyskamma [Keiskamma] and Kognie [Qonce or Buffalo] Rivers." [p. 39]

1809 Gouws, R. in Aucamp (1971)

Materials used for buildings on the Stormberg:

"Op die Stormberge is daar omtrent geen bruikbare hout vir timmerasie nie. Ouhout [*Leucosidea sericea*] is volop maar nie sterk nie; oliewenhout [*Olea europaea* subsp. *africana*] is skaars. (Footnote: Hoe sterk oliewenhout is, kan op die plaas Richsuhill in

die Clanville [Wodehouse] omgewing gesien word. 'n Oliewenhoutpaal wat in 1848 ingeplant is deur die eerste intrekkers in die buurt, met ronde gate dwarsdeur, sodat waens daaraan vasgemaak kom word, staan vandag nog ongedeerd.) Hout moes van elders gehaal word. Van 1809 af het boere van die kolonie toestemming verkry om wilgerhout vir timmerasie by die Oranjerivier te gaan haal. Die Stormbergers het seker ook van die vergunning gebruik gemaak, veral as 'n mens onthou hoe naby hulle aan die Oranjerivier was.

"Ysterhout, nieshout, en geelhout is by die Baviaans- en Katriviere gaan haal. Heelwat later is die houtsoorte ook van die Transkei verkry. Die hout wat van elders gekry is, is met 'n dissel bewerk om as balke, stutpale, en so meer, te dien.

"Populierbosse—vuurhoutjie [*Populus deltoides*]—en die Lombardiese populier [*Populus nigra* var. *italica*] wat nou so kenmerkend van die landskap is—is mettertyd aangeplant om die houttekort aan te vul."

1819 **Burchell, W.J. (1822)**

Northeastern Cape, in 'Hints on Emigration to the Cape of Good Hope':

"The Division lying between the Seacow River [Seekoeirivier] and the Storm Mountains [Stormberg of Molteno] is considered to be an exceedingly fine country and well suited for every sort of cattle, being grassy, partly flat and open, and partly mountainous. It probably contains a sufficiency of timber." [1: 38]

Mr Lyle Wood (pers. comm. 1.XII.1971)

1822 Bontebok Flats, c. 10 km southwest of Cathcart:

Mr Wood, an amateur historian of considerable and sound knowledge, stated that the Bontebok Flats were occupied by the Emigrant Thembus from the Transkei in 1822, and that these tribes went further west to the country behind the Winterberg, i.e. in the present Tarkastad District. They were also known as Tamboekies.

Thus, the fact that good numbers of game were still to be found on the Bontebok Flats, well into the 19th century, shows that the game was holding its own. On the other hand, it is possible that game was not there permanently; it could have moved down from the hinterland, e.g. Steynsburg and other districts known to be great plains game country, with the pastures.

1834 **Smith, A. in Kirby (1939 & 1940)**

10 December Modder River, west of Thabanchu, c. 35 km east of Bloemfontein:

Depart from Modder River. "Grass a little green, lots of old grass of last year." [p. 171]

1836 **Harris, W.C. (1840)**

Bontebok Flats:

"In place of the usual flat features of South African scenery, a boundless billowy succession of surge-like undulations are clothed throughout with a layer of bright green sward, close-grazed by the wild herds that it supports. Everywhere is the sward illumined by a dwarf flora, endless in variety as in profusion - the daisy, the buttercup, and the dandelion, claiming, amid hundreds of strange faces ... the privilege of old acquaintance."

Notes how "…whole acres of heads of blossoming bulbs, by which they [the Flats] are completely covered, alternate with patches of green, yellow, purple, or crimson ... but over the whole tract not a solitary tree, no not even a bush of so much as a foot in height, is anywhere to be seen, and owing to the total absence of fuel this entailed, the Bontebok Flats are equally without one permanent inhabitant." [p. 110]

1836 **Harris, W.C. (1839)**

25 December South of Namahari, or Donkin River [Wilgerivier], Frankfort District:

Water was scarce *en route*. "…the monotony of the otherwise uniformly level flat ... another vast landscape presented itself to our gaze. Endless meads, clad in vernal and variegated robe of gay but scentless flowers, exhibited the motley confusion of a Turkey carpet ... [p. 240]

"... to our right we descried a 'reed-encircled fountain' at which after 28 hours of total abstinence, the dying oxen were able to slake their terrible thirst. A strong calcareous

deposit adhering to the vegetation rendered the water extremely bitter to the taste... The total absence of fuel obliged us, after an hour's halt, to continue our march over numerous saltpans upon which herds of blesboks were busily licking the crystallized efflorescence." [p. 241]

Harris was lost whilst hunting. [p. 242]

"... found myself not a little revived by a draught of the clearest water from a serpentine river, flowing to the westward the banks of which were trimmed with reeds and dwarf willows ... [p. 243]

"... I arrived at an extensive pond covered with water-lilies [*Nymphaea nouchalii*] and bordered by a broad belt of flags and rushes." [p. 245]

27 December — Sand River, Kroonstad:

His waggon "...presently settled down to the axle in quicksand, the team also sinking to their bellies... In commemoration of this disaster the treacherous stream was christened by the Hottentots, Sand Riviere, or Sand River, by which homely designation it will be recognised in the map as a tributary of the Likwa [Vaal River]." [p. 250]

Approach to the Vet Rivier, Winburg, from the north:

"As we gradually descended towards this stream ... which ultimately proved to be the 'Gy Koup', or Vet Riviere, of the emigrants, rising near the missionary station of Umpukani [Ficksburg District] and also a tributary of the Likwa - we passed over a low tract and 8 or 10 miles in extent, strongly impregnated with salt and abounding in lakes and pools. The number of wild animals congregated on this swampy flat almost realized fable." [p. 252]

December — Plains south of the Vaal River:

"... appears to be completely taken possession of by wild animals... A region to the perception as vast and trackless as the ocean and, like it, presenting an undisturbed horizon, is spread out from the Cashan Mountains [Magaliesberg] into one level and treeless expanse of serene and sunny plain. In vain we seek for the ... variety of hill or dale, forest or glade ... the eye wanders on without the smallest check over endless flats which are utterly wearisome from their extent and monotony. Yet Nature has endeavoured in some measure to supply the deficiency by decking them out in her gayest flowers and in some of the most eccentric and attractive forms that exist in the vegetable world.

"The chandelier plant [*Brunsvigia radulosa*], and purple *Amaryllis* [unidentified Amaryllidaceae] with many other splendid bulbs, grow wild in profusion, and, being interspersed with geraniums, several species of cactus, and an endless variety of the succulent greenhouse plant called the hottentot-fig literally impart to the waste the appearance of a flower-garden." [p. 253]

1837 Harris, W.C. (1839)

2 January — Modder River, near Bloemfontein:

"... a stream of considerable size pronounced by the followers with their usual sagacity to be the Reit River although subsequently discovered to be the Modder rising near the missionary station of Thaba Nchu and joining the Likwa [Vaal] a little above the embouchure of the Nu Gareep [Orange River east of the Vaal confluence]." [p. 261]

3 January — Somewhere south of Modder River:

"... we arrived on the bank of a narrow stream completely choked with bulrushes and tangled sedge ..." Climbed a small hill through "...brushwood". [pp. 226, 227]

Crossed the Calf River [Kaffer River]: "...bottom ... extremely muddy." [p. 275]

Crossed the Riet River. [p. 277]

14 January — Arrived at the Orange River. [p. 280]

1839 Backhouse, J. (1844)

25 January — Approaching Shiloh [2 km south of Whittlesea], from Philipton in upper Fort Beaufort District:

"Nearer Shiloh the country became drier, the grass was short and brown, and many of the hills were besprinkled with *doornboom* [*Acacia karroo*]. Another species of *Acacia*, *Acacia elephantorhiza* [*Elephantorrhiza elephantina*] also abounded here on dry light soil. It had large compoundly-pinnate leaves, and pods about 6 inches long. It was not more than a foot and a half high, but had a creeping root and spread over much ground. It had much the general aspect of a handsome fern. [p. 199]

"The country around Shiloh is mountainous; it was at this time suffering more from drought than at any previous time since the first establishment of the Station... The river had so nearly ceased to flow that the irrigation of a long line of gardens on its margin could not be maintained." [p. 204]

20 June — East of Philippolis, after coming from Botha's Drift on the Orange River, 26 km north northeast of Colesberg:

"We outspanned early to afford our cattle time to feed on a grassy flat. They had not had a sufficiency of pasturage for many days. The country over which we travelled today was much like that on the south side of the river but the grass was not quite so scarce. The road wound among rough basaltic hills destitute of trees except here and there an Olive [*Olea europaea* subsp. *africana*], or a *Rhus*, under 10 feet high ..." [p. 349]

22 June — Philippolis:

"Houses of a more substantial kind are too costly for many of the Griquas, the timber needful in building them having to be brought from the woods between Klip Plaat [River] and the Kat River distant about 200 miles ..." [From forests near the Katberg in Fort Beaufort/Stockenstrom Districts.] [p. 250]

1 July — Near Bethulie:

"A cylindrical-stemmed *Euphorbia* with bright yellow blossoms was in flower on the many stony hills.

"The grass of the adjacent plain was nearly all eaten up." [p. 346]

2 July — From Bethulie, *via* Slykspruit [16 km east northeast of Bethulie], to Beersheba [25 km northeast of Smithfield]:

"The country over which we travelled was very similar to that from Philippolis to Bethulie. Basaltic hills ... on ... grassy plains ..." [p. 356]

3 July — Beersheba:

"A considerable quantity of land is irrigated at Beersheba from two springs, one of which is warm and discharges a large quantity of gas ...

"The rocky kloofs in this part of Africa produce sparingly a species of Olive, *Olea* [*Olea europaea* subsp. *africana*], which sometimes attains a height of 30 feet and is of considerable girth. Its growth is slow. Its fruit, which is a small plum, does not appear to have been converted to any use. The tree is in request for fuel and consequently soon disappears in the vicinity of settlements. [p. 359]

"... I walked to the Caledon [River] about a mile from Beersheba. It is a small meandering stream connecting large pools margined with reeds and running in a bed of about 15 feet across grassy plains among sandstone hills. In some places there are willows upon its banks." [p. 360]

15 July — Platberg, 3 km south of Ladybrand:

"There are some remarkable kloofs in the sides of the tabular sandstone mountains here out of which springs of water issue... Some of the kloofs are bushy. [p. 386]

"The heaths, Ericae, of southern Africa are most abundant about the mountains in the Cape Town District. A few are thinly scattered in various places as far east as Grahamstown. The most striking and widely diffused species is the beautiful *Erica cerinthoides*, the honeywort-flowered heath, which has heads of downy scarlet tubular flowers. It was also growing with a few other species of *Erica* and some ferns near the edge of the sandstone cliffs at Plaatberg.

"In moist places in the kloofs there were also a few trees, and *Zantedeschia aethiopica* was growing in the springs but it was much nipped by the frost. It is rare in this part of Africa.

"Grass is so plentiful that the people burn off the old which remains at this season of the year to make way for the new, but this makes the more sour kinds grow more abundantly." [p. 387]

Lishuani, c. 19 km south southwest of Ladybrand:

"There are a few small trees in the kloof behind Lishuani and some scattered wild Olives on the sides of the cliff, the margin of which is fringed with heaths."

17 July — Makwatling, about 4 miles north of Lishuani:

"... we walked to the top of the mountain which is an extended grassy plain." [p. 389]

20 July — To Imparani [5 km north of Ficksburg] *via* Umpukani [c. Gumtree, 15 km west of Ficksburg]:

"... traversed a continuance of grassy vales or plains among sandstone hills leaving Umpukani on the left... In some places the grass had been burnt for a great extent... Before arriving at Imparani we came again to the Caledon which here runs in a deep channel and has willows on its banks." [p. 394]

31 July — Caffer River, *en route* to Bethany, c. 35 km south of Bloemfontein:

"The country continued covered with grass, mostly of a sour character, and it was now brown from the cold. It was depastured by herds of gnus of from 30 to 200 each; hartebeests and blesboks were in larger numbers, and springboks in countless thousands ..." [p. 419]

2 August — Bethany, 15 km north of Edenburg:

At a Bushman kraal there were shelters made of matting "... at some of which were the remains of very small bulbous roots of *Ixias* [unidentified Iridaceae] and other plants of the same tribe, many species of which afford the people food. They are called Uyentjes, Little Onions, in the Colony, and abound in most parts of southern Africa.

"The women were out collecting roots." [p. 423]

August — Philippolis:

The cold at night froze the water in the running stream. "The sun however began to impart a considerable degree of warmth in the daytime and several plants began to put forth their blossoms.

"Among these were a green-flowered *Massonia* [*Massonia depressa*] with spotted leaves and a few species of *Senecio*; some plants of the *Arctotis* tribe with flowers resembling Marigolds; a yellow *Mesembryanthemum*; a small pale-flowered *Lycium*; a *Salvia* or sage, with small blue blossoms; a yellow fragrant bushy *Hermannia*; a purple, two-flowered *Mahernia*; and a beautiful blue *Blepharis*; the various species of which cheer the lonely desert in many places where there is scarcely another flower to be seen at this season.

"Some of the species of *Senecio*, Groundsel or Ragwort, of this country are purple or lilac, resembling the species from South Africa cultivated in English gardens as an ornamental annual.

"A blue-flowered sage something like *Salvia verbenaca* of England abounded in the sandy places where there was little other vegetation at this season of the year ..." [p. 431]

A few kilometres west of Philippolis:

"We outspanned ... at a place where there was water and a little sweet grass. In the bed of a pool lately dried up a *Marsilea* with small hairy leaves was abundantly in fructification." [p. 433]

28 August — From Philippolis "...about 20 miles" west to Scheidfontein; past Los Kopje; past Boesmansberg and Blesberg [Bleskop, 20 km southwest of Luckhoff].

30 August — "We stopped for the night between two ridges of rough basaltic hills on the clay-slate which is the formation of the karroo country on which we were now travelling and on which there was little herbage except stunted bushy *Mesembryanthemums* ...

"A large dense-leaved *Aloe* with reddish flowers, and a yellow *Gazania* [*Gazania krebsiana*] were in flower in some places, and upon the dry hills a bushy *Dimorphotheca* [*Dimorphotheca cuneata*] resembling a Marigold with white flowers was a very striking object." There was no water. [p. 434]

31 August — Met some Bushmen. "I learned from them that they prepared the poison of some of their arrows from a species of *Euphorbia* which grows on the hills but that they use different kinds of poison for different animals, the larger, such as gnus, requiring it stronger ... [p. 435]

"An *Aloe* [*Aloe grandidentata*] with spotted leaves and red flowers was in blossom on these hills. The blanched bases of the flower-stems of this species are cooked and eaten by the natives.

"Our journey today was over the Cross Mountain to Ramah... A small fragrant yellow and orange *Gladiolus* [identity uncertain, possibly *Freesia andersoniae* is meant], a scarlet *Sutherlandia* [*Lessertia frutescens*], and a few other early flowers ... enlivened the monotony ..." [p. 436]

2 September — Ramah, 90 km west of Fauresmith:

"Among the rough basaltic hills at Ramah ... was an *Aloe* [*Aloe broomii*] with dense spikes about 4 feet high of greenish-orange flowers. These were beginning to expand in warm places." [p. 438]

1844 **Cumming, R.G. (1850)**

January — Philippolis:

"... an extensive and fertile country" occupied by a Griqua-like people "...calling themselves Bastards. Their chief's name is Adam Kok. The name of their capital is Philippolis... Their country is bounded on the south by the Orange River and is about the most desirable district in southern Africa for farming purposes, there being abundance of fountains throughout its whole extent capable of being led out to irrigate the land... Rich pasture is abundant ..." [1: 138]

The Bastard People: "They are very fond of beads of every size and colour which they hang in large necklaces round their necks. They have one description of bead peculiar to themselves and to the tribes extending along the banks of the Great Orange River to its junction with the sea. This bead is formed by the root of a bush found near the mouth of the Orange River and possesses a sweet and peculiar perfume. Every Griqua girl wears at least one of them; and no traveller who has once learnt to prize this perfume can inhale it again without its inadvertently recalling to his memory the fine dark eyes and fair forms of the semi-civilized nymphs frequenting the northern banks of the Orange River." [1: 140]

Near Stinkfontein:

"On approaching the base of the hills we entered an ancient forest of mimosas [*Acacia*], every tree being a study for an artist. There was also a considerable undercover of various sweet-smelling shrubs and bushes... This venerable forest extended all around the bases of various ranges of rocky hills which stretched in different directions through these plains ... [1: 142]

"We crossed the hills by a stony neck, and having progressed some distance through several well-wooded glades and hollows in the table-land of hills we suddenly looked upon a noble prospect. A wide grassy plain covered with picturesque mimosas [*Acacia*] and detached clumps of evergreen bushes stretched away from the bases of the hills on which we stood." Came to Stink Fonteyn.

2–3 April — From Philippolis to Bothas Drift on the Orange River, 26 km south southwest of Philippolis:

"...camped on the northern bank of the Orange River at a place called 'Boata's Drift' which is nearly opposite Colesberg. Our march had been through a succession of mountains covered with excellent pasture to their summits." [1: 214]

1847 **Mitford-Barberton, I. (1970)**

7 December — Riet River, probably 17 km north of Fauresmith [From Thomas Holden Bowker's hunting diary on his trip from the Orange River to Bloemfontein]:

"Passed the Riet River, a stream no bigger than our Fish River, with large, deep pools of water containing fish of an enormous size, some weighing upwards of 60 lbs.

"Outspanned in some bushy koppies. Went out in the afternoon and found about 3000 blesbucks... Robert shot one ewe. Hit several others but they got away as the ground was 'deurslag' (boggy) from the heavy rains which had fallen in the morning. Grass very scarce as it has all been eaten off by locusts ...

"... large trees on the hills such as *kreyhout* (*karee*, i.e. *Rhus*) *olienhout* (Olive), etc. all known to us ... [p. 189]

24 December — "Found a pleasant spring in the flat with plenty of water-cress growing in it, which we devoured most greedily for want of something better." [p. 192]

1849 **Cumming, R.G. (1850)**

29 January — South of the Vet River, ? Hoopstad District:

"I held on across country for a range of stony hills dotted over with dwarfish trees and bushes on which I expected to find sweet grass for my cattle."

Reached Bloemfontein on 1 February. [2: 374]

1850 **Baines, T. in Kennedy (1964)**

2 April — Coqui's Drift on the south bank of the Vaal River:

"... I climbed a krantz, or isolated cliff, two hundred yards long, ten broad and about 25 feet high; and, where its red and yellow cliffs shone out in bold relief, thickly clothed with *Acacia,* mimosa, and other trees whose graceful waving foliage of all shades and colours contrasted and harmonised beautifully with the variegated rock ..." [p. 54]

8 June — Renoster River, northwest Free State:

Outspanned on the south side of the "…Rhinoster River where we could barely procure dry wood enough to cook a little biltong ..." [p. 89]

21 July — Bethany:

"Bethany... lies scattered amongst a cluster of hills composed of enormous masses of reddish brown or dark grey rock piled in wild confusion one above another and possessing a magnetic influence upon the compass. From this range issues a small fountain and, between some of the hills, a vlei is formed with willows growing upon its banks ..." [p. 103]

21 September — Sand River:

"... I crossed the Sand River about 3 miles below our former drift and passed through a green and fertile country studded with mimosas [*Acacia*], and once, as the numerous stone kraals and huts shewed, densely populated by the Kafir or Becahuana tribes... The country here consisted of long flats and gently undulating hills and valleys, with numerous green patches, like the fairy rings at home ..." [p. 128]

c. 1850 — Holden, W.C. (1855)

"The natural features of the Sovereignty are on a bold broad scale. But little of the picturesque presents itself to the eye of the traveller, bald monotony prevailing except in some favoured spots.

"The plains, or 'Flats' as they are generally called in South African phraseology, appear interminable. The mountains rise high until cloud-capped; the giant Qhahlamba is lost in the heavens... The apparently 'ever-lasting hills' have on their summits long tracts of arable table-land whilst from their sloping or precipitous sides 'streams of water gush out'. In some parts of the country gurgling brooks glide softly through... But the country is not so well watered as Natal; yet I consider it to be better supplied with water than the Old Colony [the Cape]. Drought is sometimes severely felt ... [p. 339]

"The intelligent reader must not suppose the Orange River Sovereignty to be a waste desert, worthless and unproductive. On the contrary, in those parts where water can be commanded, vegetation is of the richest, rankest kind. Many of the mountains are of that peculiar formation in which small fountains gush out about half-way down their slopes and the water gradually spreads to the right and left in small rivulets until, at the base, the whole of the surplus water is united, and moistens and enriches all the surrounding country. From the various points where the life-giving moisture descends, the natives either commence cultivation and sow the land with corn, or plant esculent herds... The sight of hundreds of acres of waving corn girding the bases of the mountains as was the case at Plaatberg, where I was long a resident, has a most cheering effect ..." [Platberg is 3 km south of Ladybrand.] [p. 340]

1852 — Orpen, J.M. (1980)

Farm 'Hartebeest Hoek', near Bloemfontein:

"Once he and a whole party were out with AH Bain on his farm Hartebeest Hoek near Bloemfontein. There is a small flat-topped hill there with a very irregular krantz all round the top. The sides, and a broad strip below them all round the hill, were covered with mimosa [*Acacia*] and other trees." [p. 63]

1853 — Chapman, J. (1868)

March — From Coqui's Drift on the Vaal, across the Renoster River to the Vals River in the Bothaville District:

Just south of the Renoster River: "The grass of these plains had been devoured by the multitudes of game so that the country presented to view a dreary wilderness." [1: 126]

14 GORDONIA

1779 Gordon, R.J. in Cullinan (1992)

2 October — West of Kakamas, south bank of the Orange River, Gordonia District:

Gordon, travelling southeastwards, "... crossed the dry Cabas rivulet ..." Proceeded until: "There were many *kouw* [probably *Boscia foetida*] trees and much Bushman grass (Footnote: a possible *Aristida* sp. [*Stipagrostis* spp.]) making it very pleasant. But, looking for water, we found none... In this valley we saw many giraffe tracks; they had grazed on every *kouw* tree... (Footnote: Gordon had written earlier on 30 September 1779: '... the *kouw* is a rojana, the same as those I found two years earlier on the Great Fish River. It has the small red core inside the green capsule; the kernel tastes of almonds, and oil is made from it. They are very large here and the Bushmen get fat eating them.')" [Although Gordon's "rojana" probably implies the genus *Royena*, now *Diospyros*, the species referred to is *Pappea capensis*, *kouboom*.] [p. 98]

19 October — Near Augrabies Waterfalls:

"Today again saw some hippopotamus in the river which here runs SE and NW. Saw some blue *Ixias* [probably *Moraea* sp.] as well; and otherwise up to here there have been few flowers, and also much honey." [p. 109]

Coloured Plate 47 (undated and unsigned) gives the editor's caption: "*Pachypodium namaquanum* (a member of the Num-num family) from the western banks of the Orange River. It is also known as the 'half-mens'." [p. 111]

October — West of Augrabies Falls, but south side of the Orange River:

"Departed north over a plain downhill and after half an hour's travel we were out of *kokerbooms* [*Aloe dichotoma*] and going uphill over difficult reddish-brown and stony sandhills ..." [p. 100]

13 November — Gordon tells how a Bushman had poisoned a spring of water in order to kill quaggas: "He had done this with several ostrich egg shells full of milk from the thorny six-sided *Euphorbia* when it had its yellow bloom. He also used the bruised branch of the same tree. Generally they die close to the water ..." [p. 121]

1800 Bradlow, E. & Bradlow, F. (1979)

5 November — North bank of the Orange River, 10 miles northeast of the ford at Prieska:

"Here the river is rather broader, and in appearance more beautiful than at the ford, being cloathed with a row of weeping willows on each side, beyond which there are large mimosas [*Acacia*] whose rich foliage of dark green forms a pleasing contrast with the drooping boughs of the willow [*Salix mucronata* subsp. *mucronata*] which is of a much lighter hew in leaf. [p. 93]

"Along the plains near the river there is a great abundance of mimosa [*Acacia mellifera*], a little larger than a gooseberry bush, the flower in form similar to that which Mr B has called *Mimosa karoo* but in colour is white. The blossom appears before the foliage and is succeeded by a dark brown pod, which being nearly of full size the leaves shoot out. The pod is as broad as that of a common garden pea, but no seed is yet formed. The tree is of short duration, the ground is ... with those that have fallen decayed. The mimosa is full of incurvated prickles, short, the colour of the bark - growing singly - the stalks of leaves are in pairs, and from each stalk in pairs also are 6 pairs of leaves, smaller than the other mimosa, and rounder." [p. 85]

1800 Somerville, W. in Bradlow & Bradlow (1979)

7 November — North side of the Orange River at Prieska Drift:

"In the afternoon we proceeded four hours further up a valley surrounded by hills (Footnote: at 'T'Karaap pass)... We found here the *Mimosa giraffe*, that species upon which this animal chiefly feeds (Footnote: *Acacia erioloba* E.Mey.)." [p. 97]

12 November — Witwater [Helderwater], 29 km southwest of Griquatown, Hay District:

From Rietfontein "... we advanced northeast five hours to a rivulet of excellent water called 'Wit Water' (Footnote: subsequently the site of the Griqua mission station, later

called Griquatown.). The country is still Karoo - the grass (called by the Colonists Sour Grass (Footnote: An unpalatable type of grass, probably of the genus *Danthonia* [identity uncertain, possibly *Centropodia glauca*]) becomes more plentiful as we remove from the residence of the missionaries... The water here arises from a plentiful spring ...” [pp. 100, 101]

16/17 November North of Witwater [Griquatown]:

“A plant here plentiful called in the Kora language the Bowel medicine (Footnote: An emetic (called Cape Aloes by Thunberg) made from a species of *Aloe*) or ... in colic they bruize [sic] two or three inches of the root which is to be drunk - its effect is to produce vomiting and then purging. [p. 103]

“Found wild cucumber (Footnote: probably *Cucumis africanus* L.) amongst the rocks, and also what seems to be the wolf poison, the fruit is in great abundance on the ground as well as on the tree perfectly ripe - but I suppose poisonous because the Baboons, whose tracks are numerous, have not touched it (Footnote: Somerville was probably referring to *Ozoroa dispar* which superficially resembles *Hyaenanche globosa* (Gaertn.) Lamb. & Vahl. This latter shrub (wolf poison) bears fruit about 2 cm in diameter which, when crushed, were placed in a carcass as bait for jackals and other predators. The Gifbergen [Gifberg] near Van Rhynsdorp take their name from this plant which is common there but is not found where the expedition was at this stage.).” [p. 104]

22 November *En route* to Kuruman in Postmasburg District:

“I was fortunate enough to find *Mimosa giraffe* [*Acacia erioloba*] with the pods containing the seed in high perfection - many were laying under the tree quite fresh - the half bitten off by the giraffe. The general appearance of the tree is like the weeping willow, at a little distance, although its pendant boughs do not hang so near the ground - it rarely happens that more than one or two trees are found growing together, the bark of the lower branches is generally rubbed bare on the lower side by the Giraffe scratching himself upon them - from the appearance of the boughs I should rather think that he does not browse upon them, although he certainly eats the fruit. The tree is not long lived, its tap root penetrates but a short way into the ground, and many are found blown down by the winds.” [p. 112]

23 December Somewhere near Khosis, Kuruman District:

“The people went in search of water ... having spent the day without success - every lake and pool was found perfectly dry ... They fell in with a very large herd of giraffes - not less than a hundred ...” [p. 159]

They went from “...Mapayray in the direction of southeast up the Koormanah through scenes more beautiful and picturesque than we had seen on any part of the road from the Cape - several miles of road lay through a valley, or rather forest, of the *Mimosa giraffe* [*Acacia erioloba*] growing nearer to one another than in any other place, but nowhere thick enough to be an obstacle to the waggons. They are about as much apart as fruit trees in an orchard, and the ground under each is strewed with the large pods containing the seed. This valley is a dry sandy soil overgrown with grass. The *Mimosa giraffe* is seldom or never found in moist places, but what is worthy of notice is that although the tree is the most luxuriant and plentiful hereabouts the Giraffe is hardly ever seen... We encamped at a charming spot there, the serpentine course of the river, overgrown with long reeds in full verdure, sweeps round a luxuriant plain skirted on either side by a forest of karoo mimosa [*Acacia karroo*], near to our tent grew a solitary *Mimosa giraffe* surrounded by a grove of the other species by much the largest that had been observed, the girth 3 feet from the ground measured 8 feet 2 inches, a stem nearly upright rose to the height of 7 feet from where the boughs sprung.” [p. 160]

26 December At the ‘Eye of the Kuruman River’:

Giraffe: “It frequently happened that we saw the outstretched neck of one overtopping the bushes but, when we approached, several more were seen cropping either the grass or low bushes. The *Mimosa giraffe* [*Acacia erioloba*] is only found here of stunted growth and very rare - although this district is noted as the haunt of the giraffe, a proof almost convincing that he does not (always at least) derive his chief nourishment from that tree - grass and various shrubs abound - but not a drop of water could be found in the neighbourhood ...” Reached ‘Kossy’ [Khosis]. [p. 162]

1801 Borcherds, P.B. (1861)

14 November Buffelsfontein, c. 2 km from Witwater [Helderwater]:

“On the 14th we reached the Kabeetzie Galie, or Buffelfontein where we saw some beautiful mimosa [*Acacia*] trees ...” [p. 73]

18 November — Koussie [Khosis], 50 km south southwest of Kuruman:

Cossey lake: "The lake was about 3 000 yards in circumference girt with thick long reeds and to the southwest with a large wood of mimosa [*Acacia*]." [p. 74]

20 November — Kuruman:

"... a beautiful little river of fine clear water ... flowing from beneath a caverned rock. We attempted to explore the cavity but at a distance of about 25 yards it became so dark that we could not distinguish one another. The breadth of the stream in the cave itself was about 25 feet, and there were several bones lying about. Some fifty yards from the spring the river was 30 feet broad and a foot and a half deep. It was the source of the Beriqua or, as the Boshuanahs call it, Koeromanna or Kuruman River ...

"I saw for the first time a wood of the tree known by the Hottentots as the kameeldoorn, or *Mimosa giraffe* [*Acacia erioloba*]. The trees were high, the leaves small, oval, green; the thorns reddish; the wood of a hard substance smelling like garlic; the fruit a large woolly pod holding about three rows of seed, outwardly having the appearance of a green peach. The giraffes are very fond of them." [p. 78]

November — Along Kuruman River:

"Travelling along the banks of the Kuruman we saw extensive woods of the *Mimosa giraffe* [*Acacia erioloba*]. One of the trees measured 9 feet and 2 inches in circumference." [p. 89]

1801 Borcherds, P.B. in Bradlow & Bradlow (1979)

North of the Orange River, towards Griquatown, Hay District:

"The country ... differs from that on the southern banks of the Orange River; grass starts growing there lushly, springs with much more pleasant water, and stretches of land where fertility is left in no doubt by the great variety of luxuriant vegetation ..." [p. 217]

Near Griquatown:

Food of the Roan Antelope (*Takhaitse*): "The food of this creature consists mainly of the leaves and pods of a thorntree known as *Mimosa giraffe* [*Acacia erioloba*], I saw one of these trees which are 9 feet and 7 inches in circumference, the leaves resemble those of the *Mimosa nilotica* [*Acacia karroo* is probably meant], dark green in colour, the wood is of a dark red mixed with yellow and when cut open there is nothing that resembles the smell of garlick more - the thorns when young are usually red, and in fruit is a bean-pod, 3 inches long and 1½ inches wide, the outside is covered with a silvery pale-grey fluff. Cut open, the inside with a pale yellow spongy substance and there are up to three rows of beans in it adding up to 36 in one pod. This bean when green and broken open gives off the aroma of an unripe peach ..." [p. 219]

Koermanna [Kuruman River, at the Eye]:

"The source of the river was in a rock with a cave in the centre with many twists, according to my estimation in some places 10 foot high, and having a length of 24 to 30 feet. At the end of this cave a flat rock resembling a wall prevented Mr Daniell and myself from continuing our explorations, clear water of a pure taste flowed out of it and formed at a distance of 50 paces a river 1½ foot deep and 30 feet wide. The banks were overgrown in some places with common reed and others again with trees.

"It was strange that this would suddenly disappear, and at least half an hour afterwards again appear and thus in those places formed a subterranean stream, several valleys and other small streams increased the lushness of the grass providing no mean adornment for her banks.

"Forests of the *Mimosa nilotica* [*Acacia karroo*, see note above] as well as the *giraffe* [*Acacia erioloba*] were found in several places. In the centre of these small pools...an abundance of ducks were feeding." [p. 227]

1801 Somerville, W. in Bradlow & Bradlow(1979)

7 January — North bank of the Orange River, Prieska District:

"The place most beautiful - some stately *Mimosa giraffe* [*Acacia erioloba*] growing like oaks, affording excellent shade and shelter to a horde of Bosjiesmen ... [p. 176]

"The chief food of the Bosjiesmen is the gum of the *Mimosa karoo* [*Acacia karroo*] and meal from the seed of the wild Water Melon (Footnote: *Citrullus lanatus*, *tsamma*... The seeds were roasted and pounded into a kind of meal.)." [p. 177]

1802 Borcherds, P.B. (1861)

January — North bank of the Orange River, near Prieska Drift:

"The *Euphorbia* with which the fountains are poisoned by the natives to kill game grew on the river's banks.

4 February — "On the 4th February we reached the drift or ford in that river named t'Keys. At this place the river was broad and divided by five islands into nearly parallel branches. [p. 92]

"The view was grand as next morning the river was seen in its full breadth, certainly not less than a thousand yards. The islands had disappeared and nothing but the tops of their trees were seen dipping into the stream." [p. 93]

1804 Lichtenstein, H. (1815)

15 June — Left Prieska Drift heading towards Rietfontein [Aakaap], 42 km north northeast of the Orange River, *via* Laauwaters kloof:

"The land appeared at every step to increase in fertility; the foliage of the bushes was thicker, the green of it was more vivid and the trees were less stubbed than on the southern side of the stream [Orange River]. Large tracts were furnished with what, at some seasons of the year, must be good long grass, but at present it was dried, and our cattle could find little nourishment excepting the same succulent plants on which they had been obliged to feed in the desert. All the sorts of grass that I saw were new to me: they seemed, for the most part, to belong to the families of *Poa, Melica*, *Aristida*, and *Andropogon*." [p. 299]

21 June — Left Leeuwekuil, c. 20 km southwest of Griquatown, going northwards to Ongeluksfontein, c. 30 km northwest of Griquatown:

"Our course was now over flat desert country which scarcely produced anything but some dry grasses and a few plants of the syngenesia tribe [Asteraceae], as *Asters, Gorteria*, and *Berkheya*. By the dry bed of a stream were several sorts of mimosas [*Acacia*] altogether new, and such as I never yet found described: the formation of the leaves was very remarkable. Here we first found some single shrubs of that favourite among the Betjuans [Tswanas], the *Grewia obtusifolia* [*Grewia flava*]; farther on grew in abundance rising even to the height of a man, the *Tarc*[*h*]*onanthus camphoratus*. This is one of the bushes in which the Bosjesmans particularly delight to make their nests. Its aromatic leaves were chewed with the greatest delight by our Malay slaves since they found the flavour very similar to that of some of the plants in their own country." [p. 330]

June — Left Blinkklip, 8 km northeast of Postmasburg, for Khosis:

"Came to a tolerably extensive plain lying on a regular even slope which had scarcely any soil... From the rifts of its slopy surface a few small succulent plants sprung up particularly of *Stopelium* [sic; Apocynaceae: Stapeliae] and *Mesembryanthemum* tribes. Of the latter were some several wholly new to me. These were not a little annoying to our horses and oxen into whose hoofs they frequently stuck." [p. 348]

Klipfontein, 19 km north northeast of Postmasburg, "…which the natives called *Maputi*:

"... at the foot of a pretty high hill was a wild wooded dell in which flowed a plentiful stream called Klipfontein." [p. 353]

June — Koosi [Khosis]:

Koosi means rich. "On the north side stretches a long hill flattened at the top, and towards the plain richly overgrown with trees and shrubs." [p. 356]

North of Khosis:

"…a wide extended plain scattered over with single large trees ... [p. 361]

"The country was everywhere green with excellent grass and decorated with trees and shrubs ..." [p. 362]

Kuruman River, Kok's place near Kuruman, camp of the Betjuannas [Tswanas]:

He was entertained "…with slices of dried gourd and the sweet berries of *Grewia obtusifolia* [*Grewia flava*]." [p. 378]

At a cattle-kraal on the Kuruman River "…in the midst of the space lay an enormous bulb which must have measured nearly a foot in diameter, probably of the *Haemanthus* or *Ornithogalum* species [most likely *Boophane disticha*] ... they were charms, he [Kok] said, by which the cattle were preserved from enchanters and would not be parted with by the possessor at any price ..." [p. 395] [This was as far north as Lichtenstein went.]

July — Near Rietfontein [*Aakaap*]:

Some unknown bulbs which the men roasted in the embers and which they found as tasty as chestnuts upset them, and they were "...seized with violent choking pains" which caused the progress of the expedition to be held up for a few days. Medicine cured them. [p. 423]

1811 Burchell (1822)

18 September — Left the Orange River [? at Scotch Drift] for The Kloof in the Asbestos Mountains:

"Our road for the first part was through heavy loose sand which ceased as soon as we quitted the region of acacias; after this the ground continued hard ... and, excepting a solitary one here and there, not a tree was to be seen." [1: 327]

19 September — The Kloof, a Hottentot village: "No grass, nor verdure covered the stony ground; a few scattered bushes contributed scarcely a tint of green to vary the barren brown color which distinguished all the mountains around. [1: 329]

"In the upper part of this valley there are no large trees but at a short distance lower down are some tall acacias and large bushes of a new species of *Rhus* (*pyroides*); in the habit, ramification, and broad deciduous foliage of which there is a character which reminded me of the common wild pear tree of Europe. [1: 335]

"The hook-thorn, *Acacia detinens* [*Acacia mellifera*], before described, was found growing here; and also a beautiful species of *Acacia* of a hoary complexion, the technical name of which, *Acacia atomiphylla* [*Acacia haematoxylon*], is taken from its curious and singular leaves consisting of very minute leaflets resembling seeds or atoms squeezed laterally so close together as to seem united. [1: 336]

27 September — "...I observed with surprise how small annual flowers spring up after rains. In the cornfield [wheat was growing] several European plants seemed quite at home (Footnote: *Polygonum aviculare; Veronica anagallis; Urtica urens; Lolium temulentum; Hordeum murinum;* and *Phalaris canariensis*); but their presence at this distance from their own country is easily accounted for, the seeds having been introduced along with the corn. In this manner many weeds are transported all over the world and become so completely naturalised in a foreign climate that, to prevent being misled in supposing them aboriginals, it is necessary first to examine into the possibility of such an emigration having taken place." [1: 340]

29 September — Left the Asbestos Mountains heading northwards towards Helderwater [formerly Wittewater (*Gattikamma*)]:

"The spring which in some seasons is the source of a rivulet is situated in open country without a single bush near it except a few karee-trees [*Rhus*] and some olive trees about 12 feet high standing close to the water (Footnote: *Olea similis* B. [*Olea europaea* subsp. *africana*])."

30 September — *En route* from Helderwater to Klaarwater [Griquatown]:

"For the first six or seven miles we passed over a plain well covered with dry grass ..." More than 100 springbok. "In one part towards the end of the journey we passed abundance of a handsome shrub from 5 to 7 feet high covered with showy yellow flowers but quite destitute of leaves ... it was completely armed at all points; its green leafless branches being terminated by a spine as sharp as a needle (Footnote: *Spartium cuspidosum*, described [*Lebeckia macrantha*])." [1: 341]

6 October — Klaarwater [Griquatown]:

The Hottentots were fond of brandy. "An attempt at distilling a spirit from the berries of what they therefore call the *brandewyn-bosch* (brandy bush) (Footnote: *Grewia flava*) had succeeded, but the trouble of collecting a sufficient quantity of berries was a check to it being too often made." They had also been making liquor out of honey. [1: 364]

24 October — Griquatown to the confluence of the Orange and Vaal Rivers in Herbert District:

"All around us here was barren and without water or pasture... I had not even the amusement of picking up a few flowers... The country was exceedingly rocky but at intervals covered with bushes nearly 8 feet high with intervening spaces of grass ... [1: 385]

"After having travelled about 22 miles without finding any water we arrived at a small spring very pleasantly situated amidst large trees of Karoo-thorns." [1: 386]

25 October — Spuigslang Fontein [northwest of the Vaal/Orange confluence]:

"Here I saw for the first time a neat bush of dense foliage like Box, called *Guarri* by the Hottentots (Footnote: *Euclea ovata*, described) [*Euclea crispa* subsp. *ovata*] and which is one of the very few Transgariepine shrubs that afford eatable fruit possessed

of a good flavour. It bears a round black berry of the size of a pea with a proportionately large stone. In taste it has a little astringency but is however perfectly wholesome. Other species resembling myrtles and bearing berries of the same kind were afterwards found to be plants of frequent occurrence in the regions further northward. [1: 387]

"... a large quantity of a very pretty plant which grows here in abundance (Footnote: *Buchnera aurantiaca*, described [*Jamesbrittenia aurantiaca*]). It was quite new and its fine deep-orange colored flowers ... [1: 388]

"A species of *Acacia* (*Acacia heteracantha* [*Acacia tortilis* subsp. *heteracantha*]) met with here for the first time was distinguished by its size and growth from all which had been seen hitherto. It was about 20 feet in height, a tall trunk of 18 inches in diameter supported a flat wide-spreading umbrella-like head forming a picturesque and conspicuous feature in the landscape."

26 October — Arrived at the confluence of the Vaal and Orange Rivers. [1: 389]

27 October — At Black River nearby Burchell climbed one of the tallest trees in a grove. "It was however with some difficulty that I could disentangle myself from a species of *Clematis* [*Clematis brachiata*] which, just hereabouts, grows to their very summits and smothers them with flowers and foliage, very much in the same manner as the common English species called 'Traveller's Joy' which, in Europe, indicates a chalky substratum. And, it is remarkable that this African plant which much resembles it in habit and general appearance is also an indication of a calcareous quality in the soil (Footnote: *Galium verum*, or a plant exceedingly like it [*Galium capense* subsp. *garipense*] grows in plenty on the bank of the river in grassy places. This is certainly indigenous to the Gariep [Orange River] and the country beyond).

"Footnote: The outward appearance of another plant so completely deceived me at the moment of gathering it that I believed I had collected a species of *Thalictrum* [possibly *Thalictrum minus*]. It was not in flower but probably belongs to some of the umbelliferous genera.

"Fungi, as well as Lichens and Mosses are so very rarely to be met with in the interior of southern Africa that, of the Fungi, the first which had been seen on the journey was found at this place." [1: 394]

28 October — Up the western side of the Vaal *en route* to what Burchell called the Maap River [Riet River, also called the Modder River at times, 27 km east northeast of the Vaal confluence], via Zoutpans Drift:

Hottentot women protect their bodies from the sun and weather with animal fat "...to which is generally added some sweet-smelling herbs reduced to powder which they call *Buku* (*Bookoo*). This *Buku* is made from the leaves of various aromatic or scented plants, dried and reduced to a powder by pounding them on a stone. The plants most commonly used for this purpose by the Hottentots in the Colony are chiefly of the tribe of *Diosma*, various species of which are considered equally good. But in the countries beyond the geographical boundary of that genus, other plants of various genera are, of necessity, made use of, among which a *Croton* of an undescribed species [*Croton gratissimus*], hereafter mentioned, always appeared to me to be the most pleasant."

Zout-pan's Drift [? somewhere south of Douglas]:

"Between the trees and bushes which clothe the bank of the river, a species of *Asparagus* [probably *Asparagus cooperi*] is everywhere found, climbing and entwining, so that I could not without difficulty force a way through them...Here for the first time I saw a large tree of picturesque growth and thin foliage, called by the Hottentots of Klaarwater [Griquatown] the roodeblat (red leaf) (Footnote: *Terminalia erythrophylla*, described [*Combretum erythrophyllum*]) on account of the beautiful crimson colour which the leaves assume in the autumnal season ... in which circumstance it remarkably agrees with the Indian almond, *Terminalia catappa*, a wellknown tree of the same genus. It grows to the height of 40 feet, with several crooked spreading trunks, from 1 to 2 feet in diameter covered with a smooth white or pale greenish bark. It was met with only on the banks of the Ky-gariep [Vaal River] and was not a tree of frequent occurrence." [1: 400]

30 October — Vaal River, near the Riet River [Maap] confluence, 27 km east northeast of the Vaal/Orange confluence:

"The Yellow River ... banks, thickly clothed with woods consisting of willows [*Salix mucronata* subsp. *mucronata*] in the front rank, and behind them acacias [*Acacia karroo*] intermixed with black-bark [*Diospyros lycioides*], red-leaf [*Combretum erythrophyllum*], karree-tree [*Rhus lancea*], and buffalo-thorn [*Ziziphus mucronata*], entangled and rendered almost impenetrable with the *Asparagus* [probably *Asparagus cooperi*] already mentioned. At the water's edge, and in the water itself, grew an abundance of reeds, and a tall species of *Cyperus* ."

The river there had grassy banks. [1: 404]

31 October — Visitors arrived and gave them "… a present of *uyentjes*. This is a colonial name in general use and is applied to several kinds of small eatable bulbs. None of those in question were larger than a hazel-nut and were covered in several thin brown husks. They are usually slightly roasted in the embers, but in taste they are inferior being less sweet than the others which are chiefly the bulbs of the plants of the Ensatae order. The present bulb was a species of *Cyperus*-grass hitherto undescribed (Footnote: *Cyperus usitatus*, described).

"Footnote: On the bank grows abundance of *Vahlia;* and a *Dracocephalum* ? [unidentified Lamiaceae]. A species of *Conium* was gathered in the same situations; but owing to the dryness of the ground very few new plants were here added to my herbarium. [1: 416]

"Footnote: At the station I found growing on the sides of the river and in the water, another species of *Cyperus*, 6 feet high a very handsome plant in this class." [1: 417]

2 November — Up west bank of the Vaal River, north of the Riet River confluence:

"…a wild trackless level ... generally sprinkled over with small scrubby bushes; and in many places grew abundance of *kanna-bosch* (Footnote: *Salsola aphylla*, L. or *Caroxylon salsola*, Th.)…which I had now learnt to consider as an indication of a good soil of some depth, though not always free from a brackish quality. In some parts of the plain the Bushmen had burnt away the old grass, for the purpose of attracting the game by the young herbage which subsequently springs up." Saw zebra, ostrich and hartebeest. [1: 419]

3 November — "Every thicket was so interwoven and entangled with *Asparagus rivalis* [*Asparagus cooperi*] ..."

He saw here, too, three species of plants very similar to their kind in Europe, viz: a species of *Potentilla* [*Potentilla supina*]; *Polygonum*, very like *aviculare* [probably that species]; and *Veronica*, like *V. scutellata* [probably *Veronica anagallis-aquatica*]. [1: 426]

4 November — Describes Gum-Arabic and the way it is collected from acacias. [1: 429]

Looking over on to the east bank of the Vaal River: "At a distance on the eastern side of the Yellow River, some large trees were conspicuous by their form and were either the *Acacia giraffae* [*Acacia erioloba*] or the *Acacia heteracantha* [*Acacia tortilis* subsp. *heteracantha*]: but on the western side none of these were seen." [1: 430]

13 November — Left the Vaal River to return to Griquatown:

"We travelled over a plain of boundless extent producing much grass in some places and a few bushes of *Tarchonanthus* and *Rhigozum* ... at this time all the grass, though still standing, was completely dried up like hay ..." [1: 448]

14 November — Near Groote Fontein [Campbell], between the Vaal River and Griquatown:

"As we approached Groote Fontein (Great Fountain) we passed many trees, which we observed more numerous and crowded the nearer we advanced to the spring. They consisted chiefly of the Cape acacias [*Acacia karroo*], with many hookthorn trees [*Acacia mellifera*] 12 or 14 feet high. The *Rhus tridactyla* also was remarkable by its delicate foliage."

Camped at "…Groote Fontein near the spring, in a pleasant grove, in the midst of which the water is situated. A large Solitary tree of Kameel-doorn (Camel-thorn or the tree on which, generally, the *Camelopardalis* browses) (Footnote: *Acacia giraffae* [*Acacia erioloba*]), the first I had seen of this species, was standing here." [1: 453]

Three springs of water emerged there. "It was sheltered by reeds and a large sedge (Footnote: Of the same genus as the Palmite…) intermingled with a tall and beautiful species of grass (Footnote: A species of *Saccharum*)... A *Statice*, growing plentifully about the rivulet would seem to indicate some brackish quality in the earth ..." [1: 454]

Burchell collected 33 specimens of plants, which he lists, "…among which was a small asclepiadeous plant called *tky* [probably *Brachystelma*, *Ceropegia or Raphionacme*] by our Hottentots who value it on account of the root which is the size of a round flat turnip; and being full of watery juice, it is often used by natives to relieve thirst when traversing these arid regions. [1: 465]

"The surrounding soil abounded with *wilde knoflook* (wild garlick) (Footnote: *Tulbaghia alliacea* [actually *Tulbaghia acutiloba* or *Tulbaghia cernua*]), the smell of which, as we walked over it, was strong and disagreeable, and remarkably like garlick; but towards evening the flowers gave out a sweet and pleasant odor." [1: 466]

18 November — *En route* to Klaarwater [Griquatown], from Grootfontein:

"The country we passed over this day ... was flat and open, the surface very rocky, although covered with grass and shrubs, few of which were new to me ... [1: 467]

19 November — We passed a spot containing about an acre, remarkable from the circumstance of the grass with which it was covered being eaten down as smooth as a lawn, and as verdant. What there might be in this particular spot, so different from all the surrounding country, to occasion the peculiarity, I had not time to examine; although it was evident by the quantity of manure from various animals, principally quakkas, that it was their favourite grazing place." Arrived at Klaarwater. [1: 468]

22 November — Griquatown:

Hottentots there used *boekoe-azyn* (bookoo vinegar) on wounds. Burchell "...had long believed the leaves of the *Diosmas* to contain virtues which would at some future period be used in the *materia medica* of Europe as they have long done in that of the Hottentots and Boers. This *boekoe* (or *buku*) *azyn* is made by simply putting the leaves of some kind of *Diosma* (Footnote: in the present instance, those of *Diosma serratifolia* [*Agathosma serratifolia*, endemic to the southwestern Cape]...illustrated) into a bottle of cold vinegar in which they are left to steep. The longer they have been infused, the more efficacious the vinegar is esteemed, becoming at length almost a mucilage." It was also used for Buchu brandy.

24 November — Groote Doorn, near Griquatown:

"The water at Eland's Valley being nearly dried up, Speelman was obliged to remove with my oxen to the kraal at Groote Doorn (Great Thorn), so called from the few trees of *Acacia giraffae* [*Acacia erioloba*] which grew there." [1: 479]

14 December — Leeuwekuil, near Griquatown:

"Against the rocks a handsome shrub of a broader foliage than is generally met with in these regions spread its branches and, in places, concealed the brown stone by its beautiful dark green laurel-like leaves. Its smooth pale tortuous trunk sprung out of the clefts of the hard rock and clung to its surface in the manner of an ivy but without putting forth any roots. It was a species of *Ficus* (or fig tree [*Ficus cordata*]) whose fruit, not larger than a pea, was first yellow and afterwards, when quite ripe, of a purple colour, yet not worth eating.

"Footnote: Out of the fissures of the rock grew some large bushes of *Macromerum junceum* [*Cadaba aphylla*] and *Capparis punctata* [*Boscia albitrunca*], described.

"I found in the valley *Aristida? fruticans* (Footnote: Cat. Geogr. 1885) [possibly *Stipagrostis namaquensis*], a very remarkable grass of a hard, shrubby, branching growth.

17 December — "I discovered in the mead a species of peppermint [*Mentha longifolia*], growing wild ..." [1: 491, 492]

1812 Burchell, W.J. (1822)

15 January — Griquatown:

"The rainy season had at length commenced and within the preceding six days a great quantity of water had fallen ... [1: 515]

"These reviving showers produce a change in the face of the country more like a sudden operation of magic than of a gradual progress of vegetation ... the dreary surface is transmuted into a verdant flower-garden, and innumerable little flowers, before invisible, spring up into existence and hasten to cover the ground. In less than a fortnight ... the complexion of the country assumes so different an appearance that it no longer could be imagined to be the same sterile region ..." [1: 516]

14 February — Just south of Griquatown, *en route* to Witwater:

The face of the country had changed greatly since his arrival during the drought in September, the result of good rains.

"A handsome and entirely new species of *Amaryllis* (Footnote: *Amaryllis lucida*, described [*Nerine laticoma*]) profusely covered a space of ground of half a mile in extent and the beautiful *Uncaria procumbens* (or grapple plant, described in a footnote [*Harpagophytum procumbens*]) was not less abundant. It was in full bloom, spreading on the ground, some plants having already formed the grapple-like seed-vessels while others were only beginning to expand their purple flowers ... [1: 536]

"The whole country was covered with verdure produced by an abundance of tall, fresh grass of a variety of sorts, most of which happened to be now in flower." [1: 537]

15 February — Aakaap [Rietfontein], 44 km southwest of Griquatown:

Halted "...to allow the oxen time to graze, as the plains here abounded in the most beautiful grass I had hitherto seen during the whole journey. About midway we found a kraal of Koras,

not very numerous, yet having with them large herds of cattle; on which account they had pitched their huts in the midst of these delightful, but short-lived pastures. [1: 538]

"... the hoary appearance, and soft tufted shapes, of the small grove of *Acacia atomiphylla* [*Acacia haematoxylon*]... Plants of *Amaryllis toxicaria* [*Boophane disticha*] were in many places very abundant, their bluish undulating leaves rising out of the ground and spreading in the form of a fan ... but their flowers had long since passed away ... well known to the Bushmen on account of the virulent poison contained in its bulb. It is also known to the colonists and Hottentots by the name of *gift-bol* (poison-bulb)." Describes how the poison is extracted. [1: 539]

"When we had passed through the region of the poison-bulb, we drove over an extensive field of thousands of the beautiful *Amaryllis lucida* [*Nerine laticoma*] in full bloom ..."

Arrived at The Kloof, 15 km south southeast of Rietfontein. [1: 541]

16 February — The Kloof:

Found there new genus, which he called *Paschanthus*; "A new kind of *Phyllanthus* [probably *Adenia repanda*]...sprang up between the brown stones...

"A small fern, not yet in fructification, but apparently allied to *Ceterach* [possibly *Asplenium cordatum*] grew ... a *Lantana* [perhaps *Lantana rugosa*] before me in full bloom ... [1: 544]

"Abundance of common Purslane [*Capsella bursa-pastoris*, introduced from Europe] grew everywhere on these mountains [Asbestos], and I ordered a quantity to be picked and boiled for my dinner... This was the only time during my travels in Africa that it was noticed in a truly wild state; but as it is a plant which entirely vanishes for the greatest part of the year; it is possible that it may be indigenous to many other spots which were passed over in the dry season. [1: 545]

18 February — "A plant growing over the bushes...proving to be an Apocyneous plant of a new and singular genus (Footnote: *Systrepha filiforme*, described [*Ceropegia filiformis*]). A species of bryony (Footnote: *Bryonia pinnatifida*, described) [possibly *Kedrostis africana*], remarkable for its neatly divided leaves and beautiful scarlet berries, was growing abundantly in this district, and is not uncommon in the country adjoining the Gariep [Orange River]." [1: 546]

Left The Kloof, going south towards the Orange River:

"We travelled over wide plains of tall verdant grass that might truly be called the finest hay fields ..." Then deprecates the absence of haymaking as a farming practice here. [1: 547]

1812 Burchell, W.J. (1824)

26 February — In a beautiful valley: "Along the dale below we rode in many places over a thick and verdant carpet of the most beautiful grass (Footnote: Exceedingly like Wire-grass of St Helena Island, *Agrostis linearis*, Willd. S.P.), and near akin to that which is called cocks-foot grass by the English farmers (*Panicum dactylon*, Linn. *Cynodon dactylon*, Pers.), shaded often by the soft foliage of large trees of *Acacia* whose branches were loaded with festoons of *Clematis* [*Clematis brachiata*] ... with a profusion of white flowers." [2: 5]

Left "...the deep valley and ascended to an elevated level country, very thickly covered with large trees of the hookthorn [*Acacia mellifera*] ... for about a mile and a half." [2: 6]

Jan Bloem's Kraal, 4 miles from the Orange River:

"In verdure and beauty the wire-grass far excelled every other grass of the valley; and I doubt not that its qualities, in an agricultural view of them, would equally prove its superiority in the climate of the Gariep." Burchell recommends that the wire-grass of St Helena and the doop-grass of India be tried by farmers in Africa. [2: 7]

27 February — Left Jan Bloem's Kraal and headed for Engelsche Drift on the Orange River:

At Engelsche Drift: Branches of the *Acacia* "...were frequently decorated with...a species of *Loranthus* [*Tapinanthus oleifolius*]." Crossed the Orange River going south, Prieska District. [2: 10]

"We traversed a very extensive plain covered with grass so tall that the dogs were completely hidden by it ..." [2: 15]

29 February — Heading south over a plain: "The most remarkable feature of this plain was a number of scattered trees distinguished from all others I had seen by the color of their trunks, which appeared at a little distance as if they had been white-washed. From this singular character they have gained the name of *wit-gat boom* ... in English ... White-stem (Footnote: *Capparis albitrunca*, B. [*Boscia albitrunca*])." [2: 18]

22 May — Just south of The Kloof:

"The beautiful wire-grass, so much admired on my former journey, was now all dried up or consumed by cattle; and the acacias were nearly in a leafless state." [2: 217]

24 May — Klaarwater [Griquatown]. [2: 222]

3 June — Mentions a list of botanical specimens at Klaarwater. They were ready to be sent to Cape Town, but were left behind. [2: 226]

6 June — Left Klaarwater for the north:

"The hills on this side of the country were well covered with shrubs (Footnote: Chiefly of *Tarchonanthus*, like *Tarchonanthus camphoratus*, *Spartium cuspidosum* [*Lebeckia macrantha*], and *Rhus tridactyla*, a shrub of very definite and pleasing appearance), though nowhere so thickly as to impede travelling."

Arrived at Moses Fountain [Moosfontein], 13 km northwest of Griquatown. [2: 233]

8 June — Between Gattikamma and Ongeluksfontein *en route* to the Langeberge:

"In this part of the country I found for the first time a very beautiful species of *Acacia* most remarkable for its low growth, being seldom more than 1½ feet in height, and of a herbaceous nature, the stems dying down to the ground every year. Yet its leaves, bunches of flowers, and pods, were longer than any of the arborescent species. It was not at this time in flower but was afterwards met with in abundance in the sandy plains farther in the Interior where I discovered that its roots constituted a favourite food with the elephant. Its Sichuanan name is *metsissanni* (Footnote: *Acacia elephantina*, described [*Elephantorrhiza elephantina*])." [2: 236]

9 June — Ongeluksfontein, 28 km northwest of Griquatown:

"Here for the first time I saw trees of a remarkable species of *Acacia* [*Acacia erioloba*] bearing thick brown thorns and an oval pod of a solid mealy substance within, and which never opens as those of other acacias, in this singularity resembling only the *Acacia atomiphylla* [*Acacia haematoxylon*] from which it differs, however, in most other respects. The head of this tree is thick and spreading, and of a form and appearance which distinguish it at a great distance from the other trees of the country. It is called kameel-doorn because the *Camelopardalis* browses chiefly on it, but its more popular name of *Mokaala*... It is one of the largest in these regions... Its wood is exceedingly hard and heavy, of a dark or reddish brown colour ... [2: 240]

"The technical name therefore of *Acacia giraffae* [*Acacia erioloba*] is adopted for this, although equally appropriate to other species.

"The principal shrubs about Ongeluks Fountain are the *Tarchonanthus*, the hookthorn [*Acacia mellifera*], the Karoothorn [*Acacia karroo*], and a dwarf *Acacia* called *siki* by the Bichuanas (Footnote: *Acacia stolonifera*, described [*Acacia hebeclada*]). This last which is about 2 or 3 feet high is remarkable from the circumstance of its trunk or stem running just below the surface of the earth, and from which arise a multitude of shoots or branches." [2: 241]

14 June — Doorn River, 6 miles from Ongeluks Fountain:

"A grove of large trees of the common acacia or *doornboom* [*Acacia karroo*] gave the spot a pleasant sheltered appearance. On our way we passed a few single trees of the camelthorn [*Acacia erioloba*] which, by their size, drew our attention." [2: 244]

16 June — From Doorn River to Bloem's Fontein, northern Postmasburg District:

"During the day we travelled over an open country ... a red loamy earth ... thickly covered with grass... In this season we found the grass dried up, though it still remained standing in the same position as when alive and growing. As we were obliged to force our way through it, much inconvenience was experienced from the barbed seeds and triple awns which, adhering to my clothes and their sharp points creeping through to the flesh, occasioned a constant irritation (Footnote: These were the seeds of two or three species of *Aristida* (*Chaetaria*), of an *Anthistiria* [possibly *Themeda triandra*], and of different sorts of *Andropogon*).

"These plains abounded also in large bushes of *Tarchonanthus*; and were varied with frequent clumps of karro-thorn [*Acacia karroo*]. It was remarkable that, although most of the shrubs in these countries are food for various wild animals, neither the *Tarchonanthus* nor any of the species of *Rhus* exhibited marks of having been browsed upon, a sufficient proof that they are either unwholesome, or unpleasant to the palate." [2: 247]

17 June — Bloem's Fountain. [2: 249]

18 June — Blinkklip [Sensavan]:

"At Sensavan I first met with a shrub remarkable for being regarded by the Bachapins as bewitched or unlucky and therefore unfit to be used for firewood... It grows only in rocky places, is from 4 to 9 feet high with broad oval leaves between which are produced little clusters of small inconspicuous flowers succeeded by a large round fruit not much less than an inch in diameter but which is not eatable (Footnote: *Vangueria infausta*, described)."

A new species of *Hermannia*, *Hermannia bryoniaefolia* [*bryoniifolia*], described. [2: 258]

19 June — From Blinkklip to Klipfontein, 18 km north of Postmasburg:

At Klipfontein: "Here...I found many new and interesting plants, particularly a species of *Croton* forming a handsome bushy shrub 4 - 7 feet high (Footnote: *Croton gratissimum*, described) closely resembling a species peculiar to Madagascar: and this affinity with the botany of that island, was farther marked by a species of *Melhania* (Footnote: *Melhania prostrata*, described) which grew close by it; and on the same spot with the *Vangueria infausta*. This Croton is called *mulokha* by the Bachapins. I was informed that the leaves, reduced to powder, are used by the Koras as a *buku*; and it is in fact of a much more pleasant scent than any of the Hottentot bukues. I detected, by the delightful fragrance which it emitted as I walked over it, a small frutescent kind of basil (Footnote: *Ocymum fruticulosum*, described) not less aromatic than the garden species. An exceedingly pretty sort of *Celastrus* (Footnote: *Celastrus saxatilis* [*Putterlickia saxatilis*], described) with red branches and very small leaves, decorated these rocks and occupied the same situations here, as at the Asbestos Mountains." [2: 263, 264]

20 June — From Klipfontein to Knegt's Fountain, 21 km north northeast of Klipfontein:

"...over level country varied here and there with hills of moderate elevations. The soil, which was of a sandy nature and remarkably red, was everywhere thickly covered with standing grass about 3 feet high which, being at this season quite dry and having assumed an autumnal tint, presented exactly the appearance of European cornfields of boundless extent, and which, from its height and color, very much resembled that variety which farmers term 'red wheat' (Footnote: The chief grasses were of the genera *Andropogon, Aristida, Anthistiria*, and *Poa*)." [2: 266]

Arrived at Knegts Fountain "...at a plentiful spring of water, surrounded by a grove of acacias." [2: 268]

21 June — From Knegtsfontein to Little Kosi Fountain [near Khosis]:

The dry grass had been burnt off for part of his journey. Regarding *Tarchonanthus*: "... the prevailing shrub in the plains. Where they had been burnt down to the ground they had in one season thrown up a multitude of strong shoots not less than 5 foot long.

"... we came to a plentiful spring of good water distinguished as the Little Kosi Fountain at which grew an abundance of tall reeds and on one side a thicket of acacias." In a footnote he compares the reeds to *Arundo phragmites* [*Phragmites australis*] of Europe, and proposes it "...as a new species under the name of *Arundo barbata* [*Phragmites australis*]".

Went on three miles over "...grassy plains" to the great Kosi Fountain. There were bushes of *Asparagus* growing there.

Great Kosi Fountain [Khosis]:

"This flat is clothed with grass and rushes among which a few reeds indicate to the traveller the situation of water. On the borders of the valley a considerable number of acacias forming a little wood or grove add greatly to the pleasant appearance of the spot ..." [2: 270, 271]

Left Great Kosi Fountain and "...continued over a sandy country covered in grass" until coming to "...a tolerably large clump of *Tarchonanthus*." He called the place TARCHONANTHUS STATION. [2: 289]

28 June — Six miles from Tarchonanthus Station came to a pass at the entrance to Kamhanni Mountains [Kuruman Hills]:

"On clearing the mountains we entered upon a grassy plain perfectly level and extending before us as far as the eye could discern... Here, the new and interesting forms of some scattered trees of Camel-thorn, or *Mokaala* [*Acacia erioloba*], gave a most picturesque and remarkable character to the landscape, more especially as no other large tree of any kind, nor scarcely a bush, was anywhere to be seen."

Arrived at Klibbolikhoni Fontein, c. 10 km south of Kuruman. [2: 292]

29 June — Arrived at 'Kruman' River, somewhere near the site of present Kuruman:

"…a beautiful little river running in a plentiful stream of the clearest water. At this part of its course it was 15 feet broad and abounded in tall reeds ..." Then travelled along the Kuruman River until he came to Kruman Station. [2: 299, 300]

30 June — Two miles from present Kuruman:

"At the distance of about two miles lower down the river … the chief town of the Bachapins … visited by … Dr. Lich[t]enstein, in 1805 … the same name of Litakuun.

"The country about our station once abounded in large *Mokaala* trees (camel thorns [*Acacia erioloba*]) till the Bachapins removed their town to the Kruman when they were cut down for the purpose of building and to clear the land for cornfields. At this time there were few standing.

"By the present state of vegetation it appeared that the flower-season was either past or yet to come. Most of the shrubs were without leaves ... (Footnote: A small procumbent species of *Evolvulus* [*Evolvulus alsinoides*] was here met with and is the first proof of the existence of that genus on the African continent)." [2: 305]

1 July — Departed for the Makkwarin (or Makklwarin) River [Matlhwaring River]:

Crossed the Kuruman River which was "… about 15 feet wide and a foot in depth, continued for the remainder of the day travelling over a boundless plain, generally sandy and covered with dry grass from 3 - 4 feet high." These plains extended to Litakun and "… abound in springs of excellent water, the situation of which is always indicated to the traveller by little groves of acacias; though these trees are seen scattered in considerable number at some distance in their vicinity, or occupy those hollow places which receive water only in the rainy season." [2: 306]

Many large bushes of *Tarchonanthus* from 6 to 10 feet high grew on the plain. "A little farther, a number of small Olive trees [*Olea europaea* subsp. *africana*] of the height of only 8 feet were observed; these had exactly the foliage of the European Olive." [2: 307]

2 July — Matlhwaring River, c. 30 km north northeast of Kuruman:

Took a trip towards the Kuruman River where "… the cornlike appearance of the grass seemed almost to persuade me that we were travelling through some district where agriculture displayed all her riches. [2: 314]

8 July — "I observed growing in rocky places a handsome species of *Aloe* (Footnote: Resembling *Aloe saponaria*; but it was probably a new species) which the Bachapins called *tokwi*... I here met with for the first time a remarkable kind of *Mesembryanthemum* … the roots of which are eaten by the natives as a substitute for better food (Footnote: *Mesembryanthemum aloides*, described [*Nananthus aloides*])."

Also found "… two small plants ... so exactly the color of the white limestone on which they grew, that scarcely any eye could have noticed them in walking by (Footnote: These were a species of *Crassula* ? with scale-like imbricated leaves; and *Anacampseros lanigera*, described [*Anacampseros filamentosa*])." [2: 332]

10 July — Left Matlhwaring River, going southeast over the "… Great Plains of Litakun" [of Kuruman]:

"The soil, as hitherto, was in most parts sandy and of a very red color, abounding in tall grass and, in the latter half of the day's journey, ornamented with many beautiful thick clumps of *mohaaka* trees (*Tarchonanthus*) of 10–12 feet in height which from their more diffuse ramifications appeared to be a new species."

Passed through grass which gave to the plains "… the appearance of fields of wheat. Among these grasses was a remarkable sort with long curved awns growing from one side of the spike (Footnote: B. Cat. Geogr. 2220, but not named [*Urelytrum agropyroides*])." Also a very ornamental shrub (Footnote: *Passerina*? [*Gnidia burchellii*]). [2: 340]

13 July — Returned to Litakun [Kuruman]:

"The situation of the town appeared open though surrounded by hills. The spaces which intervened between the houses were sparingly covered with low bushes and a half-trampled herbage. A few *mokaalas* [*Acacia erioloba*] were here and there to be seen standing amidst the dwellings; but, excepting there, no other tree was visible in any quarter. [2: 356] [Burchell illustrates Litakun village in colour opposite p. 360]

21 July — "The intervening ground [between the clusters of huts] remained in a state of nature, scattered over with bushes and here and there with a tuft of smaller plants or a patch of herbage... The site of the town had formerly been occupied by a grove of acacias, mostly of those species which have hitherto been confounded under the name of 'camelthorn'.

Among them was a new kind called by the inhabitants *mukwi*, or *mokwi*, or *mokala-mokwi*, distinguishable by the unusual thickness of its branches and even of its younger shoots (Footnote: *Acacia robusta*, described)." [2: 442]

22 July — On a hill on the outskirts of Litakun:

"On this hill, between the rocks and stones, grow a few shrubby plants, but as they are continually broken for firewood, or browsed upon by goats, few therefore are to be found of any size excepting the *Vangueria infausta* ..." said to bring bad luck to those who use it as firewood. [p. 451] [See p. 499 for comments by locals on the white man's use of wood for burning as firewood.]

"... a beautiful tree of a new species of *Acacia* called by the inhabitants *moshu* (Footnote: *Acacia litakunensis*, described [*Acacia tortilis* subsp. *heteracantha*]) and tried to gather some of its singularly twisted or curved pods which just at this season were hanging in abundance." [2: 452]

July — Litakun:

"The trees which constituted the grove in which the town had originally been built appeared to be all acacias but of several species, four of them confounded by the Hottentots under the name of Camelthorn (Footnote: These were *Acacia giraffae* [*Acacia erioloba*]; *Acacia heteracantha*, B. [*Acacia tortilis* subsp. *heteracantha*]; *Acacia litakunensis*, B. [ibid.]; and *Acacia robusta*, B. The other species were *Acacia capensis* [*Acacia karroo*]; *Acacia detinens*, B. [*Acacia mellifera*], and *Acacia stolonifera*, B. [*Acacia hebeclada*]) and of these two were now to be met with for the first time. The hookthorn, the Cape *Acacia*, and another of smaller growth, grew in some places ... [2: 526]

"Wild foods eaten by the Bachapins at Litakun as supplementary food when sources of agriculture and hunting are scarce: "To fill up the deficiency and escape starvation, or at least to mitigate their daily hunger, they are reduced to the necessity of searching the plains for the wild roots which nature offers ..." They ignored fruits of no kind, excepting the small berries of the *guarri* (Footnote: Different species of *Euclea* are ... called *guarri* by the Hottentots but the species I met with most...is the *Euclea myrtina*), and the *moreekwo* (Footnote: *moreekwo* is the Sichuana name for the *Grewia flava*) being anywhere to be found. The berries of the *moreekwo* bush are of an agreeably sharp flavour." [2: 588]

In a footnote Burchell lists various edible veld roots: *Gladiolus edulis* [*Gladiolus permeabilis* subsp. *edulis*]; *Babiana hypogea*; *Cyanella lineata* [*Cyanella lutea*]; *Bauhinia esculenta* [*Tylosema esculentum*] (seeds of which are also eaten)—all described. [2: 589]

1820 Campbell, J. (1822)

April — Northeast of Kuruman:

"... we entered upon an extensive plain to which there was no visible end, covered with long grass ... the whole scene had a dull uninteresting appearance." Game plentiful. [1: 148]

1823 Thompson, G. (1827)

6 June — Crossed the Orange River *en route* to Ramah:

Boundless landscape with thickets to west and northwest. Multitudes of game. [1: 115]

7 June — Southwestern Free State, Herbert District:

"Not a bush appeared over the naked surface of the desert" until "...a clump of camelthorn trees, *Acacia giraffae* [*Acacia erioloba*], a species of *Mimosa* with beautiful branching tops spreading like an umbrella ... [1: 124]

"The soil was also sprinkled with the seed of a plant covered with prickles [*Tribulus* sp.], making it unpleasant to sit or lie down. These seeds are jocularly called by the colonists, dubbeltjes (two-penny pieces)." [1: 125]

Nearing the Vaal River:

"Fine grass we found in abundance but there was no water." Moved down to the Orange River's north bank [called it Cradock River]. [1: 128]

8 June — Confluence of the Orange and Vaal Rivers:

"The scenery at the junction of the two great branches of the Gariep was the most magnificent I had yet seen in the country ... steep banks overhanging with majestic willow trees, the sedgy recesses of the hippopotamus." [1: 133]

9 June — Campbell's Dorp [Campbell, Barkly West District]:

The country "... is covered with flints and overgrown with bushes... The bushes consisted mainly of a thorny shrub *Acacia detinens* [*Acacia mellifera*] wellknown in the Colony by the name of wagt een bitje (wait-a-bit)." [1: 137]

10 June — Griquatown:

Droughts parch "... the pastures so much that they are forced to remove with the greater part of their cattle to distant fountains where grass is to be found. The country is also very deficient in timber. The Camelthorn [*Acacia erioloba*] is indeed found in the neighbourhood, of a considerable size but the wood is too hard for common purposes being wrought with much difficulty and frequent breaking of tools. The inhabitants are therefore forced to resort to the Gariep for all the timber they use, and find there an inexhaustible supply, though not of the best quality, in the large willow groves which line the banks." [1: 149]

12 June — Approach to Kuruman from the south:

Across plains of long grass with acacias. [2: 164]

16 June — Kuruman:

"The town is well supplied with water from one of the most abundant springs in southern Africa which gushes at once from the earth at a spot about 10 miles distant and which is the source of the Kuruman River. [2: 175]

"A considerable river bursts at once from the rock by a number of broken passages in the side of the hill, forming a sort of cavern. Into this we penetrated about 30 feet but without observing anything remarkable. The water, as it issued from the rock, felt at this time rather warm: in summer it is said to be as cold as ice. In all probability it retains the same temperature at all times from coming a long way under ground, the apparent changes being owing, in reality, to the varying sensations of those who examine it at different seasons." [1: 199]

From Kuruman northwards to the Matlwareng River:

"Our journey lay across a country thinly sprinkled with mimosa [*Acacia*] trees and abounding with game. As we proceeded, immense plains opened interminably to our view waving with a sea of grass. About 2 o'clock we reached the Maquareen River." [1: 196]

22 June — Lattakoo, northeast of Kuruman:

"Having crossed the bed of the Lattakoo River, which at present was only a chain of pools, a gentle eminence covered with fine grass and adorned with beautiful camelthorn trees [*Acacia erioloba*] opened to our view the expected town at a distance." [1: 215]

Left Lattakoo, heading for Nokuning [Klein Tshwaing]:

"Our way for a few miles lay through clumps of fine camelthorn trees, without any path." [1: 217]

1836 Harris, W.C. (1839; reprint 1963)

25 September — From Kuruman to Matlhwaring River:

"The soil consisted chiefly of red sand abounding at intervals with long coarse grass which, being dry, gave to the plains the delusive appearance of ripe cornfields. Fourteen miles brought us to the Matluarin, a periodical river with a few detached pools of hardly drinkable water where bulrushes, and a scanty turf, afforded barely sufficient pasture for the oxen." [p. 41]

September — From Matlhwaring River to Motito, 76 km west of Vryburg:

"During the early part of the day our road continued across a boundless oceanlike expanse, the surface being broken only by anthills or occasional dwarf bushes... Proceeding, we passed through many extensive areas of waving grass, and the country gradually became decorated with large shrubs bearing a profusion of yellow flowers. Occasionally, too, straggling clumps of mimosas [*Acacia*], from 10 to 15 feet in height, resting like islands on the bosom of the sea of grass, affording a pleasing relief ..." [p. 42]

From Motito to Little Chooi [Klein Tshwaing]:

At dawn "... we perceived the aspect of the country completely changed. Instead of the dreary waste over which we had lately passed we might now imagine ourselves in an extensive park. A lawn of luxuriant green grass spangled with flowers and shaded by spreading *mokaalas*, a large species of *Acacia* (Footnote: *Acacia giraffae* [*Acacia*

erioloba]) with an umbrella-shaped top which forms the favourite food of the giraffe. The gaudy yellow blossoms with which these remarkable trees were covered yielded an aromatic and overpowering perfume ..."

Four hours later reached Little Chooi "... an extensive salt-lake surrounded by troops of ostriches and spring-bucks attracted thither by the luxuriant yet crisp and sour grass which our cattle refused to eat, and by a small pond of intolerable alkaline water which we found it impossible to purify." [p. 46]

From Klein Tshwaing to Loharon [c. 38 km northwest of Vryburg], to Setlagole River:

"After crossing the Saltpan... We now entered upon the Chooi Desert, an extensive flat, denuded of trees, broken occasionally by low ridges but still remarkable for its scorched and sterile uniformity. After travelling twenty miles ... we reached Lohoran ..." [p. 49]

Halted for a day at Great Chooi [Stella] "...another extensive salt-lake ..." [p. 51]

From Great Chooi to Meritsane River [Maritzani], 38 km northwest of Mafikeng:

"We had now crossed the unvaried expanse of the Chooi Desert and were entering upon a country which, though remarkable for its sameness of appearance, presented a different character. Immense sandy flats with a substream of lime were uniformly covered with *mokaala* trees [*Acacia erioloba*], low thorn bushes, and long grass interspersed with numerous dry banks... The Siklagole River was 22 miles away ..." [p. 54]

Arrived at the Meritsane River where he had "...the first draught of the putrid waters of the Meritsane... The banks are precipitous, the channel deep, broken and rocky. Clusters of reeds and long grass indicating those spots which retain the water during the hot months. It was with no small difficulty, after crossing the river, that I forced my way through the broad belt of tangled bushes which margined the edge." [p. 56]

Molopo River, c. Mafikeng:

"... we reached the Molopo a few miles below its source. This river ... exhibits a broad shallow bed covered with turf traversed by a deep stream about 10 yards wide, completely overgrown with high reeds. The soil on both sides is black, spread with luxuriant grass and detached clumps of acacias ..." [p. 66]

From the Molopo River to Mosega [Sendelingspos], Marico District, 30 km southwest of Zeerust:

"... across extensive plains covered with grass waving in the breeze which stretched away to the northward and eastward as far as the eye could reach ... [p. 68]

"A large part of the country had been set on fire a few weeks before in order to clear off the withered grass and, the bountiful thunder-clouds having caused the young green blades to make their appearance, large herds of game had been attracted to the spot." [p. 69]

1839 Backhouse, J. (1844)

3 September — From Ramah c. 30 km west northwest towards the Vaal River:

"On some soft limestone there was a remarkable species of *Mesembryanthemum* with pale roundish leaves tubercled with shagreen [perhaps *Titanopsis calcarea*]. A large *Stapelia*, and a *Huernia* were growing on the stony basaltic hills ...

4 September — "... I walked to the top of an adjacent hill ... on which four species of *Aloe* were in blossom. A yellow *Zygophyllum*; a bushy spinous-leaved *Mesembryanthemum* [probably *Ruschia* subgen. *Spinosa*], and a few other plants enlivened the sombre karroo over which we travelled 18 miles." Came to Kameeldoorn Fontein. Into another pass "...where our cattle had a luxurious feed upon fine grass ...

"The Kameeldoorn, *Acacia giraffe* [*Acacia erioloba*], is a handsome tree. In places formerly inhabited by the giraffe the trunks of these trees are naked as high as the giraffe could browse off the branches and elegant compoundly pinnate foliage. In other places, or where the giraffe have been destroyed and the trees are young, they branch to the ground. They now began to be decorated with globular heads of yellow filamentous flowers like those of the more common *doornboom* [*Acacia karroo*] ..."

6 September — 3½ miles east of the Vaal River, near its confluence with the Orange River:

"The tracks of antelopes of various species were numerous from the hills to the river. In some places the land had been trampled by oxen; it was now almost destitute of vegetation except a few stunted little bushes.

"At the verge of the Ky Gariep, Vaal, or Yellow River at a place where the earth was bare for a considerable distance..."

The wagon crossed the ford at Salt Pans Drift. [pp. 441, 442]

10 September — Just west of confluence of Vaal and Orange Rivers, west of Douglas:

"The hill on which we outspanned was very rough... It afforded a little grass and numerous bushes some of which were 10 feet high. The cattle eat with avidity the branches of a willow-leaved *Eriospermum* [possibly the willow tree, *Salix mucronata*, is meant] and the horses some of the smaller shrubs which had composite flowers.

"A beautiful *Aloe*, *Aloe reclinata* [possibly *Aloe claviflora*], with large spikes of pale red flowers was growing here; also a spotted blue *Moraea* [*Moraea simulans*] ...; a species of *Aitonia* [*Nymania*] smaller than *A. capensis*; a red tubular flowered *Loranthus* [probably *Tapinanthus oleifolius*]; and various other plants were in blossom on the limestone." [p. 444]

Spuigslangfontein, *en route* to Griquatown. [p. 445]

11 September — Griquatown:

"Its original name was Klaarwater, Clearwater, taken from its clear and copious spring which not only supplied the town but watered the vale extending toward the Orange River. At the time of our visit a drought which had lasted about 6 years had reduced this spring to a standing pool. The water did not reach the surface by a foot and a half notwithstanding that a few smaller springs which were more superficial, within 2 or 3 miles, continued to flow." [p. 446]

17 September — Left Griquatown for Kuruman:

After 12 miles "... we arrived at a mud pond called Kogelbeen Fontein [24 km north northeast of Griquatown]. The water was about 5 feet from the surface. When the cattle, with some neighbouring herds, had reduced it considerably, it sprung again freely till it reached its former level.

"In the afternoon we proceeded to the place marked on maps, Mimosa Station, and outspanned by a handsome bushy *Acacia* with slender thorns and elegant small leaves of greyish green, probably *Acacia reticulata* [*Acacia karroo*]... The country began to be grassy." [p. 449]

19 September — Danielskuil, 48 km east northeast of Postmasburg:

"The native name of Daniel's Kuil signified Elephants' Reeds but elephants are not now found within a great distance of this place. [p. 450]

"We walked to the Kuil or Den which is a hole in the limestone 30 feet deep, and 10 feet across the mouth, widening a little downward. It was inhabited by pigeons. It was now free from water in consequence of the long drought.

"We travelled about 7 miles ... through a valley having several springs, to Kramers Fontein [c. 5 km north northeast of Danielskuil]... In the hollow through which a brook flows in rainy weather there were a few wild olives and other trees... The ground was undulating and bushy and there was a good supply of grass which was the chief covering of the plains and low hills to the east. [p. 451]

21 September — "We travelled for about 24 miles on grassy country with bushes ... outspanned near some thick isolated bushes." [p. 452]

Koningsfontein, 29 km south southeast of Kuruman:

"A spring forming a large shallow pool, the margin of which, as well as some marshy ground below it, is clothed with reeds. Along the bank are arboreus acacias and large bushes. The place is a great resort for wild animals." [p. 454]

23 September — Nearing Kuruman:

"Our journey today was over similar country to that on which we had travelled lately and through a shallow sandy valley where the grass and bushes were stronger and there were some large acacias. On the rocks a gay *Aloe* was in flower.

"Six hours brought us to Little Kuruman where a stream that would turn a mill issues from under some rocks and there are a few habitations. In another hour we were safely at Kuruman Missionary station ... sometimes called New Lattakoo, is situated by the side of the Kuruman River, a clear permanent stream which rises at the Little Kuruman, disappears at intervals a few miles further from its source and at length is only marked by its course, except in rainy weather. At the Missionary Station ... its margin is planted with willows and its waters are employed in irrigating some fertile gardens and cornlands. Below these there is a piece of marshy ground on which rice has sometimes been grown ...

"Behind the houses there are several patches of the low, thorny *Acacia lattaku* [*Acacia tortilis* subsp. *heteracantha*]... Wood is so scarce that the timber used for the roof of the chapel was brought from the neighbourhood of Mosega, distant about 200 miles [Sendeling's Post, Marico District]." [p. 455]

24 September — From Kuruman to Motito, 10 miles west of Takoon, or Old Lattakoo:

"… over flat sandy grassy country ... covered with bushes and small trees in some places, especially near pools ..." [p. 457]

30 September — Little Kuruman:

"... we went into the little cave out of which the rivulet flows. It is an opening like a passage in the upper limestone. Broken bones were lying in it as if some wild beast occasionally visited it. There were fish in the stream for about 20 yards up the opening. The place was evidently the resort of the Cape Otter *Lutra ingungius* [sic; *Aonyx capensis*]. Bats were the most numerous inhabitants ... the rocks were very bushy. There were some reeds where the water which soon spread itself into a large pool emerged ..."

1 October — Through the Kammani Pass [Gamohaan, 7 km north northwest of Kuruman]:

"… winding among stony hills generally covered with grass but in some places bushy with here and there a *kameeldoorn* tree [*Acacia erioloba*]. Woods of *kameeldoorn* were visible to the westward in the direction of the Langeberg Mountains."

Reached Kosi Fontein [Khosis]: "…to a pool of water having seen none since the previous afternoon." [p. 462]

2 October — From Kosi Fontein to Blinkklip:

"Our route from this place lay over stony bushy hills and sandy flats all abounding with grass growing in tufts ...

The stiff bushy *Acacia robusta* with hooked thorns abounds in this part of the country. It was now covered with a profusion of globular heads of fragrant white flowers which rendered it sufficiently conspicuous to be avoided in the dark. Otherwise travelling amongst it would have been difficult." [p. 464]

4 October — Blinkklip [Tsantsabane]:

"The country was of similar character to that we had travelled over since coming through the Kammani Pass. Several species of *Mahernia* [*Hermannia*] were in flower on the plain on which the large double-thorned capsules of *Uncaria procumbens* [*Harpagophytum procumbens*], the grapple plant, were scattered. This plant is said to have large beautiful purple blossoms.

"On low stony hills, two if not three species of *Rhigozum* were in flower. These are bushes of about 4 feet in height with small foliage and handsome yellow, white, or pinkish trumpet-shaped flowers, an inch and a half across. Some of them, especially the yellow one, *Rhigozum trichotomum* are sometimes beautifully marked with dark lines in the throat of the tube [actually the yellow is *Rhigozum obovatum* and the white and pink, *R. trichotomum*]." [p. 465]

5 October — From Ongeluks Fontein [29 km northwest of Griquatown] to Moses Fontein [13 km northwest of Griquatown] and *en route* to Griquatown:

"The road from Moses Fontein lay over stony hills ... covered with bushes which admitted a person to walk between them. Many of these were in blossom, as well as numerous plants of humbler growth." [p. 466]

12 October — From Griquatown to Reeds Drift on the Orange River via Groote Doorn, down the Sand River to Bees Fontein [Beespan is 31 km south of Griquatown and 16 km northwest of Reed's Drift]:

Camped at Bees Fontein "… under the lee of a clump of *kameeldoorns* [*Acacia erioloba*]... Some of the low hills about this place ... were decorated with gay, yellow and white bushes of *Rhigozum* [*R. obovatum* and *R. trichotomum* respectively]; many other shrubs were now in blossom."

Reached Reed's Drift "…among the bushes near the river which, at this place, is broad and thickly margined with willows and other trees." [p. 472]

14 October — Read's Drift:

"By the side of the river there was an arborescent bush allied to *Rhamnus* with shining leaves and hooked prickles [*Ziziphus mucronata*]. It is common also in Caffraria and in various parts of the Colony. This, with the Gariepine willow [*Salix mucronata*] and a large trifoliate *Rhus* [probably *Rhus pyroides*], are the principle trees on the banks of this great drain of southern Africa.

"Among the stones of the river are a few fossil Madrepores. The limestone of Griqua Town had been said to contain fossils of this tribe but they are only pipe-like encrustations which have surrounded the bases of Reeds which have grown in the course of the

water that formerly flowed from the spring. It incrusted not only the reeds, *Phragmites communis* [*Phragmites australis*], but also a *Chara*, both of which were still growing in the watery places near the encrustations.

"In sandy places all over this part of Africa and especially on the banks of this river there are two species of *Tribulus*. One with blossoms as large as a shilling, of a lively pale yellow [probably *Tribulus zeyheri*]."

On a trip from Read's Drift to Brakke Fontein [? c. 3 km north of Read's Drift], north of the Orange River the veld was "... very poor consisting of sandy flats with little grass, and a thin sprinkling of bushy plants... We outspanned at a clump of *doornbooms* [*Acacia karroo*] ... [p. 474]

15 October — "The oxen travelled far for grass. They scent it at a great distance when it is to windward... In the middle of the forenoon we came to a pool of water with grass around it... We next reached Orange River again. The willows were fine on the river bank and there was fresh grass under them ... a red poppy with stout hairs on the stem, *Papaver aculeatum*, and a horsetail weed, *Equisetum elongatum* [*Equisetum ramosissimum*], were growing ... outspanned on an elevated sandy place where there was plenty of grass and a few scattered little trees of the grey-leaved *Acacia* [*Acacia haematoxylon*], the foliage of which resembles some species of fern of the genus *Glichenia* [*Gleichenia*]."

16 October — Zwarte River [? in Herbert District], north side of the Orange River:

Up a deep kloof "... where there was water and young reeds. The cattle and horses browsed freely on the reeds and some young grass. It is a rare thing for cattle to die from repletion in this part of southern Africa except when the grass springs rapidly after rain. The grass in this part of the country is in patches and generally in separate tufts, but where it is unbrowsed, travelling cattle can sometimes get a good supply." [p. 475]

1844 Cumming, R.G. (1850)

January — North of Duiwenaarsdrift on the Orange River, Herbert District:

Trekked north to a saltpan. "The general character of the country became richer after crossing the Orange River. The plains were adorned with a more luxuriant coating of grass and in greater profusion; and the small karroo bushes were replaced by others of fairer growth, and of a different variety. Most of these yielded a strong aromatic perfume but more particularly when the ground had been refreshed by a shower of rain... Our march lay through extensive undulating country... Mountain ranges bound the view on every side and I could discover by means of my spyglass that strips of forests of mimosa [*Acacia*] stretched along their bases. The saltpan to which we had come was of an oval shape and about a quarter of a mile in diameter. [1: 134, 135]

21 January — "I discovered a fountain of excellent water but very strongly impregnated with saltpetre. This fountain ... is termed by the Boers 'Cruit Fonteyn' or 'Powder Fountain', its waters resembling the washings of a gun-barrel, but the Bechuanas more elegantly call it 'Stink Fonteyn'." [1: 136]

24 January — From Stink Fonteyn to the Vaal River, a distance of "...about 25 miles":

"The river here is very beautiful; broad and rapid streams are succeeded by long, deep, and tranquil pools, termed by the natives 'zekoe ychots' [*seekoei-gate*] signifying sea-cow or hippopotamus holes... The margin of the Vaal River, like the Orange River is richly clad with dense groves of various evergreen trees among which drooping willows predominate, whose long waving fringes dip gracefully into the limpid waters as they glide along in their seaward course. All along the banks of both these rivers huge trunks of trees are strewn, having been borne thither by the mighty floods to which they are annually subject. A short distance above my position was a beautiful island adorned with trees of the richest verdure ..." [1: 151]

Rode northeast from his camp on the Vaal River. "We found the country covered with bushes of which the majority were of a most impracticable description reminding me of a kill-devil, an implement used in angling, they being covered in thorns on the fish-hook principle. This variety of *Mimosa* [*Acacia mellifera*] is waggishly termed by the Boers '*vyacht um bige*' [*wag-'n-bietjie*] or wait-a-bit thorns as they continually solicit the passing traveller not to be in a hurry." [1: 152]

30 January — Riet River, possibly not far from its confluence with the Vaal River:

"... trekked some miles farther up the Vaal and encamped opposite where the Riet or Reed River joins it. The stream here is extremely beautiful being about 150 yards in breadth with sloping banks richly adorned with shady evergreen groves and fringed with lofty reeds, a never-failing prognosticator of a sleepless night, a virulent species of mosquito being always abundant where reeds are met with." [1: 155]

23 February — Up Riet River on southern bank, c. 40 km east northeast of Douglas:

"The breadth of the Riet River here is about 30 yards ... flows westward, joins the Vaal River opposite Campbell's dorp.

"On the third day we crossed below a picturesque waterfall... I left the Riet River on my right and held on through open sandy country richly covered with abundance of sweet grass ..." [1: 173]

27 February — North of Riet River, c. 30 km south of Kimberley:

"I had now reached the borders of a country differing entirely from any I had hitherto seen. The sweet grass which had heretofore been so abundant became very scarce, being superseded by short, crisp, sour pasturage which my horses and cattle refused to eat... The plains ... were pastured short and bare by the endless herds of game which from time immemorial had held possession of these extensive domains. Although intersected occasionally by mountain ranges, these plains often extend to amazing distances without any landmark to break the monotony of their boundless and oceanlike expanse. At other times the eye is relieved by one or other abrupt pyramidal or cone-shaped hill ... [1: 178]

"Dry and sunbaked vleys, or pans, covered with a crystalline inflorescence... This vast tract of bare, sour pasturage which is peculiarly the inheritance of the black wildebeest, the springbok, and the blesbok, but more particularly the latter, occupies a central position, as it were, in southern Africa ..."

Went south again and arrived back at Philippolis on 2 April 1844.

8 May — From Campbell's Dorp to Daniel's Kuil:

"The country was level and uninteresting... In parts the country was covered as far as I could see with a species of bush, averaging about 9 feet in height, having a grey leaf and bunches of small grey blossoms yielding a very sweet and powerful aromatic perfume [*Tarchonanthus*].

"In the evening we continued our march to Kramer's Fonteyn, a very powerful fountain whose waters issue hot from the earth as if they were mixed with boiling water.

9 May — "Leaving Kramer's Fonteyn on the 9th we held for Koning, a very distant water on the road to Kuruman." [1: 222, 223]

Koning, 29 km south southeast of Kuruman:

"This was a vley of fine spring-water about 600 yards in length, densely covered with lofty reeds from 12 to 15 feet high. The place is said to be never without lions."

11 May — From Koning to Kuruman:

"On our left our view was bounded by the Kamhanni Mountains, an extensive rocky chain. In every other direction a vast endless plain extended as far as the eye could strain. The plains were covered with rank yellow grass interspersed with clumps of grey-leaved bushes ... [1: 224]

12 May — "On the following day we reached Kuruman, or New Litakoo, a lovely green spot in the wilderness, strongly contrasting with the sterile and inhospitable regions by which it is surrounded... These gardens are irrigated with almost liberal supply of water from a powerful fountain which gushes forth, at once forming a little river, from a subterranean cave which has several low narrow mouths but within is lofty and extensive. This cave is stated by the natives to extend a very great distance under ground ..." [1: 225]

15 May — Left Kuruman:

"... in a northeasterly course through a heavy sandy country of boundless level plains stretching away on every side, covered with rank yellow grass which, waving in the breeze, imparted the idea of endless fields of ripe corn ... following morning we pursued our journey through the same description of country, varied however with detached clumps of thorny mimosa [*Acacia*]." Met a huge swarm of locusts. Had crossed the Matluarin River [Matlhwaring River] "...an insignificant stream [26 km northeast of Kuruman]." [1: 227]

17 May — Motito, Vryburg District:

Describes kraals there: "Each wigwam is surrounded by a hedge of wickerwork while one grand hedge of wait-a-bit thorns surrounds the entire kraal protecting the inmates from lions and other animals." [1: 230]

From Motito to Klein Tshwaing:

After leaving Motito camped "...in an extensive forest of grey and ancient-looking cameeldorn trees [*Acacia erioloba*]. These were the finest I had yet seen in Africa, each tree assuming a wide-spreading and picturesque appearance. They were detached and

in groups, like oaks in an English deer park. Many of them were inhabited by whole colonies of the social grosbeak [social weaver, *Philetarius socius*]... At dawn on the following morning we continued our march through the venerable cameel-dorn forest... Having proceeded about six miles emerging from the first we entered once more on a wide-spreading open country covered in some parts with bushes and in others only with grass. Another hour brought us to Little Chooi, a large saltpan where we obtained water for ourselves and our cattle from a deep pit made by men." [1: 233]

20 May — Between Little Chooi and Great Chooi [Stella]:

"We passed through level country covered with detached bushes." [1: 235]

22 May — Great Chooi, 49 km north northeast of Vryburg:

"... reached Great Chooi, a very large saltpan at present full of water... Continuing our march we entered a new description of country, boundless open plains succeeded by endless forests of dwarfish trees and bushes, the ground slightly undulating and covered with a variety of rich grasses and aromatic herbs... At sundown we encamped on the Siklagole River [Setlagoli, 68 km south southwest of Mafikeng] a periodical stream, in the gravelly bed of which fine spring-water could be obtained by digging." [1: 236]

23 May — From near Siklagole to the Kurrichane Mountains:

"The country through which we passed resembled a vast interminable park, being adorned with a continued succession of picturesque dwarfish forest trees, single and in groups. Such, with the exception of a few grassy open plains, is the character of the country from Siklagole as far as the mountains of Bakatla ...

31 May — "...we reached the Kurrichane Mountain range [22 km north of Zeerust]."

Passed through these mountains to Mabotsa [Gopane, Marico District], 40 km northwest of Zeerust.

5–7 October — Booby, c. 60 km north northwest of Kolobeng, Botswana. [1: 237]

13 November — Between Booby and Sesetabie, going south:

"... the damaged axle-tree broke short across... We outspanned and, having unloaded the waggon, we put a support under it and took out the forestell, and I then set about making a false axletree of tough thornwood. [2: 58]

17 November "... he axletree which I had made burst and, the linchpin giving way, the wheel rolled off ... before night I had finished another axletree and fixed it in place."

Arrived at the mission station at Bakatla, where David Livingstone and his wife lived. [2: 60]

7 December — Between Koning and Danielskuil:

"Between Koning and Daniel's Kuil occur two interesting caves, long famous as affording a residence and protection to marauding hordes of Bushmen. The larger of these caves is situated on the west side of the waggon track. It is of great size and contains a perpetual fountain of delicious water ... [2: 76]

"The other cave is situated to the eastward of the waggon-track ..." [2: 77]

1846 Cumming, R.G. (1850)

22 May — Lotlokane [Lotlhakane, Mafikeng District]:

"I did not find the vast herds of game congregated here as usual, water being everywhere abundant: the grass over the whole country was remarkable, being much higher than my oxen.

23 May — "I now rode forward to the Molopo which I made about one mile below the drift. This darling little river is here completely concealed by lofty reeds and long grass which densely clothe its margin to a distance of at least a hundred yards...On each side Rietbuck were very abundant." [2: 158, 159]

1847 Cumming, R.G. (1850)

15 January — Meritsane [Maritzane, 38 km northwest of Mafikeng] Fountain and on to Mahura's Kraal [Taung, 70 km south of Vryburg], near the sources of the Harts River:

"We now held on the Meritsane (rendered famous among sportsmen by Harris's glowing description of its charms) and found it full of water."

En route to Mahura's "... through a fine grassy country." [2: 292, 293]

28 January — From Mahura's Kraal towards the Vaal River:

"We ... held on through boundless open plains. As we advanced, game became more abundant. In about two hours we reached a fine fountain beside which was a small cover of trees and bushes which afforded an abundant supply of firewood... The country was thickly covered with immense herds of game consisting of five or six thousand head of game in sight of me as I sat at breakfast." [2: 296]

29 January — In about 3 hours reached the Vaal River. [2: 297]

3 May — From Mahura's Kraal northwards:

"We ... resumed our march into the far interior steering our course across the boundless open plains which lie to the northward of the Hart River.

5 May — "... we halted beside a small fountain in a slightly elevated part of the country where the grass was various, rank, and abundant. The country to the west was not frequented by game and here the grass was tall and rank, and covers of considerable size of thorntrees and greyleaved bushes [*Tarchonanthus*] were scattered over the landscape." [2: 305, 306]

12 May — Maritzani River:

"On the 12th I drew up my waggons on the north bank of the famous Meritsane. Here I had the pleasure to find that, owing to a large tract of the country having been burnt by the Bakalahari some months previously and favoured by the rainy season, a rich and verdant crop of young grass had sprung up giving the undulating plains a fresh and vernal appearance. I was delighted on beholding this because I knew that it would have the effect of attracting the game hither from the surrounding parts ... [2: 314]

I entered upon a level park thickly adorned with groves of thorntrees on which were grazing large herds of blue wildebeests, zebras, hartebeests and springboks." [2: 320]

1852 Livingstone, D. (1857)

Kuruman:

"The permanence of the station called Kuruman depends entirely on the fine ever-flowing fountain of that name ... it usually issues at a temperature of 72 degrees Fahr... I could not detect any diminution in the flow of this gushing fountain during my residence in the country; but when Mr Moffat first attempted a settlement here, 35 years ago, he made a dam 6 or 7 miles below the present one and led out the stream for irrigation where not a drop of the fountain-water ever now flows. Other parts, fourteen miles below the Kuruman gardens, are pointed out as having contained, within the memory of people now living, hippopotami, and pools sufficient to drown both men and cattle.

"The failure of the water must be chiefly ascribed to the general desiccation of the country, but partly also to the amount of irrigation carried on along both banks of the stream at the mission station. This latter circumstance would have more weight were it not coincident with the failure of fountains over a wide extent of country.

"Without at present entering minutely into this feature of the climate, it may well be remarked that the Kuruman District presents evidence of this dry southern region having, at no very distant date, been as well watered as the country north of Lake Ngami is now. Ancient river-beds and watercourses abound, and the very eyes of fountains, long since dried up, may be seen ... [p. 110]

"It is interesting to observe the industry of many Boers in this region in making long and deep canals from lower levels up to spots destitute of the slightest indication of water existing beneath, except a few rushes and a peculiar kind of coarse reddish-coloured grass growing in a hollow which, anciently, must have been the eye of a fountain but is now filled up with soft tufa. In other instances the indication of water below consists of the rushes growing on a long sandy ridge a foot or two in height instead of in a furrow. A deep transverse cutting made through the higher part of this is rewarded by a stream of running water. The reason why the ground covering this water is higher than the rest of the locality is, that the winds carry quantities of fine dust and sand about the country, and hedges, bushes and trees cause its deposit. The rushes in this case perform the part of the hedges and the moisture rising as dew by night fixes the sand securely among the roots, and a height instead of a hollow is the result ... [p. 111]

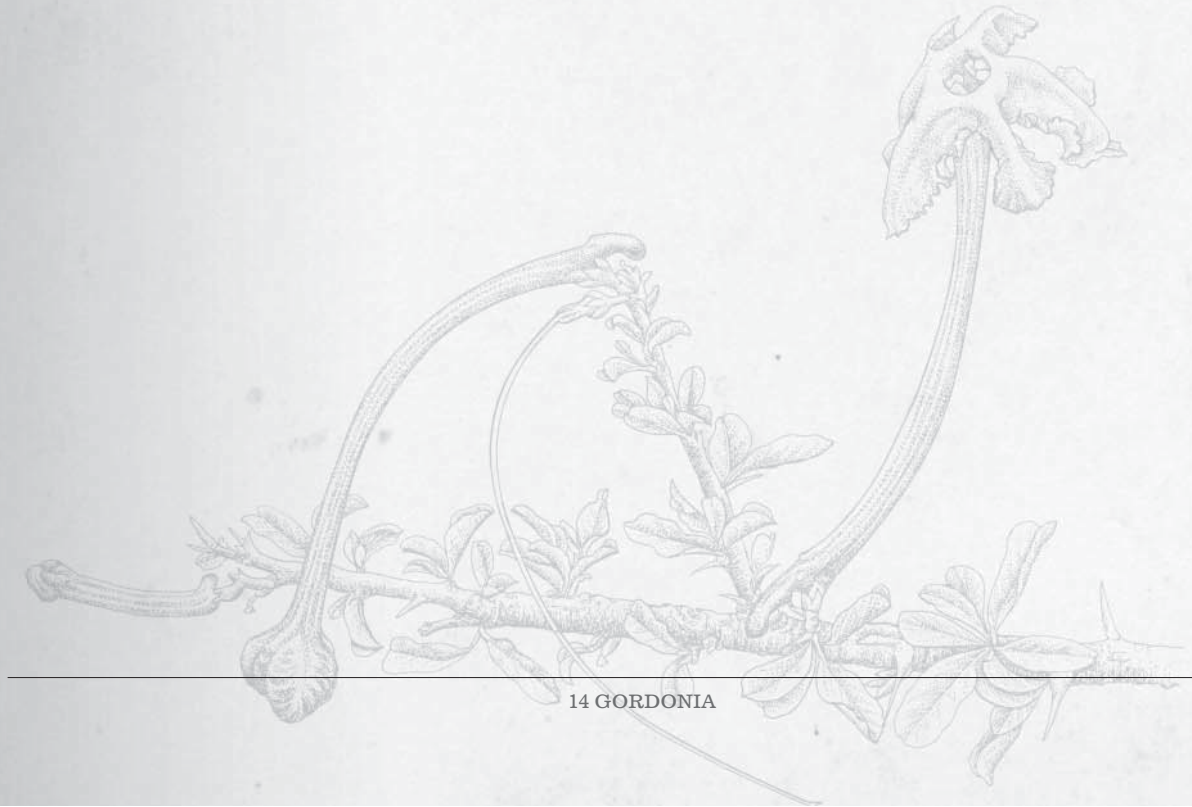
"The aspect of this part of the country during most of the year is of a light yellow colour; for some months during the rainy season it is of a pleasant green mixed with yellow. Ranges of hills occur in the west but east of them we find hundreds of miles of grass-covered plains. Large patches of these flats are covered with white calcareous tufa resting on perfectly horizontal strata of trap. There the vegetation consists of fine grass growing in tufts among low bushes of the 'wait-a-bit' thorn, *Acacia detinens* [*Acacia*

mellifera], with its annoying fish-hook-like spines. Where these rocks do not appear on the surface the soil consists of yellow sand and tall coarse grass growing among berry-yielding bushes named *moretloa*, *Grewia flava*, and *mohtla*, *Tarchonanthus*, which has enough of aromatic resinous matter to burn brightly, though perfectly green. In more sheltered spots we came on clumps of the white-thorn mimosa *Acacia horrida* [*Acacia karroo*], also *A. atomiphylla* [*Acacia haematoxylon*], and great abundance of wild sage, *Salvia africana* [probably *Salvia disermas* is meant here], and various leguminosae, *Ixias* [identity uncertain], and large flowering bulbs: the *Amaryllis toxicaria* [*Boophane disticha*] and *A. brunsvigia multiflora* [either *Ammocharis coranica* or *Brunsvigia radulosa*] (the former a poisonous bulb) yield in the decayed lamellae a soft silky down, a good material for stuffing mattresses.

"In some few parts of the country the remains of ancient forests of wild olive trees, *Olea similis* [*Olea europaea* subsp. *africana*] and of the camel-thorn, *Acacia giraffe* [*Acacia erioloba*] are still to be met with; but when these are levelled in the proximity of a Bechuana village no young trees spring up to take their places. This is not because the wood has a growth so slow as not to be appreciable in its increase during the short period that it can be observed by man, which might be supposed from its being so excessively hard; for having measured a young tree of this species growing in the corner of Mr Moffat's garden near the water, I found that it increased at the rate of a quarter of an inch in diameter annually during a number of years. Moreover the larger specimens which find few or no successors, if they had more rain in their youth, cannot be above two or three hundred years old.

"It is probable that this is the tree of which the Ark of the Covenant and the Tabernacle were constructed as it is reported to be found where the Israelites were at the time these were made. It is an imperishable wood while that usually pointed out as the 'shittin' (or *Acacia nilotica*) soon decays, and wants beauty.

"In association with it we always observe a curious plant named *ngotuane* which bears such a profusion of fine yellow strong-scented flowers as quite to perfume the air. This plant forms a remarkable exception to the general rule that nearly all the plants in the dry parts of Africa are scentless or emit only a disagreeable odour. It moreover contains an active poison; a French gentleman, having imbibed a mouthful or two of an infusion of its flowers as tea, found himself rendered nearly powerless. When mixed with vinegar, the poison may be drunk with safety, while, if only tasted by itself, it causes a burning sensation to the throat. This gentleman described the action of the vinegar, when he was nearly deprived of power by the poison imbibed, to have been as if electricity had run along his nerves as soon as he had taken a single glassful. The cure was instantaneous, and complete. I had always regretted want of opportunity for investigating this remarkable and yet controllable agent of the nervous system. Its usual proximity to camel-thorn trees may be accounted for by the probability that the giraffe, which feeds on this tree, may make use of the plant as a medicine [identity uncertain; the description suggests *Rhigozum brevispinosum* or *R. obovatum*, but neither has been identified as narcotic or otherwise toxic]." [p. 112]



15 LESOTHO

1839 **Backhouse, J. (1844)**

10 July Thaba Bosigo, 20 km east southeast of Maseru:

"Some of them smoke *dakka* or wild hemp, *Cannabis indica*, which is very stupefying and pernicious. This morning I saw a man smoking it in a rude pipe stuck into the side of a cow's horn which was nearly filled with water through which he drew the smoke..." [p. 372]

12 July From Thaba Bosigo to Plaatberg [Platberg], 3 km south of Ladybrand:

"The country between Thaba Bossiou and Plaatberg is a continuance of grassy vales between sandstone hills...the slopes of the hills abound with villages of the Basutu, these people esteeming the plains unhealthy... Some of the kloofs of this part of the country produce a tall stout reed [*Phragmites australis*] resembling *Arundo donax*; it is highly useful to the inhabitants." [p. 383]

16 NORTHERN PROVINCES

1836 Harris, W.C. (1839)

October — Mimori [Malimani] River, Marico District, 27 km south southwest of Zeerust:

Halted at the Mimori River "…only 5 miles from Mosega... A chain of lakes to the left of our camp contained a herd of wild buffaloes whose formidable heads...were protruding from the water and the waving sedges."

From Mosega to the Mariqua [Marico] River, northern Marico District:

"After travelling about 5 miles over undulating downs covered with luxuriant grass, we descended into a lovely fertile valley, in form resembling a basin, bounded on the north and northeast by the Kurrichane [Kaditshwene] range and containing the sources of the Mariqua River." [p. 71]

Mimori, near Mosega Mission [Sendelings Post]:

"...we rode through a pass in the hills behind the mission houses towards the Mimori Lakes... The plains here are broken by low ranges of stony hills with clumps of *Acacia*. A large herd of buffaloes...took to the lakes into which we followed, the water reaching up to the horses' girths and the reeds far above our own heads." [p. 74]

22 October — Left mission near Mosega:

"On the north and northeast the Kurrichane range of mountains rose in majestic grandeur..." Outspanned "…on the bank of one of the numerous streams that here form the source of the Mariqua... A spacious and level valley hemmed in on three sides by the skirting hills of the Kurrichane range, was intersected by three or four of these rivulets whose serpentine course could be traced by the sedges that rose high above the banks... [pp. 92, 93]

"In the course of two hours the wagons had reached the termination of the plain and were beginning to ascend the ridge which bounds the valley of Mosega. We shortly afterwards entered a pass, or gap, which conducted us between two ranges of the Kurrichane hills. The slopes on either side were covered with stately trees from which depended clusters of moss and festoons of various parasitic plants." Had travelled some 30 miles from Mosega and were 3 hours travel from Kurrichane town, where they called. [p. 94]

From Kurrichane Village to Kapain [eGabeni], 65 km north northeast of Zeerust at Silkaats Kop:

"The road became almost impassable - large trees overhung the way and threatened the destruction of the waggon tents...the jungle becoming more and more intricate as we advanced. Game-traps and pitfalls were to be seen through every avenue, many of the thorn fences extending across the path and impeding the waggons until cut away with a hatchet... I emerged from the forest...into a wide plain..."

Now not more than 2 hours from Kapain. [p. 96]

29 October — Mariqua River:

"...we contrived...to reach the Mariqua about 30 miles below the point where it issues from the mountain chain. The approach to this small but beautiful river is picturesque in the highest degree. Emerging suddenly from an extensive wood of magnificent thorn-trees, we passed a village surrounded by green corn-fields, and then descended...on to a lawn covered with a thick and verdant carpet of the richest grass bounded by a deep and shady belt of the many-stemmed *Acacia* [possibly *Acacia karroo*]. These beautiful trees margined the river on either hand as far as the view extended, and, clothed with a vest of golden blossoms, diffused a delicious odour around.

"Single *mokaalas* [*Acacia erioloba*] and detached clumps of slender mimosas [possibly *Acacia karroo*], hung with festoons of flowering creepers, heightened the effect, screening with their soft and feathery foliage considerable portions of the refreshing sward...

"As we threaded the mazes of the parasol-topped acacias [possibly *Acacia tortilis*] which completely excluded the sun's rays, a peep of the river itself was unexpectedly obtained. A deep and shaded channel about 20 yards in breadth with precipitous banks overgrown with reeds, was lined with an unbroken tier of willows. These extended their drooping branches so as nearly to entwine... A plain on the opposite bank...was dotted over with *mokaala* trees..." [pp. 126, 127]

End October — From Mariqua River to Tolaan River [Tolane or Toelanie River, 78 km west northwest of Rustenburg]:

"The country through which we passed this day was more thickly wooded than any we had seen since leaving Kurrichane... After travelling upwards of 15 miles...we arrived at the Tolaan River, a deep, narrow and rocky channel containing several extensive pools... The bed was perfectly dry when we crossed... We halted at an isthmus formed by a double bend in the river; a grove of large *Acacia* trees proving an agreeable shelter." [p. 134]

Tolaan River: "The country here was generally undulating, extensive *Mimosa* [*Acacia*] groves occupying all the valley as well as the banks of the Tolaan River which winds among them on its way to join the Mariqua. [p. 140]

"...the whole of the extensive plain being sprinkled with *mokaala* trees [*Acacia erioloba*], mat rushes, and thistles..." [p. 142]

31 October — From Tolaan River southeastwards to the Simalakate River, *en route* towards Kapain:

"Leaving the Tolaan River we passed between two ranges of hills and travelled nearly southeast over a rugged country strewed with loose boulders and thickly covered with low bush... At noon we unyoked in a well-watered valley covered with turf and abundantly cultivated... [pp. 142, 143]

"Late in the afternoon we halted on the banks of the Simalakate, a deep and tranquil stream margined by reeds and rushes." [p. 144]

1 November — Simalakate River:

"After skirting the deep sedgy channel of the Simalakate several miles in quest of a ford, we arrived at a point where it takes a sudden bend to the eastward... We unyoked in an extensive *Mimosa* [*Acacia*] grove which rivalled in beauty all that we had hitherto seen. The airy parasol-shaped foliage was intertwined above our heads in such a manner as to be perfectly impervious to the sun's rays, the constant and delicious shade it afforded having induced the growth of a luxuriant carpet of grass spangled with numerous gaudy flowers... [p. 147]

"Here the scenery was beautiful. Three cascades...within a quarter of a mile of each other, flanked by stately timber trees of splendid growth and graceful foliage...leaning... over the limpid stream...

"We resumed our journey about noon. The route towards an opening in the mountains led us nearly due south through an exceedingly rich and fruitful part of the country abounding in verdant savannahs and hamlets around which large droves of cattle were indulging in luxuriant pasture." [p. 148]

1 November — Cashan Mountains [Magaliesberg], on the north side, possibly north of Rustenburg:

"...into a fine valley...entered a grand and extensive forest with occasional open spots... Here...were *Mimosa* trees [*Acacia*] torn up by the roots and sturdy branches, rent from the parent stock overhung the path [by elephants]... At the end of the forest...under one of the secondary ranges of the Cashan mountains on the banks of the Bagobone River. The Mountains...clothed in parts with luxuriant verdure, their steep rocky sides besprinkled in others with occasional light bushes." [pp. 151, 152]

2 November — From Bagobone River to the Ooli [Crocodile] River:

"Three hours travelling between two ranges of the Cashan mountains brought us to the Ooli River, a pretty little stream... The banks of the Ooli are precipitous and clothed with extensive *Mimosa* [*Acacia*] groves... In order to drive the elephants into the plain, preparatory to hunting them next day, we set fire to the grass..." [p. 157]

Came to the Massellan River [? Marikana River, 25 km northwest of Brits] "...which, flowing through the mountains, joins the Lingklin, a tributary of the Limpopo."

5 November — "We followed the traces of elephants along the sides of the mountains for miles through stupendous forests." [p. 162]

6 November — Between the Sand [Sant] and Lingklin Rivers in the Cashan Mountains:

"...we...pursued the track...for eight miles over a country presenting every variety of feature. At one time we crossed bare stony ridges, at another threaded the intricacies of shady but dilapidated forests; now struggling through fields of waving grass and again emerged into open downs. At length we arrived amongst extensive groups of grassy hillocks covered with loose stones interspersed with streams and occasional patches of forest in which the recent ravages of elephants were surprising... [p. 168]

"...we found that a second valley had opened upon us surrounded by bare stone hills and traversed by a thinly-wooded ravine" where he estimated that "...no fewer than 300 [elephants] here within the scope of our vision." [p. 169]

First week in November — Limpopo River, northern Rustenburg District:

"Our next movement brought us to the source of the Oori or Limpopo - the Gareep of Moselekatse's dominions. Fed by many streams from the Cashan range...rolling its deep and tranquil waters between tiers of weeping willows... [p. 181]

"The country now literally presented the appearance of a menagerie..." [Elephant, rhino, buffalo, etc.] [p. 182]

The Limpopo River "...watering a soil rich in luxuriant vegetation. Forests producing timber of finest growth...and meadows throughout decked with blossoming geraniums and with an endless profusion of gayest flowers." [p. 186]

c. mid-November — Eastward from the Limpopo River in the Magaliesberg, near Rustenburg:

Harris moved eastward and passed what he called the highest point of the range "...the sources of the Bekane and Umpeban here... To the southward [the country] becomes very open and level with occasional clumps of forest, but although the black soil continued, the vegetation was becoming visibly less and less abundant." [p. 187]

Machachochan River [Hex River, c. 45 km northeast of Rustenburg]. [p. 193]

19 November — In good giraffe country "...with a firm wooded plain before me I counted 32 of these animals [feeding] in a *Mimosa* [*Acacia*] grove." [p. 195]

Giraffe: "Although very extensive, the range of its habitat is exclusively confined to those regions in which the species of *Mimosa* named *mokaala*, or kameel-doorn [*Acacia erioloba*], is abundant, the leaves, shoots and blossoms of that tree forming its ordinary food." [p. 200]

End November — Near Marico/Limpopo confluence:

"As we approached the junction of the Mariqua with the Limpopo, in about latitude 2410, bushes usurped the place of trees, the country daily became less inviting and the game in consequence less and less abundant." [p. 202]

Early December — Travelling south through the gap in the Cashan foothills, near Rustenburg:

"Every feature of this part of the country was beautiful beyond description. Grassy meads, spangled with brilliant flowers extended between rich masses of grove and forest. Stately trees were festooned with clambering vines, or scented creepers. Here the gorgeous *Aloe* reared its coral tufts above the olive brake, and there the meadows were flushed with the crimson or lilac hues of the poppy [identity uncertain] and the *Amaryllis* [unidentified Amaryllidaceae]." [p. 212]

16 December — Left Cashan Mountains going south:

"...having crossed a small range of hills which were all that divided us from the vast plains of the Vaal River, entered upon a new region totally different in character from all that we had hitherto traversed. [p. 220]

"As the day broke, boundless meads kept extending to the eye, covered with luxuriant herbage and enamelled with rich parterres of brilliant flowers..." [p. 221]

Along Chonapas River [Mooi River] to the Vaal River:

"...on the banks of the beautiful Chonapas a deep gurgling stream tenanted by hippopotami and meandering between clusters of sighing reeds... Not a dry twig was to be obtained in the whole country and it was found necessary to break up one of our boxes in order to boil the water and dress some fish that had been taken. [p. 222]

"A verdant meadow on which numerous elands were grazing in herds like tame cattle... traversed, throughout its length, by the silver stream of the tortuous Chonapas winding... between fringes of waving bulrushes..." [p. 226]

19 December — Vaal River: "At the spot where we reached it the breadth did not exceed 150 yards but the fresh deposition of rubbish on the banks showed that water had very lately risen at least 10 feet above its present level." It was very muddy and "...literally teeming with hippopotami." [pp. 229, 230]

20 December — Having crossed the Vaal, Harris moved down the bank of the river for several kilometres:

"The first day we travelled over an interrupted plain strewed with small land tortoises and covered with a profusion of gay flowers, red, yellow, purple, and crimson. Amongst these the gaudy marigold [unidentified Asteraceae] was predominant, growing sometimes singly and at others spreading out into beds of several acres in extent. A sultry and tedious march of nine hours brought us at length to a bog, with a scanty pool of excessively fetid mineral water which nothing but the direst necessity could have induced

us to taste. The number of animals collected in the vicinity first drew our attention to this treasure which was surrounded by a clump of bulrushes [*Typha capensis*] with a strong calcareous incrustation at their roots... [p. 234]

"The face of the country here, so beautifully clothed with herbage and flowers, would appear to be kept fresh and verdant by these nightly showers and humid mists rather than by the partial showers which, few and far between, are wont to visit it. [p. 235]

"After we had advanced 25 miles a long line of karree trees [*Rhus* sp.] darkening the horizon proclaimed our approach to some hidden stream..." [p. 236]

23 December — "On 23 December, having skirted the river about 5 miles we...found ourselves at the embouchure of one of its principal tributaries, the Nama-Hari, or Donkin... About sunset, having advanced 10 miles up the right bank of the Nama-Hari without discovering a ford...crossed to the southern bank of the Nama-Hari [Wilge River at Vaaldam, Free State]." [p. 237]

1844 Cumming, R.G. (1850)

6 June — North of the Kurrichane Mountains [Kaditshwene], 27 km north of Zeerust:

Came to "...a lofty detached mountain, the highest of all in the country. The mountain is called by the Bechuanas the Mountain of the Eagles."

Southward of this he mentions a "...level forest" with vultures perched "...on the grey and weather-beaten branches of the loftiest trees in the forest." [1: 255]

Continued northwards "...through a country of increasing loveliness. Beautifully wooded hills and valleys...with rivulets of crystal waters in the valleys."

He was heading for Sesetabie, "...an extremely bold and picturesque pass in the lofty mountains in which the 'Kouloubeng' [Kolobeng] or 'river of wild boars', a tributary of the Ngotwani [Notwani] takes its rise."

Climbing a high mountain of the chain, he saw "...beautifully wooded plains and mountains stretched away on every side to an amazing distance." [1: 258]

Went through Sesetabie gorge.

The last-named places were probably in the Bakhatla Reserve, southeastern Botswana, in the vicinity of Gaberones. [1: 261]

29 October — Forests north of Kurrichane Mountains, north of Booby, 27 km north of Zeerust:

"...our progress was opposed by an interminable forest where the trees stood so close together as often to bar the possibility of the waggons passing betwixt them. On these occasions it became imperative upon me to turn pioneer and in the course of the day I felled with the axe not less than fifty trees..."

30 October — "...through heavy sand and interminable forest where it was necessary to keep the axes in constant operation... The sand became, if possible, worse than ever and the waggons repeatedly stuck fast. We held through a jungle of the most virulent wait-a-bit thorns which reduced my waggon-sails to ribbons... [2: 52]

31 October — "...got clear of the desert and reached a strong perennial fountain situated in a finely-wooded valley on the northern borders of the mountain country, extending to the southward with little intermission as far as the chain of the Kurrichane range." [2: 53]

1846 Cumming, R.G. (1850)

18 June — Limpopo River, Waterberg District:

"At every turn there occurred deep still pools with occasional sandy islands densely clad with lofty reeds, and with banks covered with reeds to a breadth of 30 yards. Above and beyond these reeds stood trees of immense age and gigantic size beneath which grew a long and very rank description of grass on which the seacows delight to pasture." [2: 174]

1 July — Crossed Lepalala River [Palala River] to Baseleka, 158 km northwest of Potgieterust [Potgietersrus, now Mokopane]:

"Seleka's town is built on the top and sides of a steep and precipitous white quartz rock which rises abruptly and forms a very remarkable feature in the green forest scenery which surrounds it..." [2: 191]

Around Seleka's kraal "...chains of mountains of moderate height shot above the level forest in every direction but mostly to the east and south." [2: 195]

1850 Baines, T. in Kennedy (1964)

7 April — Paarden Kop, near Potchefstroom:

"...a large flat hill called Paarden Kop, from the number of horses that died on it when the Boers first emigrated from the Colony 12 or 13 years ago. Thousands of skeletons are still visible upon its top, and its base is clothed with a thick *Mimosa* [*Acacia*] forest still tenanted by numerous lions..."

Buffelsfontein Farm [or Buffelsvlei], c. 20 km upstream from Potchefstroom:

"...a beautiful stream winding in most intricate mazes through a rich alluvial plain so equable in volume that, during more than 6 months in which the Vaal River was alternately dried up and flooded, no increase or diminution in its depth was perceptible." [Mooi River] [p. 59]

12 April — Potchefstroom:

"Succeeded in persuading Mynheer Schoeman to let us have three 16 ft planks of inch willow wood at about 1 shilling per foot for the purpose of building our canoe... [p. 61]

2 May — "Cut up thorn trees for knees, and, to see how the little vessel would look, set her up stem and stern with two planks bent to the shape of her top sides... [p. 73]

28 May — "I was informed that near the main source of the Mooi River is a cave into which persons enter with a number of lighted candles, leaving one at each angle to guide them on their return. It is inhabited by bats and occasionally by baboons, and its termination has not as yet been discovered..." [p. 84]

4 June — "The Hottentots at work in the field set the dry grass on fire and shortly after I reached home the flame and smoke were seen driving rapidly before a fresh breeze towards us... About four in the afternoon the fire had passed the farm on the opposite bank of the river and on the near side was following quickly. At length it reached the dry reeds below the garden and the flame increased rapidly. Volumes of smoke, black and grey, overspread the heavens; while the fire, now subsiding and now again leaping high above the tall feathery reeds, crackled and snapped among them with a noise resembling that of a rapid and incessant discharge of musketry. When the sun had set the scene was indeed magnificent: the grass was burning on a line of upwards of 2 miles in length, while the reeds continued to send up rolling clouds of smoke mingled with sheets of vivid flame..." [p. 86]

25 September — Mooi River, near Potchefstroom:

"The river flows through an almost level country well clothed with *Mimosa* [*Acacia*], some of them between 40 and 50 feet in height...

"...we walked down the river in search of willow poles to make oars for our boat but, though we cut two or three, we could get none exactly to suit us." [p. 133]

October — Potchefstroom area:

"During the week, either heavy gales of wind enveloped us in clouds of dust rivalling in density the sandstorms of the Sahara, or partial whirlwinds, while all around us was calm, would raise from the earth huge columns of red sand, driving them with frightful rapidity across the plain and not infrequently in almost unpleasant proximity to ourselves.

"On one occasion one of these pillars crossed the road immediately in front of me; the grass on the other side had been burnt, and the ashes, mounting up into the column, changed its colour in an instant from that of the red sand to that of the sooty blackness..." This gave a mirage effect. [p. 146]

6 December — Mooi River:

"Travelled about 10 or 12 miles up the river...leaving the river on our left, we crossed a valley 3 or 4 miles broad between two parallel ranges... Turning a sharp corner we perceived that the range was double, enclosing a valley of a mile in width, thickly studded with the *Mimosa* [*Acacia*] in its verdant garb and golden ornaments, and the suiker bosch, a species of *Protea* [*Protea caffra*], just beginning to expand its beautiful crimson flowers." [p. 181]

1857 Baldwin, W.C. (1863)

8/9 June — Approaching Potchefstroom [Mooi River Dorp] from nine miles south:

"...my best ox is dead having got at a poisonous kind of grass called by the Dutch tulp [*Moraea pallida*] which has much the same effect upon them as a tremendous blow-out of clover, causing them to swell fearfully: this was the only casualty but it was nearly being the same with several others."

13 June — Near Potchefstroom:

"...to the Dutchman named Vessell Bartness, through a beautiful country of dense thornwood, quite a relief to the eye after the endless plains we have come through. This is truly a sweet spot, a lovely stream meandering through thorn covered with watercresses, a magnificent orchard..." [p. 148]

16 August — Merico [Marico]:

"The Merico country is a beautiful land, most fertile and productive... It is warm, well wooded, but a little short of water. There are no rivers, only one or two small streams, and plenty of fountains...hilly, rather too stony, but with large fertile valleys intervening... This is the last house in the Merico, the Boers have not penetrated further... We are only 4 days from Sechele, Maccatgeese chief [Makathisi]." [Kolobeng, Bakhatla Reserve, Botswana] [p. 162]



17 KWAZULU-NATAL

1822/23 **Isaacs, N. (1836)**

A Chart of Port Natal, surveyed by Lieutenant King in 1822/23, which shows:

"Good Timber for Ship Building" along the full length of the Bluff.

"Good Forests and Trees" on the shores of the southwestern area of Durban Bay, near present Clairwood.

"Hippopotamus Grazing Ground" backed by "Bush" inland and with an extensive "Swamp" along the Bay frontage.

"Bush and Trees" coming off the Berea down to the Bay frontage and extending southwards along the length of the Point, and then northwards past the present South and North beaches.

"Extensive Grazing Flat" from present Durban Central northwards towards Umgeni River Mouth.

No mention of mangroves.

1691 **Dampier, W. (1924, reprint)**

"The woods are composed of divers sorts of trees; many of which are very good timber, and fit for any uses, they being tall and large. The savannas also are clothed with kindly thick grass." [p. 129]

1839 **Backhouse, J. (1844)**

Crocodiles in Natal rivers are "...much dreaded by the natives who, when they wish to ford the rivers where these animals abound, are said to throw calabashes into them. The calabashes being hard, light, and round, the alligators follow them down the river trying in vain to seize them, and the people avail themselves of the opportunity of crossing while the alligators are thus occupied." Names them *Alligator cowieii*. [p. 238]

1839 **Delegorgue, A. (1990)**

June — The Bluff, Durban:

"...flattened at the end and covered with full-grown trees." [p. 48]

Bush around Durban:

"From the very first I devoted my time to combing the woods and to preparing my specimens... Sometimes I was caught up by twisted, thorny, impenetrable bush from which I could extricate myself only by lying flat on the ground and crawling. There was always the risk of having to spend the night out in the open, an infinitely disagreeable situation to be in, particularly in those parts which were frequented by leopards." [p. 50]

Salt River, a stream entering Durban Bay:

Hadedah birds [*Bostrychia hagedash*]: "In the mornings before daybreak they silently leave the mangroves on the island or at the mouth of the Salt River where they have spent the night, and make their way towards the forests where the great dead trees entwine their gaunt white branches. Here they settle for an hour or two. The dew is too heavy on the grass, and they are obliged to wait until it has completely evaporated." [p. 57]

June–September — Mkomazi River [Umkomaas], 45 km south of Durban:

"In our fruitless attempts to find a short cut along the wooded river banks, we tired our horses out quite unnecessarily." Crossed higher up river after some hours travelling: "... descended a long steep slope which led down to a ford over the river...a beautiful river steeply embanked." [p. 72]

Between Umhlanga [near Mount Rosa] and Umzinto:

Discovered "...a knoll 500 feet high, surrounded on three sides by a steep stony gully where I found, collected in the hollow rocks, the purest water. Beyond stretched rich green grasslands and, further away still, there were sand dunes covered with those thick

protective bushes which prevent the wind from blowing the sand away. To left and right grew isolated *Mimosa* [*Acacia*] bushes, while in the valleys there were wild bananas [*Strelitzia nicolai*]. Here and there the earth offered up patches of stone or sand, gravel, clay, or marshland..." [p. 78]

Between Umzinto and Umkomaas:

"...we saw for the first time innumerable swarms of locusts which settled on the green pastures and on every variety of tree, whose appearance they altered completely so that the trees seemed more luxuriant than usual, and the dull green of their foliage now appeared purplish with gleams of silver and mother-of-pearl." Describes more about the locusts. [p. 80]

21 October — Crossed the Umgeni River, north of Durban, and out-spanned for the night on the banks of the Umhlanga River.

22 October — Notes that Umhlanga means 'river of reeds'. Left next day "...and by three o'clock were looking down on a great stretch of country, seamed with rivers and rich with the greenest of pastures where thickly wooded hills contrasted with bare slopes, and the horizon was edged by distant mountains. Everywhere we looked there were huge herds of oxen and cows peacefully grazing." [p. 84]

November /December — Pietermaritzburg, Boschjesmans Rand:

"In the distance we can see dark green crevices cutting deeply into the lighter green of the mountain grasslands when they are in their prime, and this dark green is even more pronounced when the grazing reaches maturity. All over the valleys the eye is drawn to particular hillsides where this green appears to grow darker as one approaches, and objects increase in size until they take on colossal proportions.

"Eventually one becomes aware that these are forests of huge trees: outbosch, timber forests. These trees are principally geele-out [yellowwood, *Podocarpus*]; *stinck-out* [stinkwood, *Celtis africana* and *Ocotea bullata*]; *hyster-out* [ironwood, *Olea capensis* subsp. *macrocarpa*]. Most of the geele-out grow to 100 or 120 feet high and from the root to the first branches form a fine straight column, unblemished by any knot. It is therefore a simple matter to cut perfect pieces 60 feet long by three feet wide. Unfortunately the wood is only suitable for permanent, sheltered construction. I have heard it said by those who know that it is quite useless for naval construction.

"The stinck-out is particularly hard and resistant but it does not provide such fine long pieces. Its whole life is one of suffering. It is contorted beneath its burden of hanging moss [*Usnea* sp.] which adorne it like an immense beard and, while I am well acquainted with the parasite, I am ignorant of the shape of the tree's own leaves. The bark is always damp because of the moss, and it is often coated with earth. This poor plant seems to have no life of its own. Its appearance though picturesque is rather gloomy; the birds themselves shun it. However, in Natal it is valued for its use in the manufacture of gun butts. *Hyster-out* is an excellent wood used to make axles for wagons.

"These out-bosch are composed only of a limited variety of trees and are therefore not rich in birdlife. Parrots, touracos, green pigeons, francolins and a few small birds, shrikes, and warblers were all that I encountered there; furthermore the height of the trees is an obstacle to hunting in the European fashion. I have made the same experiment twenty times over with the same result: the shot is too scattered and retains too little of its force to bring down these birds from the top of yellowwoods which are 100 to 110 feet high... These forests once sheltered the larger animals..." [p. 97]

1839 Krauss, F. in Spohr (1973)

10 June — Durban Bay:

"Natal Bay was completely sheltered, semi-circular, about two hours in width with a number of islands. A narrow channel, 15–16 feet deep, wound from the entrance towards the northern shores of the Bay where there was a sort of landing place. The other parts of the Bay were without water at low tide. [p. 58]

"...everything was new and strange and different from the Cape Colony; the flora and fauna were completely different. During my very first walk from the 'Mazeppa' [ship] to the landing place I enjoyed the exotic plants: the small tree *Strychnos spinosa* Lam. ...with its round yellow fruit of 4 to 6 inches diameter and hard peel containing flat seeds of a pleasantly sourish taste, rather like apricots. The Boers call them calabash, the Kaffirs *lislaala* [perhaps *iHlala*: *Strychnos madagascariensis*]. *Carissa grandiflora* A.DC. [*Carissa macrocarpa*], a bush with white sweet-smelling flowers and red gooseberry-like berries with a pleasant flavour; two types of palms, one a low fan-shaped tree with a fruit like a coconut, *Hyphaene coriacea* Gaertn., and the other the slim high *Phoenix*

reclinata Jacq. with long feathery leaves, Kaffir *kafferboom* called by the Boers. Furthermore the beautiful *Zygia fastigiata* E.Mey. [*Albizia adianthifolia* var. *adianthifolia*], a tree with widely spread branches and a crown that looks as if it were lopped. All these plants spread over the plain between the forest and the Bay... This splendour will since have been destroyed by English settlements and the growing town of D'Urban." [p. 59]

11 June

"I do not intend to go into more detail about the flora but refer to the preface of my flora publications where I also describe the 585 types of new plant specimens I collected from June 8th 1839 until February 4th 1840 in Natal...

"Coming from the sea to Natal Bay, one has first to pass on the left the projecting Cape Natal [The Bluff] a very steep ridge about 200 feet high covered with forests... The ridge at the time was not inhabited."

From December 1838 about 100 English soldiers lived "...on the flat sandy peninsula..." They left in January 1840. "Near to the camp they had dug a draw-well which gave only brackish water. The narrow peninsula, sandy on the inner and outer shores, covered with scrub, rising slightly, was woody and was uninhabited...

"There was a landing place at the northern end of the Bay. From there the path led to the Boers camp at Congella and to the Umlaas River and camp. From there as far as the Zout and Versche River, the muddy coast as well as the small islands were overgrown with *Malvacea paritium tiliaceum* St Hill [*Hibiscus tiliaceus*] (a bush with big yellow flowers), with the low *mengerhout* trees, *Rhizophora mucronata* Lam., *Bruguiera gymnorrhiza* Lam., and *Avicennia tomentosa*. Mangrove trees were reminiscent of the swampy river-mouths of the tropics. During high-tide their ramified, knotty roots were under water and at low tide were an ideal place for collecting crustaceae and molluscae... At low tide their trunks were covered up to 6 to 8 feet high with masses of *Potamides decollatum* Brug. and *Lithoprina intermedia* Phil., snails which the rising water washed off again...

"As the high tide rose at spring-tide up to 6 feet pushing up the river, the water of the Zout River was salty quite far inland, therefore called Salt River. The Versche River was less salty and was therefore called Fresh River by the Boers... From there a grass plain spread for a quarter hour to the Umlaas [Umlazi] River. The Cape Natal ridge overgrown with bushes and trees also continued as far as the Umlaas River...

"The vegetation of the islands was of the same kind as that on land. *Carissa grandiflora* A.DC. [*Carissa macrocarpa*], and *Strelitzia augusta* Thunb. [*Strelitzia nicolai*] bushes mentioned above, were abundant." [pp. 59, 60]

June

About 20 Boer families were living at Congella Camp. "Behind Congella Camp and along the coast, as well as inland in the gorges between the mountains, were wide forests with enormous trees. These forests could only be entered along the elephant paths but not safely without a gun in case one of these colossi happened to pass by... I saw a herd of more than a hundred elephants, old and young together on the grasslands near the forests."

Between the Umgeni and Umslati Rivers [Umhloti]:

"...this beautiful hilly country, well supplied with water, and the marvellous coastal forests..."

15 July

"On July 15th 1838 I sent off for Baron von Ludwig [in Cape Town] on the schooner 'Friends Good Will' living plants of *Hyphaene coriacea* Gaertn., *Phoenix reclinata* Jacq. and others, in addition to fresh fruits of *Brehmia spinosa* Lam. [*Strychnos spinosa*] and *Carissa grandiflora* A.DC. [*Carissa macrocarpa*]. [p. 62]

"The hunt in the surrounding marshes [at Congella] was less amusing as they were overgrown with reeds..." [p. 64]

August–September.

Pietermaritzburg:

The surrounding "…hilly grasslands and on the Bosjesmansrand...whose gorges are well wooded. Here I collected many interesting, partly unknown plants amongst them the strange Podostemonea, *Sphaerothylax algaeformis* Bisch. [*S. algiformis*], growing on a stone in the river." [p. 65]

September

Congella Camp, at the head of Durban Bay:

"... I investigated the surroundings of the Umlaas River as far as its mouth, which is two hours from the Camp. Between the Umlaas and the Versche Rivers there is a plain with high reeds, *Arundo typha* [*Phragmites*] bordered by jungle. The Umlaas [Umlazi] River has its source at the Boshmans Rand... During the first month in Spring the plants started to grow...I collected the attractive Malvaceae: *Pavonia kraussiana* Hochst. [*Pavonia burchellii*], *Gladiolus psittacinus* Hook. [*Gladiolus dalenii*]." [p. 66]

24 October — From Durban to Umgeni:

Left Congella Camp on horseback. "After half an hour's ride across the grasslands, skirting the forests, we reached a sandy rise covered with trees. From here we had a lively view over Natal Bay, the Umgeni River and the sea. Sandy tracks led us through the forest, and sometimes grasslands across valleys and over hills to the Umgeni River. There the soil was clay-like and almost black, overgrown with *Acacia multijuga* Meisn. [*Acacia caffra*] with vast prairies extending from there... One could see over the bush-covered valleys of the Umgeni valley down to its mouth at the ocean, over the vast forest along the coast, the spreading hills towards the Umsluti River and inland to the bare table-topped mountains. On the slate which is intruded by dolerite grew large trees of an angular *Euphorbia* [*Euphorbia ingens*]. Going down a steep path we reached the slow-flowing Umgeni River, only 2 feet deep... Its banks were densely overgrown with *Arundo* [*Phragmites*] and other kinds of grass...

"...on the hills were the kraals of Natal Kaffirs surrounded by mealie fields. For two hours upwards the country from the Umsluti River to the Umvoti River consisted of wide hills slowly sloping down with beautiful grassland, sometimes consisting of only one kind of grass interspersed with acacias and angular euphorbias with lovely crowns for colour. Other trees grew only along the numerous, mostly dry, rivers with their deep beds and high drifts, amongst them the tall *Phoenix reclinata* Jacq." [p. 68]

25 October — Reached Mpanda's Kraal. "We roamed through the marvellous forests and over the prairies for a long time without seeing any game... On the way we saw many cattle with herdsmen and we saw many kraals around the residence [of Chief Mpanda], where the grass was eaten off and trampled down." [p. 69]

November –January — Congella Camp:

"The vegetation was at its lushest and many insects flew around - mainly on the blossoms on the trees. In December the sky was mostly overcast. It did not rain as regularly as before but it was muggy and very hot, up to 24.5 R in the shade [c. 30,5°C]. In January the temperature rose to 26 R [c. 33°C]; it became drier and in places there was a shortage of water. Plants and trees drooped and the insects became few." [p. 73]

1840 Delegorgue, A. (1990)

16 January — Halfway between Umgeni River, at Pietermaritzburg, and Mooi River:

"The countryside, which was superb, offered rich pasturage and the only trees we could see were in the kloofs." [p. 101]

17 January — Bushman's River, near Estcourt:

"The pastures here were better than those of Mooi River. The valleys were full of mimosas [*Acacia karroo*], a sign of the sweetness of the Zoet-gras. The plains were turning to gold and the sun was already drying out the grass which was all to be burnt in a month or six weeks time so that then new grass might sprout and grow." [p. 102]

18 January — North of Estcourt, between Bushman's River and the Drakensberg:

Crossed the Tugela River. "The crossing took several hours... Certain grasses in the vicinity gave off a strong scent of roses; the Boers called it stinck-gras [possibly *Cymbopogon*, Turpentine grass]." [p. 103]

20 January — "On the evening of the second day I had the opportunity to feast my eyes on a wonderful sight. A bright light enabled one to distinguish objects a long way off. It was produced by a grass fire to the north which, in a line two miles wide was coming down the mountainside like a river of flame, and seemed to engulf everything in its path. Towards midnight the destructive fire, for want of fuel, died out on the banks of a stream which put an end to its ravages..."

21 January — North of the Klip River:

"After an unbroken journey of some seven hours in very hot, dry weather, we took up our position on a beautiful plain dotted with mimosas [*Acacia karroo*]. These trees provided me with gum, the only natural medicament capable of calming the increasingly acute irritation from which I had suffered for some time." [pp. 104, 105]

31 January — Crossed the Mfolozi River and the White Mfolozi, Mhlabatini District:

"These rivers...after rising in the mountains of Quathalambene [Drakensberg] water a stretch of barren country and then, half way to the sea, they enter a wooded region which abounds in game of all kinds. Their course now meanders around the many obstacles which stand in their way. I spent part of 1841 and 1842 near the confluence of the forests, hunting big game, principally elephant..." [p. 114]

8 February — Pongola [Phongolo] River, Ngwavuma:

"...reached the Om-Pongola River, the banks of which were covered with *Mimosa* trees... to the south the country is excessively furrowed by ravines and covered in rough, steep, ironstone hillocks. To the north, in contrast, the land appears to extend in an open plain for as far as 12 miles beyond the banks of the river." [p. 118]

?30 February — Umgeni Falls, Pietermaritzburg:

"I reached the upper ford of the Om-Guinee, a mile or two from the beautiful waterfall and made the crossing in water three and a half feet deep, flowing over the large boulders which are the terror of wagon drivers." [p. 126]

March — Durban:

"More graceful light and gay were the souimangas, the Amethyst Sunbirds, like feathered butterflies, dipping their tongues into the calyx of flowers of the *caffer-boom* [*Erythrina* sp., presumably *E. humeana* at this season] or of the wild hemp [*Leonotis* sp.]... [p. 128]

15 July — "I was busy following a bird and had to cross a sort of glade where *weld-calebasses-boom* [the wild calabash-tree, *Strychnos spinosa*] grew and where there were numerous antbear holes." [p. 133]

Tugela River Mouth:

"The shores of lakes are often covered in reeds which are rooted in the mud. The amphibians come up through these reeds each night and return the same way in the morning. The pathways which they trample are only about eighteen inches wide on the ground, but form a wide round tunnel about a metre high which opens up as the animal passes through and closes again behind him. I frequently ventured into these tunnels in spite of the mud which made progress difficult, hoping for a face to face encounter with a hippopotamus." [p. 157]

1840 Krauss, F. in Spohr (1973)

14 January — From Umlaas River, near Durban, to Pietermaritzburg:

"From the Onder-Umlaas a bad waggon road leads up hill and down dale to Pietermaritzburg. Two hours from the Upper Umlaas Camp near the steep Potatoes Hoogte, so called because earlier settlers had planted potatoes there, the country became more open. The heights and plains were overgrown with a few 'dooring-boome' and only the deep gorges were covered with forests. Higher up the thorny bushes vanished and it was grassland. Over gently rising hills one reached the top of the table mountains and from there a vast grassy plain extended with long sloping ridges which was excellent for cattle and horse farming...

"One table mountain is particularly beautiful, standing by itself between Pietermaritzburg and the Umgeni River. The mountain had only one access and is about four hours in circumference, and on its top it had good pastureland for horses. The plain extends for about six hours between the Upper Umlaas and Pietermaritzburg. There were few thorny trees and a kind of *Euphorbia* in the form of low bushes."

From Pietermaritzburg up Bushmanrand:

"These slopes and gorges were also overgrown with forests and many clear brooks flowed down to the villages. [p. 74]

"On the heights of the Bushmanrand and over the ridges sloping down towards the Umgeni River there was excellent pasture for cattle. Three hours below its source the Umgeni formed a beautiful waterfall and then wound through a narrow bed between the table mountains...

"From the Umgeni the country rises again to the level of the Houtboschrand [not found]... The Houtboschrand was also overgrown with forest, mainly consisting of Yellowwood trees [*Podocarpus*] with *Usneae* hanging from them. The plain on top of the Houtboschrand was full of bulbous plants, orchids and so on, and is sour veldt not suitable for cattle, and there are few living creatures there. Down in the Karkloof one heard once more the chirping of birds. The trees and bushes which I unfortunately could not collect because time was short, were quite different from the others..."

Mooi River:

"The river flowed quietly, had clear water, and low garden-like banks were covered with excellent pasture-land, *Andropogon excavatus* Hochst. [*Cymbopogon caesius*]. Crossing a bushless hilly country one arrived at the Bushmans River, the centre of the coal industry. Again there were many *dooring boome*, *Mimosa horrida* [*Acacia karroo*]. Between the Bushman River and the Little Tugela River is an extensive plain, again mostly covered by a type of grass, giving the appearance of vast cornfields." [p. 75]

1841 Delegorgue, A. (1990)

21 October

Delegorgue wanted to write some notes whilst in camp: "I was provided with a torch made from a long blade of *tambouki-gras* [*Miscanthus* or *Hyparrhenia* sp.], the sort from which Boschemans made their arrows, thick as a reed, and which burnt with a clear steady flame." [p. 168]

26 October

Umlalazi River [? northeast of Eshowe]:

"We discovered here a strange mimosa [*Entada rheedii*] which produces the enormous fruit already known to the inhabitants of the colony at the Cape of Good Hope. The sea had often cast up near Cape Town on the shore of Table Bay or False Bay, a flattened, hard, brown fruit. The Dutch called them *zee-bontjes*, sea beans, because they did not know their origin, and these so-called beans were always found without their pod. Near Om-Lalas [Umlazi is 5 km south of Durban, while Umlalazi is northeast of Eshowe] we came across a number of these fruit, hanging from the tops of the trees which grew on the banks of the little tributaries. My men found pods that were three feet long and contained fourteen to seventeen seeds, each seed being large and strong enough to make an excellent snuffbox.

"Since my return I have been able to compare these fruit from the land of the Amazoulous [Zulus] with those brought back from India which are produced by the *Entada pursaetha* [*Entada rheedii*], *Mimosa scandens*. It seems that this plant exists in Oceania, perhaps even in South America; an English naval captain gave me some of the seeds which he had picked up on the shores of the Pacific Ocean near Guayaquil. Apparently this fruit when it is consigned to the waves, travels enormous distances, carried by the currents." [p. 170]

4 November

Nseleni River, near Empangeni:

"...we entered a sparsely-wooded area watered by a small river called the Selene. In the trees on the banks I saw grey crested tauracos, *Coliphymus concolor* [*Corythaixoides concolor*], perched in the highest branches... The next day we continued on our way through the bush, often having to cut a path through the trees with our axes...

"...we camped under some large trees. These trees, although they are not woody, attain the height and strength of our oaks; they were the *noorsh-doorn* [*Euphorbia* sp.], or the *koker-boom* [*Aloe barberae*], the quiver-tree." [p. 174]

7 November

North of Nseleni River:

"...some trees, the fruit of which attracted my attention. One of these trees [possibly *Kiggelaria africana*] which stood no more than 18 feet high and which was not at all beautiful, bore great numbers of these oval-shaped fruit which were wider near the stalk, more conical near the tip and characterized by sharp protuberances. They were as green as the unopened bud of a poppy. The Amazoulous have no use for these fruits.

"Another tree [*Kigelia africana*] amused us by its strange appearance: it was hung all over with cylindrical, round-ended fruit which reminded us of the appetising display in a pork-butcher's shop window. In order to complete the illusion, only the brown colouring was lacking to transform our green vegetables into sausages. The tree is known by the name of *Tripinnaria tenacium*. The Amazoulous describe as *mouty* the fruit of this tree as well as that of the tree mentioned above, which is not to say that the trees were poisonous but only that the monkeys would not eat the fruit. It is wellknown that man, lacking the instincts which guide the animals in their choice of food, profits by their example, particularly by that of the quadrumanes [monkeys etc. - four-hands]. [p. 179]

"Let us say a word about the delectable fruit which we found... As we passed alongside a rocky ridge grown here and there with various species of trees and shrubs we saw a movement in the branches of a tree which was laden with fruit. It was a troop of monkeys, *amakaho*, which, alarmed at our approach, were swinging away from branch to branch to escape us. When we arrived beneath the tree we shook down a quantity of the fruit which we broke open and ate. This fruit belongs to a tree which the botanists call *Strychnos* [*Strychnos decussata*], but this *Strychnos* differs from the *Strychnos spinosus* which is so common on the sandy plains around the bay of Natal [Durban]. It is smaller, the woody outer covering and the flesh are yellow, it is sweeter and less acid, and its smell and flavour are not at all the same. If this *Stychnos* is not quite identical to the one from Nossi-Be [Madagascar], it must be closely related.

"The monkeys appeared to have eaten a large quantity of the fruit judging by the debris which cluttered the ground. My Caffres followed suit and I must admit that, in my turn, I imitated my Caffres as I found the fruit very palatable in that it was less acid than most of the wild fruit which grows in this part of Africa. The tree is also found in the great woods surrounding Port Natal as it favours the density of the forest while the *Strychnos spinosus* is more at home in open glades and on the dry plains. This is perhaps the reason why it is less common.

"When they arrived at the bay of Natal, the Boers gave the name *wild-kalabas-boom* to the *Strychnos spinosus*, and the one that resembles the *Strychnos* of Nossi-Be they called the *klein-wild-kalabas-boom* or *geele-wild-kalabas-boom*. The fruit of the *Strychnos spinosus*, when it is ripe, has a very strong smell and is well known for its refreshing qualities. Indeed, the flesh may quench a man's thirst, but it has certain disagreeable properties also. On one occasion when I was in the company of Mr Wahlberg of Stockholm and various other people, we all consumed several of these fruits for there was no water available. This produced vomiting among some of us and the reverse effect in others. For my part I felt no ill-effects; the Caffres insist that the fruit is good medicine for those who are in need of its properties but that it had no effect on those whose stomachs do not require it. It forms the staple diet of the monkeys which inhabit the bush of Port Natal. They have discovered how to hasten the ripening process of the fruit which is normally very slow; they detach the biggest of the green fruit and leave it to lie on the sand, exposed to the sun and the dew. When we needed the fruit for our own use, we looked for it not in the trees but on the ground." [p. 180]

27 December — Mfolozi River:

"Our expedition led us to a ridge culminating in a steep drop from which we were able to admire one of the most picturesque and impressive of views. Eleven coils of the Om-Pholozie River...meandered across the landscape. The river immediately below us was invisible because of the steep drop; beyond was a beautiful luxuriant forest while in the distance stretched a vast green plain where numerous herds of buffalo and *cannas* [eland] peacefully grazed." [p. 219]

28 December — Near Nseleni River:

"...we came upon some sandy plains where sour grass was growing of the type found near the bay of Port Natal [Durban]. The vegetation was no longer than of Om-Philos [Umfolozi]; in these plains there was virtually nothing growing but palm trees and stunted bushes; they were called by the Boers wild-klapper-noot, wild coconut; wild-dattle-boom [*Phoenix reclinata*], wild date palm, then there were dwarf palms, lataniers [*Latania* sp., probably *Hyphaene coriacea*], and various wild bananas [*Strelitzia nicolai*]... Everything appeared more tropical..." [p. 220]

29 December — Between Mfolozi River and Lake St Lucia:

"Before us lay a plain, a mile or a mile and a half long. Although dry at the time it must have been flooded during the rainy season for it was covered in reeds, sward grass, and wild *Gladiolus*, all plants which favour marshy ground. There were forests to our right where the concentration of trees was dense at the centre, becoming more sparse towards the out-skirts. Beyond were the dunes of white sand which commanded a view of the sea some way off while, a mile away on the left hand side, the waters of the Om-Pholozie flowed down to the false bay of Saint Lucia." [p. 224]

1842 Delegorgue, A. (1990)

14 January — Kosberg, near the confluence of the White and Black Mfolozi Rivers:

Delegorgue was hunting elephants. "The granite slope was covered with thorny trees: *Mimosa* [*Acacia*], aloes, and *kooker-booms* [applies to tree aloes: *Aloe barberae*] or *na-booms* [*Euphorbia*]. On the other side of the Omphilos the bush was dotted with mimosas [*Acacia*] and there were immense wild fig trees [possibly *Ficus natalensis*] on the banks while reeds grew here and there in the sand. They were in greatest abundance near a bend in the river at the foot of a steep triangular mountain, gashed by a slide of red earth. Among the reeds stood twelve or fifteen elephants." Delegorgue fired a shot. "I was suddenly startled by a noise like ten water mills...when I noticed...five females each followed by a calf with a single male bringing up the rear... This herd of giants was flattening the trees as a boar might flatten the grass in passing.

"All over the Doorn-veld, when the mimosas [*Acacia*] are in flower, the honey has an excellent taste and is very healthy and much sought after...the Boers save the honey and use it all the year round when there is no sugar to sweeten their tea and coffee; the bastaards make beer from it which is intoxicating in the highest degree because of the presence in the roots of the *mour-boschis* used to activate the fermentation (Footnote: *moerbossie*, one of several species of *Anacampseros*). When this pernicious root is not used, honey-beer is very pleasant and healthy; I often made it myself..." [p. 245]

January — Forests north of the Mfolozi River:

"Great forests of Ingheta-Om-Schlopy, beyond the Om-Pholozi at Ingheta-Om-Schlopu."

Full of elephants; where nobody had hunted before. "According to his description, these forests of great trees were so luxuriant that the rays of the sun never penetrated there, the resultant half-light and the cool dampness attracted the long noses [elephants] in

the heat of the summer. The only paths were those beaten by the elephants, and the thorns were more cruel there than anywhere else. But nowhere were the elephants less aggressive..." [p. 255]

3 February — Black Mfolozi country:

"I learnt something which I could never have suspected when one of the guides happened to remark, 'Master, can you smell the *makanos*. Here is some shade, let us stop here'. More interested in resting than in tasting the *makanos*, I sat down under one of the trees. Everybody was collecting the fruit which was lying about on the ground and which had quite a pleasant smell [fruits of the Marula trees, *Sclerocarya birrea* subsp. *caffra*]...the elephant eats them and likes them very much. But if he likes them a lot he can never have enough of them to eat. What is one *makano*, what are a thousand *makanos* to an elephant? He does not need so many to get drunk." [p. 261]

7 February — West of confluence of Mfolozi Rivers, ? Mhlabatini:

When a herd of elephants is rushing madly away from danger during a hunt "...the undergrowth is trampled underfoot, the squadron of elephants flattens all in its path; trees three feet in circumference are twisted, uprooted, broken and their top branches frequently dumped far away...the hoary giants of the vegetable kingdom give way beneath the weight, although their branches in falling could well crush the perpetrators of the sacrilege. I have seen healthy strong trees, sixty feet high and nine feet in circumference snapped like a cane across a man's knee. This was the work of only one or two elephants; imagine then what their collective force must be... Even a whirlwind does not leave behind such devastation. Ten and twenty years later nature will not have repaired all the damage; tree trunks which are all bending in the same direction give evidence of the passing of a battalion of monsters, and trees which were young at the time still bear traces of having been bent to the ground. [p. 272]

"Beneath the rock I sat on grew clusters of round-topped mimosas [*Acacia*], their luxuriant green foliage enriched with bright golden buds. [p. 274]

"The elephant has, in common with man, a predilection for a gentle warming of the brain induced by fruit which have been fermented by the action of the sun: the *omkouschjlouane* and the *makano* of the Amazoulous (Footnote - p. 315 - probably *umkhululwana*, the *mkhuhla*, *Trichilia emetica*, and marula, *Sclerocarya birrea* [subsp.] *caffra*). These wild fruits which he brings down with his trunk, within a few days of lying on the earth, develop the qualities he is seeking, and it's when the elephant is caught unawares eating the fruit that the hunter is in the greatest danger... As a result of the intoxication, the males become as dangerous as the females. [p. 275]

"...frequently a tusk is broken in the effort which the elephant makes to uproot a tree..." [p. 277]

1847 Steytler, J.G. (1970)

Durban:

On a trip inland "...we drove through the thick bush and thick sand; all this is now part of the town. At that time, 1847, there were scarcely twenty houses in Durban, and no main road, all heavy sand... In crossing the Berea we came across numerous elephant spoors; there was not a single house in or near the Berea bush; after about three hours we came to the first farm where we off-saddled to see the cotton fields..." [p. 37]

Writing of his stay at the Durban Bay: "I occasionally walked up to Durban on the sands at low tide and passed through groves of mangrove-trees which grew in the water..." [p. 38]

1849/50 Drayson, A.W. (1858)

Durban Bluff and surroundings:

"On our left as we entered [the river] rose the Bluff, densely wooded to the water's edge, the branches of the trees, with their rich foliage, almost brushing the vessel's yards...the middle distance was represented by the calm...waters of the bay with two or three thickly-wooded islands. Numbers of wildfowl floated about and among these...the flamingo and the...pelican were conspicuous, the white plumage of some cranes standing out like stars in the blue waters. In the distance were seen the densely wooded hills of the Berea." [p. 45]

Riding in the vicinity: "Forests appeared, hung with creepers and scented blossoms; undulating grassy slopes with detached and park-like clumps of trees. Here and there the calm silvery water of the bay was seen in the distance through openings in the forest, or under the flat horizontal foliage of the umbrella-*Acacia* [*Albizia adianthifolia*] whose graceful shape, combined with the palm, the giant euphorbias, and the brilliant kaffirboom [*Erythrina*], formed the characteristics of this bush." [p. 47]

1849

The Berea, Durban:

"I had received so many accounts from different sources as to the great dangers that were certainly to be met in the dense bush of the Berea, and also the part that extended across the Umganie [Umgeni River] for several miles up the coast, that I had hesitated attempting so rash a course..." He had been warned about elephants, leopards, snakes, etc. He then joined a hunting party there. [p. 75]

"The cover was so very dense and thick that we were obliged to crawl on all fours...after wild pig and leopard." [p. 76]

Natal Midlands:

In order to hunt elephants: "The Dutchmen...make periodical trips into the uninhabited districts or where elephants are numerous and the country open or park like. When a herd of elephants is discovered these Boers make a plan of attack either to drive the herd...to a better or more open country or to prevent them from retreating to the dense bushes near." [p. 77]

Upcoast from Durban:

"The bush for many miles up the Natal coast was impenetrable except by the paths that elephants had made and in which they had stalked to and from water, and from place to place in Indian file. It was difficult for a man, when moving along these paths, to see many yards on either side, the underwood, the briers, and parasitical plants being matted together like a hedge.

"In many parts one has to force himself through places where he cannot see a yard around him."

Durban:

Hunting elephants: "We cantered over the Natal flat and entered a small narrow bushpath that led to the top of the Berea... [p. 80]

"The country across the Umganie was thickly wooded, but inland it was either open or of that parklike description so common in many parts of Africa." [p. 91]

Umgeni River, north of Durban:

"This part of the country was plentifully watered, and the numerous ravines and marshy spots allowed the long reeds to escape the fires that perform the part of mowers once or twice a year." [p. 93]

Mooi River area, etc.:

"At the cold season of the year the Dutchmen are in the habit of making excursions into the uninhabited plains in search of the large herds of elands and hartebeest that are there found... The plains under the Draakensberg Mountains and near the sources of the Mooi River were very frequent hunting grounds of the Boers who lived near the Bushmans River... The country in which we purposed to hunt was covered with almost beautiful undulating turf.

"Late in the autumn of the year the grass which grows to great length is set on fire either by the Boers or by the Bushmen, the tribes of the latter living near in the Draakensberg Mountains. The ashes of the consumed grass made a good manure, and, after a shower of rain, the young tender grass springs up and causes the whole plain to look grassy and brilliant, much like a vast green carpet. The antelopes scent the fragrance from afar and come many miles to graze. They then fall victims to the unerring aim of the Bushman's arrow or the Dutchman's rifle." [p. 109]

Snow was on the Drakensberg. "Little cascades could be seen...in the different kloofs or ravines that were formed by the spurs of the mountains. These ravines were well wooded; many fine trees grew in them, the underwood being thick and matted, as is usually the case in Africa, affording a secure retreat to some angry old buffalo, an exile from his family... Here also were bushbuck..." [p. 110]

Umlaas River [Umlazi], 8 km southwest of Durban:

"I went across the Umlaas for a week's hunting with a Kaffir named Muntu. Near his kraal there was some undulating ground sprinkled with bush which was said to be visited occasionally by buffalo..." The buffalo scattered. "...the country was undulating with a little bush here and there. I yelled at the troop as they galloped along together, and turned them from a thick patch of bush...into a large flat open plain with short springy turf. Here is the Epsom of Africa, a lawn of 25 miles, flat as a billiard table is its course." [p. 246]

Near Durban:

"A root [*Tephrosia macropoda*] grew on the Natal flat with which I frequently captured fish; it had the effect of fuddling them, and made them jump out of the water if used in a

confined space. It was something like ground ivy in growth, the long fibres stretching for several feet round. The leaves were small and shaped like clover. The root was discovered by taking hold of one of these creepers and pulling it up until it led to the root which was then dug up. The root was about a foot long and half an inch in diameter. When a dozen or so had been collected they were bruised and fastened on to a bamboo.

"The large pools of water left by the high tides on the Bluff amongst the rocks were the scenes of operations. Into these the roots were inserted and then stirred round for some time. In less than a minute, small and large fish would dart out from the holes in the rocks and swim about the pool as though greatly perplexed, and would very soon after turn on their backs and float, when they could be taken with the hand. Sometimes with a duck-and-drake sort of progression they skipped along over the top of the pool and sought the dry land. If they were placed in water that was uncontaminated by this root, they would recover in a few minutes, and might be eaten without the slightest danger.

"The root was called by the Kaffirs, *'il, o zarni'* [ilozane, probably *Tephrosia macropoda*]. I do not know if botanists are acquainted with it in any way." [p. 304]

ca. 1850 **Holden, W.C. (1855)**

From Durban, inland:

"The surface of the land, for five or ten miles from the shore, rises with a gentle angle, and is everywhere strongly undulated. From one extremity to another there is an almost painful succession of hills and vales, rising and falling in endless monotony.

"The traveller fords a stream, ascends a hill, descends, crosses a brook; and this the whole variety of an ordinary day's journey along the coast division.

"If he sees ahead of him (as he does in the vicinity of Natal Bay) a level plain three or four miles across, he hails with joy this interruption in the fatiguing monotony of grass-covered hills and ravines...

"This coastland is almost destitute of trees, except along the courses of the numerous streams, and close upon the shore. For most of the distance, a dense jungle extends from the beach inland, varying in width from two rods to as many miles. [1 rod = 5 m.] Scarcely any timber valuable for building purposes is found near the coast, except the red mangrove which abounds at the mouths of some of the larger rivers.

"Through almost every part of the coast division waggons can find their way without their owners being required to bestow labour in making roads... [p. 21]

"The land gradually rises as it recedes from the coast till, at varying distances of from five to fifteen miles, the elevation suddenly terminates in rocky precipices crowning a valley and forming a natural boundary to the coast division... In the valleys succeeding upon the coast range there are but few places of access for waggons.

"The hollows are nearly filled with unnumerable round grass-covered hills rising from 100 to 2 000 feet...

"In the midst of these valleys rise lofty mountains... [p. 22]

"Beyond this valley series the ground gradually rises and stretches out in a broad table-land, almost wholly destitute of trees, often cut deep by ravines and rivers, and sometimes interrupted by ranges of mountains, the sides of which are covered with dense forests. As we penetrate inland about 50 miles the peaks of the Quahlamba mountains [Drakensberg], four or five thousand feet above the level of these, are visible. [p. 23]

"In the extensive grassy plains, many cattle, sheep, and goats are pastured. Nearly the whole surface of the country is burnt over once or twice a year; not all at once, but in sections, so that at all seasons the flocks and herds may have abundance of fresh grass. The flames, once kindled in the dry grass run rapidly before the wind, rousing from their retreats the birds of the night, wolves and hyaenas, that flee howling and screaming away; and startling from midday sleep the roebuck and antelope whose graceful bounds and winged speed soon place them beyond the reach of the devouring fire." [p. 27]

Durban:

"The site of the town is above the head of the Bay to the north; and its position, being on a low flat, is more favourable for business than conducive to health. It is skirted by the Berea Hills at a distance of about 2 miles where the range curves, running to the Umgeni River on the north-east and the Umbilo River on the west. A plain, some parts of which are swampy, and covered with a tall, broad-leaved grass [probably *Phragmites*], extends along the base of these hills... [p. 240]

"When the white man first trod this plain, it was a beautiful green sward covered with grass and interspersed with clumps of evergreen trees; but now, in the town, the streets are long beds of deep sand, through which it is very difficult to walk." [p. 241]

Pietermaritzburg and surroundings:

"The country around is almost destitute of wood except in some of the mountain kloofs, giving to the whole neighbourhood a wild yet monotonous appearance. The scarcity of wood makes fuel very dear in the town... There is an abundant supply of fresh water..." [p. 245]

Natal:

"As for grass, I am quite satisfied that the same quantity of land which will support five cattle in England will feed twenty in this country. All the cattle, which both white and black men have yet been able to keep, have scarcely made a perceptible difference to the grass; and it has to be burnt off the ground every year. In autumn and winter the country is lighted up with fires burning in all directions, some of them from one to three miles long..." [p. 255]

1852 **Baldwin, W.C. (1863)**

Early January — Between the Tugela River and the plains of Inyesan [Nyesane, north of the Tugela River]:

"The grass, which grew to a tremendous height, was so saturated that one might just as well walk through a river, so there was no use in putting on dry clothes in the morning." [p. 7]

5 September — Slatakula Bush [Hlathikhulu], between White and Black Umfolosi Rivers:

"As we were obliged to clear a way for the waggons, we made but slow progress." [p. 40]

11 September — Black Umfolosi River:

"Crossed the Black Umveloose, a very bad drift, and outspanned on some beautiful new grass which was quite refreshing after all the dry, withered stuff we had been seeing so long." [p. 41]

14 September — "The ground was bad for a horse being bushy with long grass and full of large stones." [p. 42]

1854 **Baldwin, W.C. (1863)**

15 April — Matalkoola River [Amatikulu River], 24 miles north of the Tugela River:

"...rode next day across as rough and bushy country as can well be imagined." [p. 60]

25 April — Inyesan, north of the Tugela:

"We found a very nice fruit called by the Kaffirs *amabouche* [*Salacia kraussii*; *amabhonsi*; *ibhonsi*], resembling a mangrove in flavour, very luscious and good." [p. 62]

7 May — Near the Umgowie Mountains [Ngoye]:

"After breakfasting sumptuously on broiled kidneys, steaks, and mushrooms which we luckily found near...down a kloof...chasing my horse through the most frightful tangled grass and brushwood up to my armpits and in many places over my head, through kloofs and valleys." South of the Umslatoose [Mhlatuze River]. [p. 65]

24 June — Amatongaland [Tongaland]:

"The Amatongas have no cattle lest the possession of them should excite the cupidity of their warlike neighbours who would soon exterminate the more timid neighbours. [Baldwin had commented on missing a supply of milk there such as he had been able to get in Zululand].

"After about seven hours sharpish walking through a very thick shrubby country, and apparently very poor land, we came out into a clearance and saw cultivated grounds, the first Amatonga kraals I had ever met with, and, as the Amatongas have no cattle, there are no fences around their kraals... There was nothing but dense bush and large timber to be seen in any direction."

Among the Amatongas, at a captain's hut: "At supper I had the most delicious *bashoo* nuts [unidentified] I ever ate. They were roasted in the embers of the fire, and taste exactly like filberts. They grow in pairs in a large husk. The Amatongas' cuisine is decidedly superior to that of the Zulus but the traveller will nowhere find in their country the rich *amas* [fermented milk] which is to be had among the Zulus." [p. 75]

29 June — Umkusi River [Mkusi River], Umbombo District:

"Crossed the Umkusi, a beautiful river with large trees overhanging, and spreading across." [p. 78]

30 June — Going north, from the Umkusi towards the Pongola:

"We toiled a long weary way through dense bush all day. We passed innumerable vleys covered with ducks, widgeon, geese, water-rails, cranes and divers of all sorts, very tame...

1 July — "In going through the bush I saw a great number of pitfalls, about 9 feet deep and very narrow at the bottom." [p. 79]

Pongola River, Ngotshe District:

"I never hailed anything with more joy than the Pongola...the river was as cold, clear and beautiful as any I ever saw. It is at this point about 100 yards wide, and its banks on both sides are covered with the wild fig-tree [*Ficus*] which grows to an enormous size. [p. 81]

"We crossed the Pongola and reached some large vleys of water, with lots of wildfowl and black geese. We saw also a few seacows [hippopotamus]... They were very shy having been shot a good deal." [pp. 82, 83]

4 July — Camped just north of the Pongola River:

"The natives have the good taste when making a clearance for their gardens to spare the gum-trees [probably *Eucalyptus* sp.]. They are very beautiful trees with dark green leaves sweeping the ground. Their foliage is so thick that no daylight penetrates the interior... [p. 84]

"You seldom meet an Amatonga without his carrying a fire-stick, and big fires are slowly consuming all around the clearance." [p. 85]

12 July — Mathlashlas, crossed the Umsutie, or Mapoota River [at Ngwavuma]:

"...a beautiful, broad river, very deep, about 90 yards wide, and apparently navigable, emptying itself into Delagoa Bay [Mozambique] - with magnificent trees along its banks." [p. 86]

22 July — Crossed the Pongola River going south:

"Got over this much-dreaded part of road, twenty miles across - a dreary sandy flat without a tree or a drop of water - and then 5 or 6 miles through the bush..."

5 August — Reached the Umkuzi River. [p. 91]

1855 Baldwin, W.C. (1863)

14 August — Crossed the Umkusi heading north for the Pongola:

"Ascended a very high hill...taking a survey of the surrounding country, as broken, rugged, and hilly a country on every side as can be well imagined...

15 August — "I have never travelled over more promising ground, beautiful short, new, green, sweet grass, with plenty of bush and grass." [p. 108]

1856 Baldwin, W.C. (1863)

5 November — St Luey River, north of the Umveloose River:

"Went into the bush where the thick foliage and brushwood and the long grass made the travelling bad, and the shooting worse." For two miles.

8 November — "One of the best rivers I know of for sport of all kinds, and nearest to the Colony; it rises somewhere at the foot of the Ombombo Mountains [Ubombo Mountains] and runs through a splendid wooded valley. [p. 115]

"A long heavy walk through vleys...brought us to the first Amatonga kraals... The poor fellows were all but starving; they had nothing to live on but wild figs, kaffir oranges [probably *Strychnos* sp.], and other fruit of the kind." Proceeded to St Lucia Bay. [p. 117]

1857 Baldwin, W.C. (1863)

May — Drakensberg, north of Ladysmith:

"The finest view of the colony of Natal is from the ascent of the Drakensberg from which it looks beautiful, well watered and wooded, and like a large well kept garden when compared with the country on the other side, to the west, which is devoid of stick or wood, flat, barren, and unprofitable..." [p. 142]

1858 **Baldwin, W.C. (1863)**

Extract from a private typescript of Peter McKenzie one of the well-known McKenzie family of Dargle, Natal. His parents had come out with the Byrne Settlers in 1850 and eventually his father bought his own farm, 45 km northwest of Pietermaritzburg at Nottingham Road:

"In 1858 he and his wife had saved up, after seven years of hard work and careful economy, 300 pounds in golden sovereigns with which he bought the farm 'Leeuw Bosch' from S. Maritz, 6 000 acres of beautiful country, about 800 acres of which consisted of fine bush heavily stocked with sneezewood [*Ptaeroxylon obliquum*] and yellowwood [*Podocarpus*] trees, and other varieties...

"The farm itself was of little immediate use to my father as he had no stock to graze on it, but the sight of the bush with magnificent yellowwood trees [*Podocarpus*] towering above the smaller trees must have made him feel like a staghound unleashed with the game in full view.

"Already, a great demand for timber for housebuilding was rising in the Free State, and in several bushes, already, small gangs of the many immigrants who were vainly seeking for work, had started digging pits close to a few large trees which they cut down and rolled on to the pits and cut into planks, rafters and scantlings which found a ready sale to the Boers when they came down to Maritzburg every Spring to sell their hides and wool and renew their supplies of coffee and sugar and salt.

"He soon got into touch with a few of these men, with most of whom of course he was acquainted, and soon got two or three saws going in 'Lion's Bush'. Up to that time very few British Settlers had taken up farms north of Maritzburg, but now, as the Boers moved off, the British moved in, and for the next 10 years, Lion's Bush remained one of the busiest farms in the district, with old sawyers moving off and new ones coming in.

"At first, no doubt, the Boers would have to call at Lion's Bush for what plank they wanted, and take it with them over the Berg. But with this money my father was soon able to buy himself a little Voortrekker tented wagon to carry trading goods, and also a strong understill (without the body (or buck)) on which he would load his yellowood planks and go off to the Free State to trade for cattle or horses, being thus able to start stocking his farm gradually.

"Pit-sawing is very hard work, and can only be done well by men of great strength and endurance. The epithet 'topsawyer', which has no meaning today, was applied in those days to a man of outstanding strength, endurance and skill, as all these qualities were necessary in the man at the top of the log being sawn, and he had to sharpen and set the saw as well as to mark the log into the sizes required.

"For these reasons it will be seen that the amount of sawn timber turned out by two or three saws, worked by inexperienced men, was not great at first, nor well done. But as the men were anxious to succeed in the work, it gradually improved, those quite unfitted to it dropping out, and others coming in until a fairly good output of well-sawn timber was achieved.

"Some of it would be sold on the farm, but much of it my father loaded onto the waggon specially designed for carrying timber, and made several trips a year up to the Free State. On each of these trips the big wagon was accompanied by the small 'Kaap-tent' trading wagon, loaded with such trading goods as were in demand among the Boer farmers, and always including a big supply of sweets of which the Boers in those days, grown-ups as well as children, were very fond."

[The rest of the typescript does not mention timber felling, etc. It concerns trading and transport riding]

1862 **Dobie, J.S. (1945)**

26 August Durban and environs:

"Farms begin to show (when viewed from the sea) and along the coast an undulating line of wooded range studded with farms or plantations. Underneath to the left, lies the town of Durban...but hidden from view by intervening sand ridges and scrub. The harbour lies inside of 'The Point', a long spit - the tail end of a scrubby sand ridge on which are one or two houses visible... Away to the right the outer Bay stretches away wide, and is bordered by a low undulating range of scrub...the Bluff...close on our port side a long scrub-covered island ahead, beyond which the high land of the Bluff range tapers away and then the country around the head of the Bay rises in undulating wooded ranges, with one sugar plantation in the valley, and a few farms or villas on the nearest wooded range. As we round it, the City of D'Urban appears slumbering beneath on a sand bank enbowered in scrub, or low-growing trees, terminating in the scrubby sand spit which shuts the harbour in from the outer anchorage... The scrubby sandy ridge is very pretty from the variety of foliage of the low trees, if such they can be called." [p. 2]

28 August — Durban to Verulam, 27 km north of Durban:

"Three miles through sand and lumps of scrub, brought us to the...estuary of the Umgeni... After crossing the estuary, which is about a quarter of a mile wide our road lay through sandy soil with grass, the scrub forming long barriers on either side - very pretty lanes and parks. Then a narrow track through dense scrub consisting of low trees with underwood and inter-twined by vines and creepers. About 9 miles from D'Urban brought us out in the open where we crossed a new road... Followed the new road, on which there has been expended a considerable amount of bridging and cutting, crossing deep wooded gorges and along sidling wooded hills, then over open undulating country with sugar plantations and a sprinkling of low trees, most of these destitute of foliage at this season, and of the thorny *Acacia* tribe. The grass, though brown, or yellow and dried up, abundant, but very coarse, seems characteristic of this part of the Colony. Hills, flat topped and undulating, intersected at various points by deep ravines, wooded or scrubby. After crossing three successive low ranges of hills and sundry small water courses which, in the landscape, show as lines of bushy trees and palms of a short and stunted order, came in sight of the town of Verulam."

Proceeded to Umhloti on the coast, 8 km east southeast of Verulam. [p. 8]

16 November — Midlands, Mooi River to Lion's River:

"...down into another gully tributary of the Mooi; the wagon followed a dividing range between it and Lion's River... Rode to the right among pretty stony mounds and ridges with all kinds of sugar-bush on them... Overlooking Lion's River a wide rolling flat extends beyond, bounded by low ranges. The valley of Umgeni, crossing beyond the succession of hills in middle distance rises from Spitskop and Spion Kop [25 km west southwest of Ladysmith]. Took short cut for the wagon, crossing the head of a small valley... A Kafir kraal on range among bush, lots of bush...walked up ridge and picked a very graceful *Iris* [*Moraea inclinata*], very slender, growing on single stem with a long single leaf - flower pale blue and very pretty - no seed. We are now on the boundary of surveyed land and near to civilized life again. What a bore! ...winding up the Lion's River side of a steep high range, finely wooded on its sharp slopes on that side. Then along a ridge, found another small specimen of *Iris* of a purple colour [*Moraea inclinata*]... Looking down, a fine valley presented itself. High bush-covered ranges on the left and the low undulations of Lion's River to the right..." Arrived at Fort Nottingham. [p. 50]

At Cotswold [Mackenzie's farm] "...went to bush for firewood and we followed on horseback to hill which overlooks Umgeni... Lots of bush, but it appears to be outside the boundary of the farm [belonging to Mr Fannin of Dargle]. The bush is like others. Soon got enough dead wood collected. The 'yellow wood' of the country, fine tall trees, a species of the yew, wood very inferior, neither so close hard or tough or so prettily marked, more like a pine. Picked up seed of a pretty vine [identity uncertain] - leaves like lime tree growing a round flat edible berry. [p. 52]

23 December — "...bed of Lions River, nicely grassed country. The Umgeni is on the other side...had a peep over into the Umgeni, a very pretty valley and fine bush on southern slopes, sugarbush [*Protea*] on sides of higher ranges. [p. 55]

27 December — "Up to bush cutting posts and rails. Found that pretty flowering little apple in blossom growing to size of a little tree, another with seed like it, but pear-shaped, no flower. Also a bush with very pretty red cherry-like fruit, and mossy-like blossom, leaf springs at junction of stem and fruit (Footnote gives the native name as '*imbovan*', probably *Cassine* sp.). [p. 56]

"...among other information he was told that the soil of this high zuur veldt country is good for no cultivation without high manuring... No crop will grow to anything except in the marshy flats after being drained, or in patches where the bush had been cleared away, etc..." [p. 57]

1863 Dobie, J.S. (1945)

Lion's River District:

10 January — "Rode across Spitzkop to William Spiers' farm... Crossed over some very pretty grass where sugarbush scrub and sugarbush [*Protea*] grows... Fine tall timber which is being cut down and sawn in pits by Kafirs. Getting a water-wheel up for a saw-mill. On way home found in a ravine among sugarbush a very pretty small tree with leaf like lilac and lilac-coloured flowers in round bushes, also some very pretty flowers." [p. 61]

[During all this time in Natal he had been regularly visiting the forests, which he calls 'bush', to cut poles and rails for making his kraals, etc., for example in the Umgeni forests, probably in the Howick area]

1 April — Up and over Karkloof, 25 km north northwest of Pietermaritzburg, to Bushman's River in Estcourt District and on to the Drakensberg:

Upper Karkloof: "On top of ranges fine-looking sheep country." Crossed Mooi River "…through pretty country to Bushman's River. Quite a change of scenery, very pretty rivers, thorny-bush and banks strewed with broken rock... On to Moor's (Footnote: at Weenen)...over low undulations and short sweet-looking grass..." [p. 74]

5 January — Moor's: "...very pretty short sweet grass, brackish looking water in small river... A few thorn trees scattered along ridge and put me in mind of Ikqui-Kquin [not found] beyond Umgwali [southern Engcobo District]. Asked whether it got very dried up in summer. 'No, every day there are clouds and thunderstorms here, and though very warm at times the grass keeps very green till latter end of winter'." [p. 75]

6 January — *En route* to the Drakensberg: "On across Little Tugela [Estcourt District] at a good drift and over rank sourveldt grass... Gray thinks this is the cream of the country and good for sheep, no frost here and in the valleys, under shelter of Berg, grass is in abundance all winter. [p. 76]

7 January — "...nearly opposite and under the Berg, crossed Impafana [? Mpofana] and several small boggy-looking burns... Pretty situation in a basin at the foot of one of the spurs of the mountain which is dotted over with sugarbush and clumps of bush, and waterfalls in the ravines... [p. 77]

"…country very rank in grass but among the sugarbush [*Protea*] it was finer.

11 January — The Berg draped with snow..." [p. 78]

13 April — From Impafana River, under the Drakensberg, to Ladysmith:

"...on over low undulations sprinkled with a few thorns and with grass rather rank to Ladysmith. Pretty-lying little town with plantation of seringa trees, one edge of a little plain surrounded by low stony ridges dotted with thorns [*Acacia*] and aloes." [p. 81]

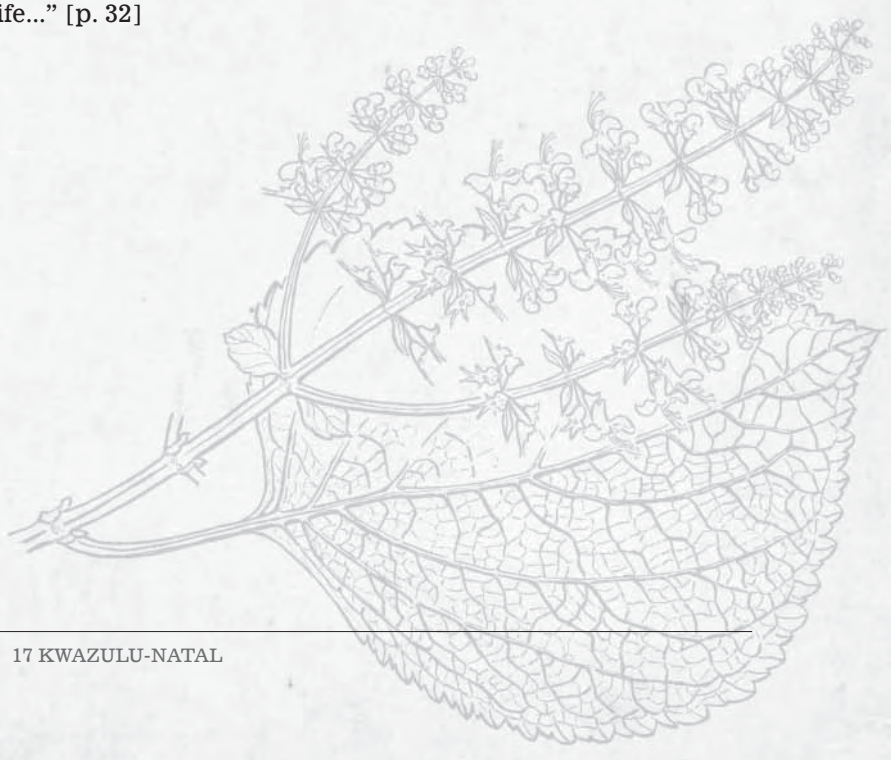
1880s/1890s Lugg, H.C. (1970)

Inland from Port Shepstone:

"The South Coast of Natal bears little resemblance to what it was when I was a boy. The many forest-fringed streams and valleys clad in heavy bush have since been completely denuded to give place to sugar cane, bananas, and countless houses, so that only those who lived in those days, and are still alive, can have any conception of what a beautiful country it really was.

"The Umzimkulu in particular, was a magnificent river, with a deep wide estuary extending inland for several miles, and flanked with forest covered hills. So deep was the water that the little steamer 'Somtseu' was often able to ascend the river as far up as Batstone's Drift [c. 3,5 km from the mouth] and the Sugar Mill beyond.

"The Murchison and Oribi Flats [23 km west northwest of Port Shepstone], now under cane and wattle but then large grassy plains in the early nineties, were teeming with partridges...whilst the adjoining forests abounded with wild pig, leopards, bushbuck, baboons and other wild life..." [p. 32]



18 BOTSWANA and ZIMBABWE

BOTSWANA

1844 **Cumming, R.G. (1850)**

7 June — From Sesetabie Gorge to Booby, ?near Gaberone:

"On gaining the neck of the mountain pass our march for a few miles wound through beautifully-wooded grassy hills after which we descended into a rugged and densely-wooded valley... So dense was the jungle that we were obliged repeatedly to halt the waggons and cut out a pathway with our axes before we could advance... Emerging from this valley we entered upon a more level country, still however densely covered with forest-trees and bushes in endless variety. Here, water was very abundant...

"Although I am now acquainted with the native names of a number of trees of the African forests, yet of their scientific names I am utterly ignorant. The shoulders and upper ridges of the mountains throughout all that country are profusely adorned with the graceful sandal-wood tree [probably *Croton gratissimus*], famed on account of the delicious perfume of its timber. The leaf of this tree emits at every season of the year a powerful and fragrant perfume which is increased by bruising the leaves in the hand. Its leaf is small, of a light silvery-grey colour which is strongly contrasted by the dark and dense green foliage of the *moopooroo*-tree [*mmopudu*: *Mimusops zeyheri*] which also adorns the upper ridges of the mountain ranges.

"This beautiful tree is interesting as producing the most delicious and serviceable fruit that I have met with throughout those distant parts, the poor natives subsisting on it for several months during which it continues in season. The *moopooroo* is of the size and shape of a very large olive. It is at first green but, gradually ripening, like the Indian mango it becomes beautifully striped with yellow, and when ripe its colour is the deepest orange. The fruit is sweet and mealy, similar to the date, and contains a small brown seed. It covers the branches, and when ripe the golden fruit contrasts with the dark green leaves of the tree which bears it.

"Besides the *moopooroo*, a great variety of fruits are met with throughout these mountains and forests, all of which are known to and gathered by the natives... Throughout the densely-wooded dells and hollows of the mountains the rosewood-tree [identity uncertain] occurs, of considerable size and in great abundance." [1: 266]

12 June — Approach to Booby from a southerly direction:

"We performed two long marches through thickly wooded plains." Many giraffe. [1: 274]

"The kraal at Booby is encompassed on three sides by rocky hills which to their summits are densely clad with sandalwood trees [probably *Croton gratissimus*]." [1: 276]

18 June — Near Booby:

"I had ridden about half a mile in a northeasterly direction through shady groves of *mokala* trees [*Acacia galpinii* or *Acacia erioloba*]. [1: 292]

19 June — "...took a stroll through the forest. Here I found some old dung of elephants and observed several fullgrown trees torn up by the roots, and others that had been shivered by the gigantic strength of those animals... Our march lay through an interesting country... The forest was in many places thin and open with here and there gigantic old trees of picturesque appearance standing detached, some half-dead and others falling to pieces from age..." [p. 293]

To the fountain of Bootlonamy [Boatlaname]:

"... I...held east through a grove of lofty and wide-spreading mimosas [*Acacia karroo*], most of which were more or less damaged by the gigantic strength of a troop of elephants which had passed through there about twelve months before..." [p. 295]

Left Bootlonamy and "...marched through about 6 miles of an old grey forest of mimosas [*Acacia*]. [? near Shoshong]

23 June — "Continued our march through a thinly-wooded level country." Proceeded about 10 miles when "...the country became thickly covered with detached forest-trees and groves of wait-a-bit thorns [probably *Acacia mellifera* or possibly *Ziziphus mucronata*]." Arrived at the fountain of Lepeby [Lephepe, Bamangwato Reserve]. [1: 297]

"...the strong fountain of Lepeby which, issuing from beneath a stratum of white tufous rock, formed an extensive deep pool of pure water adorned on one side with lofty green reeds. The fountain is situated at the northern extremity of a level bare vley surrounded by dense covers of wait-a-bit thorns [*Acacia mellifera*]." [1: 301]

25 June — From Lepeby fountain to Massouey [Mashowe, Masowe or Mosowe, Bamangwato Reserve]:

"This was a very remarkable spot on the southern borders of endless elephant forests... The fountain was deep and strong, situated in a hollow at the eastern extremity of an extensive vley, and its margin was surrounded by a level stratum of solid old red sandstone... The soil of the surrounding country was white and yellow sand but grass, trees and bushes were abundant. From the borders of the fountain a hundred well-trodden elephant paths led away in every direction like the radii of a circle. The breadth of these paths was about 3 feet. Those leading to the northward and east were the most frequented, the country in those directions being well wooded...

"From the margin of the fountain there extended an open level vley without a tree or bush, that stretched away about a mile to the northward where it was bounded by extensive groves of wide-spreading mimosas [*Acacia karroo*]." [1: 303]

Near Massouey:

"Here the trees were large and handsome but not strong enough to resist the inconceivable strength of the mighty monarchs of these forests. Almost every tree had half its branches broken short by them, at every hundred yards I came upon entire trees, and these, the largest in the forest, were uprooted clean out of the ground, or broken short across their stems. I observed several large trees placed in an inverted position having their roots uppermost in the air... [1: 307]

"The food of the elephant consists of the branches, leaves and roots of trees, and also of a variety of bulbs, of the situation of which he is advised by his exquisite sense of smell. To obtain these he turns up the ground with his tusks and whole acres may be seen thus ploughed up... He is extremely particular in always frequenting the freshest and most verdant districts of the forest; and when one district is parched and barren, he will forsake it for years, and wander to great distances in quest of better pasture. [1: 310]

"...spreading out from one another and proceeding in a zigzag course, they smash and destroy all the finest trees in the forest which happen to lie in their course. The number of goodly trees which a herd of bull elephants will thus destroy is utterly incredible. They are extremely capricious, and on coming to a group of 5 or 6 trees they break down not infrequently the whole of them when, having perhaps only tasted one or two small branches, they pass on and continue their wanton work of destruction. I have repeatedly ridden through forests where the trees thus broken lay so thick across one another that it was almost impossible to ride through the district... During the night they will feed in open plains and thinly wooded districts..." [1: 312]

1 July — Arrived at Lesausau, Bamangwato Reserve:

"Our route during the greater part of the day lay through dense jungle and thorny thickets where it was necessary to clear a way with our axes before the waggons could pass... As we neared Lesausau we entered upon a broad level strath adorned throughout its length and breadth with a variety of picturesque *Acacia* and other trees which stood at intervals as if they had been planted by man." [1: 321]

Mountains rose from the plain. "A light and feathery fringe of dwarfish trees and varieties of gigantic cacti [actually *Euphorbia cooperi* or *E. ingens*] adorned the sides and upper ridges of these rugged mountains and, as we proceeded, I observed finely wooded wild ravines stretching away into the bosom of the mountains." [1: 322]

Sicomy's country, Bamangwato Reserve:

5 July — Left Sicomy's for Corriebely [Kurubella, Bamangwato Reserve], which he reached next day. Arrived back at Massouey.

Came upon signs of two very large elephants; the Bechuana trackers followed the spoor due west. "Having followed it for many miles through this desert country we reached a district where the bushes to whose berries Knop-kop was so partial, grew in abundance, and here the elephants had commenced to feed upon their roots ploughing up the sand extensively with their tusks." [1: 340]

July — Returned from Massouey to Sicomy's Kraal:

"From the base of the mountain on which I stood stretched a dead-level park through a bold opening in the mountains. The park was regularly ornamented with groves of forest trees and extended without a slightest break or change as far as I could see..."

Trekked north from Sicomy's to Letlochee, which was reached two days later. [1: 345]

23 July — Letlochee:

"The country before me was a vast level forest extending to the north and east for about 20 miles without a break... After proceeding several miles through a dry barren tract where wait-a-bit thorns prevailed, we entered upon more interesting ground. [1: 349]

"The forest was adorned with very picturesque old trees of various sorts and sizes which stood singly and in shady groups while the main body of the forest consisted of a variety of trees of other sorts averaging about the height of a giraffe." [1: 350]

Came upon a place where elephants had been feeding: "...the ground also was here and there ploughed up by their tusks in quest of roots..." [1: 351]

July — Mahalapia River [Mahalapshwe or Mhalatswe River, Bamangwato Reserve], near the Limpopo River:

Crossed the "...gravelly bed of the river Mahalapia... This was one of the loveliest spots I had seen in southern Africa: a bold bend of the river was adorned with groves of remarkably lofty and picturesque acacias [possibly *Faidherbia albida*]. Three trees in particular, of the same description, graced the spot, which in size and beauty surpassed any I had hitherto met with, carrying their thickness to an immense height from the ground when they divided into goodly branches which stretched away in beauty to the skies. [Probably at Sabie, east of Mahalapshwe] [1: 377]

"The country between Letlochee and Sabie was most impractable for waggons, the forest in parts being extremely dense, and sundry difficult nullahs intervening." [1: 380]

Travelling eastwards through "...an extensive and almost impracticable jungle of wait-a-bit thorns [*Acacia mellifera*]." [1: 383]

27 August — Sabie, Bamangwato Reserve:

"...into a dense forest... In the meantime a tremendous conflagration was roaring and crackling close to windward of us. It was caused by the Bakalahari burning the old dry grass to enable the young to spring up with greater facility whereby they retained the game in their dominions. The fire stretched away for many miles on either side of us darkening the forest far to leeward with a dense and impenetrable canopy of smoke..." [2: 2]

31 August — Towannie [Towani or Tewane, Bamangwato Reserve]:

"Our course lay through an open forest... We held on for Towannie, a strong fountain in the gravelly bed of a periodical river." [2: 7]

1 September — Mangmaluky [Mamoluki, Bamangwato Reserve]. [2: 10]

23 September — Started back to the south. This was the farthest north that he travelled. [2: 23]

South of Mangmaluky:

"Having passed the river we entered an extensive grove of picturesque cameel-dorn trees [*Acacia erioloba*] clad in young foliage of the most delicious green." [2: 24]

3 October — Near Lepeby Fountain:

Footnote: "It is about this latitude that the traveller will first meet with the gigantic and castle-like *nwana* [*Adansonia digitata*, *mowana*] which is decidedly the most striking and wonderful tree among the thousands which adorn the South African forests. It is chiefly remarkable on account of its extraordinary size, actually resembling a castle or tower more than a forest tree.

"Throughout the country of Bamangwato the average circumference of these trees was from 30 to 40 feet but, on subsequently extending my researches in a northeasterly direction throughout the more fertile forests which clothe the boundless tracts through which the Limpopo winds, I daily met with specimens of this extraordinary tree averaging from 60 to 100 feet in circumference, and maintaining this thickness to a height of from 20 to 30 feet when they diverge into numerous goodly branches whose general character is abrupt and horizontal and which seem to terminate with a peculiar suddenness.

"The wood of this tree is soft and utterly unserviceable. The shape of the leaf is similar to that of the sycamore tree but its texture partakes more of the fig-leaf. Its fruit is a nut which in size and shape resembles the egg of a swan.

"A remarkable fact in connection with these trees is the manner in which they are disposed throughout the forest. They are found standing singly or in rows, invariably at considerable distances from one another as if planted by the hand of man. And, from their wondrous size and unusual height (for they always tower high above their surrounding compeers) they convey the idea of being strangers or interposers on the ground they occupy." [2: 35]

4 October — Near Lesausau in the Bamangwato Mountains, in the neighbourhood of Sicomy's Kraal, near Shoshong:

"The rains having fallen, the country was already adorned with a good coating of verdant grass". His waggons "…rattled along" through "…the trackless mazes of the forest." [2: 36]

12 October — Lepeby fountain:

"When last I visited this fine fountain the game drank at it in numerous herds but now not an animal of any kind came near it with the exception of a few rhinoceroses. This I always found to be the case at the fountains during the summer months when the game are very independent of water owing to the more abundant moisture contained in the young grass. In the forenoon I went birdnesting among the reeds and rushes which grew around the fountain." [2: 40]

16 October — Bootlonamy [Boatlaname, Bakhatla Reserve]:

He "…drew up the waggons under an impenetrable grove of picturesque mimosas [*Acacia karroo*] which were then gaily bedecked with a profusion of highly-scented yellow blossoms; brightly contrasting with the summer vestment of delicious green. [2: 41]

"The vley at Bootlonamy being firm and hard we rattled along at our wonted pace but in the evening when we cleared the vley and entered on the sandy tracts beyond..." they got stuck in the sand. [2: 45]

24 November — From Bakatla Mission [David Livingstone] to Chouaney "…a little east of north", Bakwena Reserve, 80 km east of Kolobeng:

After leaving Bakatla "…we descended into another beautiful valley through which meanders the crystal waters of the Ngotwani...flowing in a northeasterly direction...falls into the Limpopo about 60 miles below its junction with the Marriqua... After following some distance along the finely-wooded banks of the Ngotwani...we entered upon an extensive open tract of country adorned with a carpet of the most luxuriant herbage. This interesting plain was beautifully wooded towards the mountain ranges which bound it on every side, and the Ngotwani twined in a serpentine course along the middle of it forming, in one part, an extensive vley or marsh about 4 miles long and a quarter of a mile in breadth. This vley was now beautified with a dense crop of waving green reeds averaging about 14 feet in height... Dr Livingstone told me that a party of Baquaines were to leave Couaney on the ensuing day for the purpose of cutting a supply of the long rank reeds with which to thatch his new church and dwelling house... [2: 63]

"We were...nearly opposite the centre of the reeds when, on emerging from a grove of thorny *mokala* trees [*Acacia galpinii* or *Acacia erioloba*]...we saw...buffaloes grazing on an open plain betwixt us and the vley." [2: 64]

26 November — Sichely's Kraal [Kolobeng, Bakhatla Reserve]:

"The town's...wide fields and gardens enclosed with hedges of the wait-a-bits [*Acacia mellifera*]." [2: 67, 68]

1845 Cumming, R.G. (1850)

21 June — From Mangmaluky [Mamoluki], going south:

"On the 21st I held south down a beautiful wide valley full of very green trees of various kinds. This was evidently a favourite haunt of elephants: every tree bore their marks. At the southern end of this valley was one of the most interesting fountains I ever beheld. The water came gushing down through the wildest chasms formed from one succession of huge masses of rock of all shapes and sizes... All the ground and rock about the fountain were covered with a layer of elephants' dung about a foot deep... [2: 96]

17 July — "...through a fine open country lying northwest of Corriebely [Kurubella]…

18 July — "I held on for Letlochee and slept at Lebotane, a very strong and perpetual fountain." Next day went on to Letlochee [Letloche].

3 September — Soobie, Bamangwato Reserve:

At the fountain "...a thundering clattering of hoofs was heard coming up the vley and on came a herd of blue wildebeest...very thirsty." [2: 110, 111]

10 September — Bootlonamy to Moselakose:

"...we reached Moselakose, a retired fountain in a bold glen, or gorge, in the first mountain chain before us. As we approached this fine fountain...found the spoor of game abundant at the water." [2: 119]

17 October — On the Ngotwani [Notwani] River, near Sichely's Kraal:

"...the Ngotwani, except at its source, was this year dried up; we, however, found a spot in its gravelly bed where, by digging, we obtained sufficient water for all. [2: 134]

"The river's banks on each side were clad with groves of shady thorntrees." [2: 140]

1846 Cumming, R.G. (1850)

8 June — Limpopo River:

"I was at once struck with this most interesting river: the trees along its banks were of prodigious size and very great beauty. [2: 162]

12 June — "I was in a sequestered bend of the river where the banks for several acres were densely clad with lofty reeds and grass which towered above my head as I sat on the horse's neck. Beyond the reeds and grass were trees of all sizes forming a dense shade; this is the general character of the banks of the Limpopo as far as I have yet seen." [This would have been in the Bakhatla Reserve] [2: 167]

17 September — Seboono fountain "…called by the natives 'paapaa'…a small yet famous water." [Probably in Bamangwato Reserve]:

"…the water was not more than 20 yards long and 10 yards broad. The west side was bounded by tufous rock which rose abruptly from the water about 5 feet. The top of this rock was level with the surrounding vley and here all the elephants drank as if suspicious of treading on the muddy margin on the other three sides of the fountain." [2: 233]

13 October — Moroking country, dependants of Chief Sicomy [Sicomy was at Shushong]:

"The country through which we passed was very soft and sandy, the forest often so dense as to compel us to halt and use our oxen. On the 13th we reached a strong succession of fountains forming a running stream of pure water. Here the country became extremely beautiful, a very wide and finely wooded valley stretched away into the bosom of the mountains, ending in a bold ravine. This district I discovered to be the abode of a considerable tribe called 'Moroking'. Their cultivated cornlands stretched away on every side of the fountain." [2: 257, 258]

1847 Cumming, R.G. (1850)

7 January — Between Kolobeng and Bakatla:

"The country here is the most pleasing I have seen in Africa. Beautifully wooded, undulating plains, valleys, straths, and conical and tabular mountains of most fascinating appearance, invariably wooded to their summits stretching away on every side." [2: 287]

27 October — Mariqua/Limpopo confluence, Rustenburg District, Botswana border:

"On the 27th we reached the junction of the Mariqua with the Limpopo...and held up to the northern bank of the Mariqua. This fine little river averages here about five or six yards in width and meanders along in a very fine serpentine course through a very broad open vley, its banks being in many places destitute of cover excepting reeds, and in others is densely clad with groves of thorn [*Acacia*] and willow trees [*Salix mucronata*], etc... [2: 341]

"Next day we marched about 8 miles up the river and outspanned in a wide open vley." [2: 342]

19 November — Mariqua River to Sichely's Kraal to the west [Kolobeng, Bakhatla Reserve]:

"...we halted under a lofty mountain, the highest in the district, called 'Lynchea Cheny' or the Monkey's Mountain. [2: 350]

"Our march this evening was through the most beautiful country I had ever seen in Africa. We skirted along an endless range of well-wooded stony mountains lying on our left whilst, to our right, the country at first sloped gently off and then stretched away into a level green forest (occasionally interspersed with open glades) boundless as the ocean. This green forest was relieved in one direction by a chain of excessively bold, detached, well-wooded, rocky, pyramidal mountains which stood forth in grand relief..." [2: 351]

1849 Livingstone, D. (1857)

Kalahari Desert:

"The quantity of grass which grows in this remarkable region is astonishing, even to those who are familiar with India. It usually rises in tufts with bare spaces between, or the intervals are occupied by creeping plants which, having their roots buried far beneath the soil, feel little the effects of the scorching sun.

"The number of these which have tuberous roots is very great; and their structure is intended to supply nutriment and moisture when, during the long droughts, they can be obtained nowhere else. Here we have an example of a plant, not generally tuber-bearing, becoming so under circumstances where that appendage is necessary to act as a reservoir for preserving its life; and the same occurs in Angola to a species of grape-bearing vine which is so furnished for the same purpose. The plant to which I at present refer is one of the Cucurbitaceae which bears a small scarlet-coloured eatable cucumber [*Coccinea rehmannii*].

"Another plant, named *leroshua* [possibly *Ipomoea bolusiana*], is a blessing to the inhabitants of the Desert. We see a plant with linear leaves, and a stalk not thicker than a crow's quill. On digging down a foot or eighteen inches beneath, we come to a tuber often as large as the head of a young child. When the rind is removed we find it to be a mass of cellular tissue filled with fluid much like that in a young turnip. Owing to the depth beneath the soil at which it is found it is generally deliciously cool and refreshing.

"Another kind, named *mokuri* [probably *Tylosema esculentum*] is seen in other parts of the country where long-continued heat parches the soil. This plant is a herbaceous creeper and deposits under-ground a number of tubers, some as large as a man's head, at spots in a circle a yard or more horizontally from the stem. The natives strike the ground on the circumference of the circle with stones till, by hearing the difference of sound, they know the waterbearing tuber to be beneath. They then dig down a foot or so and find it.

"But the most surprising plant of the Desert is the '*kengwe* or *keme*', *Cucumis caffer* [*Citrullus lanatus*], the water-melon. In years when more than the usual quantity of rain falls, vast tracts of the country are literally covered with these melons. This was the case annually when the fall of rain was greater than it is now, and the Bakwains sent trading parties every year to the lake. It happens commonly once every ten or eleven years, and for the last three times its occurrence has coincided with an extraordinarily wet season. Then, animals of every sort and name, including man, rejoice in the rich supply. The elephant, true lord of the forest, revels in this fruit, and so do the different species of rhinoceros although naturally so diverse in their choice of pasture. The various kinds of antelope feed on them with equal avidity, and lions, hyaenas, jackals, and mice, all seem to know and appreciate the common blessing. These melons are not however all of them eatable. Some are sweet; and other so bitter that the whole are named by the Boers the 'bitter water-melon'. The natives select them by striking one melon after another with a hatchet and applying the tongue to the gashes. They thus readily distinguish between the sweet and the bitter. The bitter are deleterious, but the sweet are quite wholesome.

"This peculiarity of one species of plants bearing both sweet and bitter fruits occurs in a red eatable cucumber [*Coccinea* sp.] often met with in the country. It is about 4 inches long and about an inch and a half in diameter. It is of a bright scarlet colour when ripe. Many are bitter, others quite sweet. Even melons in a garden may be made bitter by a few bitter *Kengwe* in the vicinity. The bees convey the pollen from one to the other." [p. 47]

June

Trip to Lake Ngami, from Kolobeng:

From Kolobeng to Boatlanama: "The soil is sandy, and there are here and there indications that at spots which now afford no water whatever there were formerly wells and cattle-stations.

"The adjacent country is perfectly flat but covered with open forest and bush, with an abundance of grass; the trees generally are a kind of *Acacia* called '*monato*' [*Burkea africana*] which appears a little to the south of this region and is common as far as Angola. A large caterpillar called '*nato*' [the moth *Cirina forda*] feeds by night on the leaves of these trees and comes down by day to bury itself at the root in the sand in order to escape the piercing rays of the sun.

"Boatlenama, our next station, is a lovely spot in an otherwise dry region. The wells from which we had to lift out the water for our cattle were deep, but they were well filled...

"Lopepe [Lephepe, Bamangwato Reserve] came next. This place provided another proof of the desiccation of the country. The first time I passed it, Lopepe was a large pool with a stream flowing out of it to the south; now it was with difficulty we could get our cattle watered by digging down in the bottom of the well.

"At Mashue - where we found a never-failing supply of pure water in a sandstone rocky hollow - we left the road to the Bamangwato hills and struck away to the north into the desert. Having watered the cattle well at Lobotani, about northwest of Bamangwato, we next proceeded to a real Kalahari fountain called Serotli... At Serotli we found only a few hollows like those made by buffalo and rhinoceros when they roll themselves in mud. In a corner of one of these there appeared water which would have been quickly lapped up by our dogs had we not driven them away. And yet this was all the apparent supply for some eighty oxen, twenty horses, and about a score of men.

"Our guide, Ramotobi, who had spent his youth in the desert, declared that though appearances were against us, there was plenty of water at hand. We had our misgivings, for the spades were soon produced; but our guides, despising such new-fangled aid, began in good earnest to scrape out the sand with their hands. The only water we had any promise of for the next seventy miles - i.e. for a journey of three days with the waggons - was to be got here. By the aid of both fingers and spades two of the holes were cleared out, so as to form pits six feet deep and about as many broad. Our guides were especially earnest in their injunctions to us not to break through the hard stratum of sand on the bottom, because they knew, if it were broken through, 'the water would go away...'

"When we came to this stratum we found that the water flowed in on all sides close to the line where the soft sand came into contact with it. Allowing it to collect we had enough for the horses for that evening; but as there was not enough for the oxen we sent them back to Lobotani where, after thirsting full four days (ninety-six hours) they got a good supply. The horses were kept by us as necessary to produce game for the sustenance of our numerous party.

"Next morning we found that the water had flowed in faster than at first, as it invariably does in these reservoirs owing to the passages widening by the flow... In these sucking places the Bakalahari get their supplies; but the water now no longer rises to the surface.

"Here, though the water was perfectly inaccessible to elands, large numbers of these fine animals fed around us; and when killed, they were not only in good condition, but their stomachs actually contained considerable quantities of water.

"I examined carefully the whole alimentary canal in order to see if there were any peculiarities which might account for the fact that this animal can subsist for months together without drinking, but found nothing.

"Other animals such as the duiker, the steinbuck, the gemsbuck and the porcupine are able to subsist without water for many months at a time by living on bulbs and tubers containing moisture. They have sharp-pointed hoofs well adapted for digging, and there is little difficulty in comprehending their mode of subsistence.

"Some animals, on the other hand are never seen but in the vicinity of water. The presence of the rhinoceros, or the buffalo and gnu, of the giraffe, the zebra, and pallah is always a certain indication of water being within a distance of seven or eight miles but one may see hundreds of elands, gemsbucks, and ostriches without being warranted thereby in inferring the presence of water within thirty or forty miles... I believe however that these animals can subsist only when there is some moisture in the vegetation on which they feed; for in one year of unusual drought we saw herds of elands and flocks of ostriches crowding to the Zouga from the Desert... As long as there is any sap in the pasturage they seldom need water. But should the traveller see a 'spoor' of a rhinoceros, a buffalo or a zebra, he would at once follow it up, well assured that before he had gone many miles he would certainly reach water..." [p. 54]

June — Mokokonyani [Kokonyani Pits], in the Mokoko River:

Permanent wells in the bed "…where the water comes to the surface in a bed of tufa.

"The adjacent country is all covered with low thorny scrub, with grass, and here and there clumps of the 'wait-a-bit' thorn or *Acacia detinens* [*Acacia mellifera*].

"At Lotlakani (a little reed), another spring 3 miles further down, we met with the first Palmyra trees which we had seen in South Africa. They were 26 in number." [p. 61]

Nchokotsa [Chukutsa]:

"...we came upon the first of a great number of saltpans covered with an efflorescence of lime, probably the nitrate. A thick belt of mopane trees (a species of *Bauhinia*) [*Colophospermum mopane*] hides this saltpan, which is 20 miles in circumference, entirely from the view of a person coming from the southeast..." [p. 62]

Thamalakane River:

"While ascending...the beautifully-wooded valley we came to a large stream flowing into it. This was the River Tamunak'le."

1 August — Reached Lake Ngami:

"...on 1 August 1849 we went down together to the broad part and, for the first time, this fine-looking sheet of water was beheld by Europeans..." Describes it. [p. 65]

"It is shallow, for I subsequently saw a native punting his canoe over 7 or 8 miles of the northeast end... In fact, during the months preceding the annual supply of water from the north, the lake is so shallow that it is with difficulty [one] can approach the water through the boggy, reedy banks. These are low on all sides but on the west there is a space devoid of trees, showing that the waters have retired thence at no very ancient

date. This is another of the proofs of desiccation met with so abundantly throughout the whole country. A number of dead trees lies on this space, some of them embedded in the mud right in the water. We were informed by the Bayeiye who live on the lake that, when the annual inundation begins, not only trees of great size, but antelopes as the springbuck and tsessebe *Acronotus lunata* [*Damaliscus lunatus*] are swept down by its rushing waters. The trees are gradually driven by the winds to the opposite side and become embedded in the mud.

"The water in the lake is perfectly fresh when full, but brackish when low." [p. 66]

August — Zouga River [Botletle River]:

Plants used by local people in their fishing activities:

"The Bayeiye live much on fish...and they catch them in large numbers by means of nets made of the strong fibres of the *Hibiscus* which grows abundantly in all moist places...

"Their float-ropes are made of the *ife* or, as it is now called, the *Sansevieria angolensis* [*Sansevieria cylindrica*], a flag-looking plant having a very strong fibre that abounds from Kolobeng to Angola. And the floats themselves are pieces of a water-plant containing valves at each joint which retain the air in cells about an inch long. The mode of knotting the nets is identical with our own." [p. 72]

1850 Livingstone, D. (1857)

August — Near Ntwetwe Pan:

"We passed quickly over a hard country which is perfectly flat. A little soil lying on calcareous tufa, over a tract of 100 miles, supports a vegetation of fine sweet short grass, and mopane, and baobab trees. On several parts of this we found large salt-pans, one of which, Ntwetwe, is 15 miles broad and 100 miles long.

"The salt dissolved in the water has by this means all been transferred to one pan in that direction, named Chuantsa. On it we see a cake of salt and lime an inch and a half thick. All the others have an efflorescence of lime and one of nitrates only, and some are covered thickly with shells. These shells are identical with those of the mollusca of Lake Ngami and the Zouga. There are three varieties - spiral, univalve, and bivalve." [pp. 77, 78]

1851 Livingstone, D. (1857)

June — From the Chobe River to the Zambesi River:

"The country over which we had travelled from the Chobe was perfectly flat except where there were large anthills, or the remains of former ones which had left mounds a few feet high. These are generally covered with wild date-trees [*Phoenix reclinata*] and palmyras [*Hyphaene petersiana*], and in some parts there are forests of mimosas [*Acacia*] and mopane [*Colophospermum mopane*]." [p. 91]

ca. 1850 Holden, W.C. (1855)

24 July — Two days east of Lake Ngami:

"On the 24th, the forests through which we passed were so thick that we were obliged to bring our axes into play to clear a road for our waggons." [p. 422]

17 August — Along Thamalakane River:

"Early on the 17th we continued our journey for four miles farther up this river [the Gonier]; we then left it and passed through a dense forest which occasionally obliged us to use the axe...

"After crossing the river we passed through a small but thick forest, and, striking the bank of the Tamalukan continued up its course for ten miles. [p. 431]

"We continued our course up the Tamalukan for fifty miles; then, leaving the river, entered a sandy country thickly covered with a grey and weather-beaten looking forest from sixty to seventy miles long. In this forest there are several vleys or pools of muddy water; it is consequently frequented by buffaloes, rhinoceroses and other wild animals that drink at the vleys." Then reached the Mababe swamps.

Went round the swamp. "Next morning we resumed our journey and entered on a large, level and boundless plain on which there was little or no grass, yet hundreds of the blue gnoo, the sasabe, and quagga were to be seen passing in long files before our waggon... It took us six hours to travel across this plain." [p. 432]

1852 **Livingstone, D. (1857)**

November — Left Sechele's and skirted the Kalahari Desert [Kolobeng, Bakhatla Reserve]:

"A larger fall of rain than usual had occurred in 1852 and that was the completion of a cycle of 11 or 12 years at which the same phenomenon is reported to have happened on three occasions. An unusually large crop of melons [*Citrullus lanatus*] had appeared in consequence. We had the pleasure of meeting Mr J Macabe returning from Lake Ngami which he had succeeded in reaching by going right across the Desert from a point a little to the south of Kolobeng. The accounts of the abundance of water-melons were amply confirmed by this energetic traveller for, having these in vast quantities, his cattle subsisted on the fluid contained in them for a period of no less than 21 days; and when at last they reached a supply of water they did not seem to care much about it." [p. 121]

1853 **Livingstone, D. (1857)**

15 January — Khopong to Boatlanama:

"On our way from Khopong along an ancient river-bed which forms a pathway to Boatlanama I found a species of cactus [unidentified Apocynaceae: Stapelieae], being the third I had seen in the country, namely one in the Colony with a bright red flower, one at Lake Ngami, the flower of which was liver-coloured, and the present one, flower unknown. That the plant is uncommon may be inferred from the fact that the Bakwains find so much difficulty in recognising the plant again after having once seen it that they believe it has the power of changing its locality. [p. 134]

21 January — "On 21 January we reached the wells of Boatlanama and found them for the first time empty.

"Lopepe [Lephepe], which I had formerly seen as a stream running from a large reedy pool, was also dry.

"The hot spring at Serinane, east of Lopepe, being undrinkable, we pushed on to Mashue [Mashowe] for its delicious waters." [p. 135]

January — South of the Zambezi:

Describes the circumcision ceremony there; the second part of the ceremony called 'sech': "Just at the dawn of the day a row of boys of nearly 14 years of age stood naked in the *kotla*, each having a pair of sandals as a shield on his hands. Facing them stood the men of the town in a similar state of nudity, all armed with long thin wands of a tough, strong, supple bush called *moretloa* [*Grewia flava*], and engaged in a dance named '*koha*'...the men rush forward to them, and each aims a full-weight blow at the back of one of the boys; shielding himself with the sandals above his head, he causes the supple wand to descend and bend into his back, and every stroke inflicted thus makes the blood squirt out of a wound a foot or eighteen inches long." [p. 146]

Mahapi River, near Manakalongwe [Manakalongwe Pass], or Unicorn's Pass, also called Porapora (the gurgling of waters):

"The country beyond consisted of large patches of trap-covered tufa having little soil or vegetation except tufts of grass and wait-a-bit thorns [*Acacia mellifera*] in the midst of extensive sandy grass-covered plains. These yellow-coloured grassy plains with *moretloa* [*Grewia flava*] and *mahatla* [*Tarchonanthus camphoratus*, *mohatlha*] bushes form quite a characteristic feature of the country. The yellow or dun-colour prevails through most of the year.

"The Bakwain hills are an exception to the usual flat surface for they are covered with green trees to their tops, and the valleys are often of the most lovely green. The trees are larger too, and even the plains of the Bakwain country contain trees instead of bushes.

"If you look north from the hills we are now leaving, the country partakes of this latter character. It appears as if it were a flat covered with a forest of ordinary-sized trees from 20 to 30 feet high, but when you travel over it they are not so closely planted but that a waggon with care may be guided among them. The grass grows in tufts of the size of one's hat, with bare soft sand between." [p. 150]

February — Ntwetwe Pan, Lake Makarikari:

"Great tracts of this part of the country are of calcareous tufa with only a thin coating of soil. Numbers of baobab [*Adansonia digitata*] and mopane [*Colophospermum mopane*] trees abound all over this hard smooth surface. About 2? miles beyond the northern bank of the pan we unyoked under a fine specimen of a baobab, here called in the language of the Bechuanas, *Mowana*. It consisted of 6 branches united into one trunk. At 3 feet from the ground it was 85 feet in circumference.

"These *mowana* trees are the most wonderful examples of vitality in the country. It was therefore with surprise that we came upon a dead one at Tlomtla, a few miles beyond this spot... The natives make a strong cord from the fibres contained in the pounded bark. The whole of the trunk, as high as they can reach, is often consequently quite denuded of its covering which, in the case of almost every other tree, would cause its death, but this has no effect on the *mowana* except to make it throw out new bark which is done in the way of granulation.

"This stripping of the bark is repeated frequently, so that it is common to see the lower 5 or 6 feet an inch or two less in diameter than the parts above. Even portions of the bark which have broken in the process of being taken off, but remain separated from the parts below, though still connected with the tree above, continue to grow...

"No external injury, not even a fire, can destroy this tree from without, nor can any injury be done from within as it is quite common to find it hollow. And I have seen one in which 20 or 30 men could lie down and sleep as in a hut. Nor does cutting down exterminate it, for I saw in Angola instances in which it continued to grow in length after it was lying on the ground."

Livingstone then describes differences in the structure of trees. [p. 162]

"The mopane tree *Bauhinia* [*Colophospermum mopane*] is remarkable for the little shade its leaves afford." They fold and reduce their shadows. A certain beetle infests the mopanes.

"In passing along we see everywhere the power of vegetation in breaking up the outer crust of tufa. A mopane tree, growing in a small chink, as it increased in size, rends and lifts up large fragments of the rock all around it, subjecting them to the disintegrating effects of the atmosphere. The wood is hard and of a fine red colour and is named ironwood by the Portuguese. The inhabitants, observing that the mopane is more often struck by lightning than other trees, caution travellers never to seek its shade when a thunderstorm is near...while another tree, the *morala* [*Gardenia ternifolia* subsp. *jovis-tonantis* which, as the name indicates, is widely thought to be a protection against lightning] which has 3 spines opposite each other on the branches and has never been known to be touched by lightning, is esteemed, even as far as Angola, a protection against the electric fluid... The natives believe that a man is thoroughly protected from an enraged elephant if he can get into the shade of this tree." [pp. 164, 165]

28 February — Unku [Kumsedisha]:

"At Unku we came into a tract of country which had been visited by refreshing showers long before, and every spot was covered with grass run up to seed, and the flowers of the forest were in full bloom.

1 March — "Proceeding to the north from Kama-kama [not found] we entered into dense *mohonono* bush [*mogonono*, *Terminalia sericea*] which required the constant application of the axe by three of our party for two days.

"This bush has fine silvery leaves, and the bark has a sweet taste. The elephant, with its usual delicacy of taste, feeds much upon it...

"The rains had been copious but now great numbers of pools were drying up. *Lotus*-plants [*Nymphaea* sp.] abounded in them, and a low sweet-scented plant covered their banks. [p. 167]

"The grass here was so tall that the oxen became uneasy, and one night the sight of a hyaena made them rush away into the forest to the east of us..." [p. 168]

Path from Lurilopepe [not found]:

"We were however rewarded in latitude 18 with a sight we had enjoyed the year before, namely, large patches of grape-bearing vines...clusters of grapes [Vitaceae ?] with which they were loaded... The bushmen know and eat them but they are not well flavoured on account of the great astringency of the seeds which are in shape and size like split peas. The elephants are fond of the fruit, plant, and root alike... [p. 169]

"The forest through which we were slowly toiling daily became more dense and we were kept almost constantly at work with the axe. There was much more leafiness in the trees here than further south. The leaves are chiefly of the pinnate and bipinnate forms...a great variety of papilionaceous family [Fabaceae] grow in this part of the country."

March — Northeastern Botswana:

"The poison more generally employed is the milky juice of the tree *Euphorbia*, *Euphorbia arborescens* [*Euphorbia cooperi* or *E. ingens*]. This is particularly obnoxious to the equine race. When a quantity is mixed with the water of a pond, a whole herd of zebras will fall dead from the effects of its poison before they have moved away 2 miles. It

does not, however, kill men and oxen. On them it acts as a drastic purgative only. This substance is used all over the country though, in some places, the venom of serpents and a certain bulb, *Amaryllis toxicaria* [*Boophane disticha*] are added to increase the virulence." [p. 171]

May

Near Ngwa Hill [Goha Hills]:

"As we went north the country became very lovely. Many new trees appeared, the grass was green and often higher than the waggons. The vines festooned the trees among which appeared the red banian *Ficus indica* [*Ficus burkei*] with its drop-shoots, and the wild date [*Phoenix reclinata*] and palmyra [*Hyphaene petersiana*], and several other trees which were new to me. The hollows contained large patches of water..." [p. 173]

Approaching the Chobe River:

"Next morning, by climbing the highest trees we could see a fine large sheet of water surrounded on all sides by the same impenetrable belt of reeds in water breast-deep, but always found a broad deep space free from vegetation and fordable.

"A peculiar kind of lichen which grows on the surface of the soil becomes detached and floats on the water, giving out a very disagreeable odour like sulphuretted hydrogen in some of these stagnant waters." [p. 175]

Chobe River, near Sanschureh confluence:

Went down the river "...though from the highest trees we could see nothing but one vast expanse of reed, with here and there a tree on the islands...

There were great numbers of otters, *Lutra inunguis*, F. Cuvier [*Lutra maculicollis*] which have made little spoors all over the plains in search of the fishes, among the tall grass of these flooded plains...

The anthills here are very high, some 30 feet and of a base so broad that trees grow on them, while the lands, annually flooded, bear nothing but grass." [p. 176]

June

From Linyanti up to Sesheke, Zambia [Old Sesheke]:

Anthills: "In the parts through which we passed the mounds are generally covered with masses of wild-date trees [*Phoenix reclinata*]. The fruit is small, and no tree is allowed to stand for long for, having an abundance of food, the Makololo have no inclination to preserve wild fruit-trees. Accordingly, when a date shoots up to seed, as soon as the fruit is ripe they cut down the tree rather than be at trouble of climbing it.

"The other parts of the more elevated land have the camel-thorn *Acacia giraffae* [*Acacia erioloba*], white-thorned *Mimosa* [*Faidherbia alba*], *Acacia horrida* [*Acacia karroo*], and baobabs [*Adansonia digitata*]. In sandy spots there are palmyras [*Hyphaene petersiana*] somewhat similar to the Indian, but with a smaller seed..." [p. 203]

"The small, thin, light canoes of the Makololo are "...not more than 15 or 18 inches wide and about 15 feet long. Their paddles, 10 feet in length, are of a kind of wood called *molompi* [not identified], very light, yet as elastic as ash." [pp. 204, 205]

Leeambye River [branch of the Zambezi], near Sesheke:

First time seen by Europeans: "Both islands and banks are covered with forest, and most of the trees on the brink of the water send down roots from their branches like the banian, *Ficus indica* [*Ficus burkei*]... The beauty of the scenery of some of the islands is greatly increased by the date-palm [*Phoenix reclinata*] with its gradually-curved fronds and refreshing light-green colour near the bottom of the picture, and the lofty palmyra [*Hyphaene petersiana*] towering far above...

"...the Banyeti, or Manyeti...make neat and strong baskets of the split roots of a certain tree..." [p. 212]

Towards Katima-malelo ('I quenched fire') [Katima Mulilo]:

"We dug out some of an inferior kind of potato sisinyane from a man's garden, for when one is planted it never dies out. This root is bitter and waxy though it is cultivated. It was not in flower so that I cannot say whether it was solanaceous or not." [p. 213]

Leeambye Valley:

"There are but few trees in this valley: those which stand on the mounds were nearly all transplanted by Santuru [a person] for shade... It is covered with coarse succulent grasses which afford ample pasturage for large herds of cattle...at present the pasturage is never eaten off though the Makololo possess immense herds of cattle." The valley gets flooded at times and all stock has to be removed. [p. 215]

September — Linyanti, Caprivi, Namibia:

"The town and district of Linyanti are surrounded by forests infested by this poisonous insect [the tsetse fly]." [p. 227]

November — Chobe River, near Mparia Island [Imphalila/Mpalila Island, Chobe/Zambezi confluence]:

"The part of the river called Zabesa, or Zabenza [alternative name for a part of the Chobe River], is spread out like a little lake surrounded on all sides by dense masses of tall reeds...

"The banks of the Chobe, like those of the Zouga, are of deep calcareous tufa, and the river has cut out for itself a deep perpendicular-sided bed. Where the banks are high, as at the spot where the wagons stood in 1851, they are covered with magnificent trees...

"Among the trees may be observed some species of the *Ficus indica* [*Ficus burkei*], light-green coloured *Acacias*, the splendid *motsintsela* [*Berchemia discolor*, *motsintsila*], and evergreen cypress-shaped *motsouri* [*Garcinia livingstonei*, *motsaodi*]. The fruit of the lastnamed was ripe and the villagers presented many dishes of its beautiful pink-coloured plums; they are used chiefly to form a pleasant acid drink.

"The *motsintsela* [*Berchemia discolor*, *motsintsila*] is a very lofty tree yielding a wood of which good canoes are made. The fruit is nutritious and good but, like many wild fruits of this country, the fleshy parts require to be enlarged by cultivation: it is nearly all stone." [p. 232]

Chobe River, near confluence with Leeambye River:

"The villages of the Banyeti contributed large quantities of *mosibe* [possibly *Ximenia caffra*, *motsidi*], a bright red bean yielded by a large tree. The pulp enclosing the seed is not much thicker than a red wafer, and is the portion used. It requires the addition of honey to render it at all palatable.

"To these were added great numbers of the fruit [*Strychnos* sp.] which yields a variety of the *Nux vomica* from which we derive that virulent poison strychnia. The pulp between the nuts is the part eaten and it is of a pleasant juicy nature, having a sweet acidulous taste. The fruit itself resembles a large yellow orange but the rind is hard and, with the pips and bark, contains much of the deadly poison. They evince their noxious qualities by an intensely bitter taste. The nuts, swallowed inadvertently, cause considerable pain but not death, and, to avoid this inconvenience, the people dry the pulp before the fire in order to be able the more easily to get rid of the noxious seeds. [p. 236]

"A much better fruit, called *mobola* [*Parinari curatellifolia*], was also presented to us. This bears, around a pretty large stone, as much of the fleshy part as the common date, and it is stripped off the seeds and preserved in bags in a similar manner to that fruit. Besides sweetness, the *mobola* has the flavour of strawberries with a touch of nauseousness. We carried some of them, dried as provisions, more than 100 miles from this spot.

"The next fruit, named *mamosho* ('mother of morning') [*Schinziophyton rautanenii*] is the most delicious of all. It is about the size of a walnut and, unlike most of the other uncultivated fruits, has a seed no larger than that of a date. The fleshy part is juicy and somewhat like a cashew-apple, with a pleasant acidity added.

"Fruits similar to those which are here found on trees are found on the plains of the Kalahari, growing on more herbaceous plants. There are several other examples of a similar nature. Shrubs, wellknown as such in the south, assume the rank of trees as we go to the north; and the change is quite gradual as our latitude decreases, the gradations being herbaceous plants, shrubs, bushes, small, then large, trees. But it is questionable if, in the cases of *mosho* [*Schinziophyton rautanenii*], *mabola* [*mobola*, *Parinari curatellifolia*], and *mawa* [not identified] the tree and the shrub are identical, though the fruits so closely resemble each other; for I found both the dwarf and tree in the same latitude. There is also a difference in the leaves, and they bear at different seasons." [p. 237]

Chobe River, above Gonye Falls:

"The banks of the river were at this time appearing to greater advantage than before. Many trees were putting on their fresh green leaves though they had got no rain, their lighter green contrasting beautifully with the dark *motsouri*, or *moyela* [*Garcinia livingstonei*], now covered with pink plums as large as cherries..."

Rocks in the river bed: "These rocks are covered with a hard aquatic plant which, when the surface is exposed becomes dry and crisp, crackling under foot as if it contained much stony matter in its tissue. It probably assists in disintegrating the rocks for, in parts so high as not to be much exposed to the action of the water or the influence of the plant, the rocks are covered with a thin black glaze." [p. 238]

1857 **Baldwin, W.C. (1863)**

26 September — Kapong [Kopong]:

"The country here is very flat, through bush all the way, but sandy and heavy." [p. 176]

North from Kopong:

"The road uncommonly heavy deep sand, bushy country all the way, camel thorns principally [*Acacia erioloba*], with large open patches." [p. 177]

23 October — Two days from Mosilikatse's Kraal [? Bulawayo, Zimbabwe]:

"Ascended a high mountain this morning and had a capital view of the surrounding country - one immense wooded flat as far as the eye can discern in every direction, with mountains thinly interspersed all over just like so many artificial grottoes on a gentleman's pleasure-ground. They are round and stony for the most part, wooded to the summit and of every conceivable shape and size, decidedly pretty: but there is no water and the country bears such a parched appearance the very sight makes your tongue cleave to the roof of your mouth... Sassy [? Shashi] completely dry. Two days from Mosilikatse's kraal." [p. 193]

1 October — Batlanarmi Waterhole [Boatlaname]:

"Got to some wells called Batlanarmi where we found a good supply of water in a deep hole... The ladder by which we descended to the well was a tall camel thorn [*Acacia erioloba*] tree with the branches lopped off, leaving about 2 feet to stand on. The Masaras stood on it and passed the zinc bucket from hand to hand." [p. 178]

2 October — Trekked to Lopepe's Vley [Lephepe]:

Had 42 thorns removed: "I need hardly say I suffer great pain as my hands festered and ached and throbbed to such a degree that I got no sleep and I did not lessen the pain by applying bluestone. The hack thorns [probably *haakdoring*, *Acacia mellifera* subsp. *detinens*], or *vaac um bechi* [*wag-'n-bietjie*] - a most appropriate name given them by the Boers signifying 'wait a little' - are the most fearful things to get through I ever came across. They have low square tops, strong and very dense, with short stubby sharp thorns set on both ways, and no garment of any quality can stand against them... They are most virulent and poisonous in their nature..." [p. 180]

18 October — North of Sicomo's Kraal:

"Our course lies nearly north... This is without exception the driest flattest, most desolate-looking country I ever saw, and the Masaras have burned the last blade of grass..." [p. 189]

5 November — Sicomo's Kraal [Shushong, Mahalapye]:

"Got early to Sicomo's, a wild queer place. The Kaffirs all live on top of a high berg, having no access but up a gorge between two stony mountains, a dry watercourse which, in any country, would be a roaring torrent." [p. 183]

1858 **Baldwin, W.C. (1863)**

2 May — Between Nkowani [? Inkonkane Pan] and the Chapeau, or Beauclekky River [Botletle River, Ngamiland]:

"There is no game or water. The country is utterly worthless... It is an almost endless flat, with rank grass, thorns, brambles, and worthless scrub-brush..." At a weak waterhole, the water was such that not even the oxen that had been without water for 18 hours would drink it. "The Kaffirs throw the most virulent 'wait-a-while' thorn [*Acacia mellifera*] branches into these pits to prevent the oxen from trampling." Reached the Beauclekky on 3 May. [p. 239]

8 May — "We got to the River Chapeau, or Beauclekky, five days ago; at first sight it appeared an immense bay in every direction as far as the eye could discern, covered with flamingoes and pelicans..."

Trekked on to Chapeau, a Masara captain. "…the Kaffirs had a weir across the river" for catching fish. [p. 241]

"The river appears of immense breadth... I do not know where the stream runs to, and, as far as the eye can reach there is nothing to be seen but reeds so tall and thick that it is impossible to force your way through them. There is safe harbour here for all the game and wild animals in South Africa. I never saw anything like it, and my Hottentots say it is the same all the way to Lake Ngami, about 13 days from here by wagon. It is not far,

but the sand is so heavy that the oxen can only take slow and short stages...it must be confessed that this part of the sandy desert [is] only fit to keep a few miserable goats in existence. There is not a bite of grass now except along the edge of the reeds, but then it is winter." [pp. 244, 245]

6 June — Crossed the river. "We took up the spoor of a large troop of elephants and followed it till within two hours of sunset, straight away from the river to a thick grove of *mapani* trees, the leaves of which very much resemble the beech and are even now, in the depth of winter, green and luxuriant [*mopane* (*mopaane*), *Colophospermum mopane*]." [p. 261]

15 June — Lechulatebe's State, Lake Ngami:

Arrived on 11 June. "I have just returned from seeing the Great Lake, the nearest point of which is about two hours and a half on horseback from here. The country all around appears to be perfectly flat, very unhealthy and uninteresting with a lot of rubbishy reeds at this end, but it is wooded to the banks on the other side and most of the way round. I gather from the natives that it is a three days ride round the lake... The natives are afraid to cross in their canoes as when the wind rises it is very rough... Not far from the southern point, the road the wagons take to Walvish Bay, there is a high ridge of rocks, Lechulatebe's stronghold, in case of an attack from Sebituane. [p. 264]

18 June — "Today I measured two trees called *mowane* [Baobab, *Adansonia digitata*]: one was twenty-seven and the other twenty-eight yards round the bole. At about 6 feet from the ground they spread into four great stems all bending outwards and leaving in the middle a spacious apartment exactly one foot between each stem where they branch from the main bole, widening upwards and, at 18 or 20 feet from the ground, the circumference of the tree must have been forty yards at least. I should live in one of these if I stayed in this part. [p. 268]

20 June — "The river is very full and still rising rapidly, overspreading its banks far and wide and driving us to cut a path through the bush which is so thick that our tent is smashed and two strong canvas sails are torn to shreds... And yet not a drop of rain has fallen for months, and the river is the only water. Every vley in the country is dried up, I cannot in any way account for it - it is one of Nature's freaks." [p. 270]

17 July — Left the Beauclekky River. [p. 281]

11 August — Boatlaname:

"... Batlanarmi, where there was a little water at the bottom of two deep holes which we got at by means of a ladder formed of a tree with several branches. We lowered the tree, on every branch of which was a Masara who handed up the water in a large iron can..." [p. 295]

"Baldwin cut the branch off a camelthorn tree [*Acacia erioloba*] to make a false axle for one of his waggons.

"We have just had a narrow escape from being burnt up. Our road lay through thick *mapani* [*mopane*, *Colophospermum mopane*] trees with tall white grass, thick and dry and a deal broad, on each side. Someone had set the grass on fire in fifty places behind us and below the wind." [p. 296]

1859 Baldwin, W.C. (1863)

12 June — Massouey [Masowe]:

"There was, however, delicious water at Massouey, a fountain pure as crystal where we first saw the Great Salt-pan and a magnificent piece of scenery exactly resembling the sea coast. It was difficult to imagine oneself so far inland. We measured a tree called cream of tartar [baobab, *Adansonia digitata*], 61 feet around the bole, but there are many very much larger.

"The country is very dry here; scrubby *mapani* [*Colophospermum mopane*] trees and a great scarcity of game which I attribute to the want of water and dryness of the grass. We came to some new burns the other day where the grass was green and sweet and found a great variety of game..." [p. 311]

5 May — Kapong to Batlanarmi:

"...a country of such perfect sameness as this is in most parts... There are no landmarks of any sort to guide the eye; it is one densely wooded flat as far as human eye can range..." [p. 370]

1860 Baldwin, W.C. (1863)

August — On return to Sechele's from the Victoria Falls [he was probably in southwestern Zimbabwe at this time]:

"The Maccalaca [Makalala] Kaffirs rile me frightfully; during my absence they have set the velt on fire in a hundred places; the grass is as dry as old tinder and, with the high wind we have daily, it roars away for scores of miles, thus driving the little game there is away. What their object is, except to drive me away, I don't know, as they have no cattle, sheep, or goats." [p. 402]

1861 Baines, T. in Kennedy (1964)

24 August — Near Elephant Kloof, Ngamiland:

"Leaving Elephant Kloof, one of the wellknown and permanent watering-places of travellers on this road, we trekked...to the eastward... The country as before is loose red sand with long grass, small thorns close set in patches, and a few mimosas [*Acacia*]. [p. 101]

27 August — "The country was unpleasant to walk in owing to the prevalence of the low, leafless and almost invisible clumps of '*wagt-een-beetje*' bush [*Acacia mellifera* or *A. tortilis*]." [p. 110]

3 September — Otchombinde [Rietfontein, Ngamiland]:

"Rode down the Otchombinde (Mimosa or Thorn) River..." [p. 121]

Near Otchombinde: "Our path lay over a sandy plain with clumps of bare leafless mimosas [*Acacia*] and other thorns till we reached open glades of pine trees with yellowish-green foliage and grey stems, called by the native tongue *motjeara* and *motjurie* [*motsiara*: *Terminalia prunioides*]. These became ere long a mixed forest..." Found many pitfalls at a place called Fort Funk where Chapman is thought to have met the Greens "...returning from the journey in which the late eminent naturalist Wahlberg was killed by an elephant..." [p. 131]

18 September — *En route* to Ghanzi, and near it:

Habits of Bushmen, differing from those at Tounobis, or Reitfontein [sic]: "At every few yards along the path one or other would squat down and, with a sharpened stick, tear up the loose soil that covered a large succulent root, junks of which they gave to us and to the Damaras. Picking up a leaf of the nearest bush, I made them understand that I wanted to see that part; when they put into my hand two or three dry, leafless little twigs, almost indiscernible at the height of the eye above the ground.

"Yet, in a few minutes, one man had brought to light half-a-dozen water tubers, say 9 inches long by 6 or 7 broad, but of all shapes and sizes that the spaces between the stones allowed them to assume." [p. 144]

Ghanzi:

The waterhole was fairly small and water had to be obtained by digging. "In times not very remote, the water was so large that a man lying in wait for game at one end was often disappointed of a shot by the animals drinking at the other. We outspanned in a small grove about 350 yards south of the pits, and collected specimens of the various *Mimosa* [*Acacia*] blossoms, ranging through every gradation of tint from the palest greenish-yellow to the deepest golden tint and the most intense chrome.

"The thorns were not less diversified, and I may as well take this opportunity of naming a few.

"Firstly, I noticed a large hooked seed of the creeping plant [*Harpagophytum procumbens*] sometimes called *haakdoorn* but more properly The Grappler. The *haakdoorn* [*Acacia mellifera*], of which a noble specimen overhangs my waggon, being furnished along its branches with small but very strong and sharp-hooked thorns, arranged in pairs and tearing the flesh most cruelly whenever it catches.

"The twigs of the *wagt-een-beetje* [possibly *Acacia luederitzii*] are armed with a straight thorn, but the hooked thorns grow in pairs opposite each other. 'Stop a bit' you must, if this one takes your garments.

"Next is the *haak-en-steek* [*Acacia tortilis*], the short hook of which holds you fast and, if you attempt to drag yourself away, forces down upon you a pair of straight ones, a couple of inches long, and sharp as a needle.

"There is the *motjeerie* [*motswere*: *Combretum imberbe*], or Damara's mother, with its rough cruciform points [winged fruits], the common white-spined *Mimosa* [*Acacia karroo*], the prickle-thorn [unidentified], and I know not how many more.

"The shortest way, in fact, is to adopt Dr Kirk's division: i.e. class one for tearing clothes; class 2 for tearing flesh; class 3, the largest, for tearing flesh and clothes both together." [p. 146]

24 September — From Ghanzi going east, *en route* to Thounce [Kameelpan, Ngamiland]:

"...we left Ghanze...and walked forward, the Bushmen digging roots when we became thirsty. One of these measured in its longest circumference 3½ feet, and 2½ feet in its shortest. Those of moderate size are, however, more agreeable, the juice having rather a milky appearance and taste. Its seeds are strung upon a skein of fibres in long round tapering pods, 4 to 6 inches long, and thicker than a goose-quill. This inestimable gift of Providence to a thirsty land is called *markwhae*, or *marfwhae* [unidentified Apocynaceae, possibly *Fockea* sp.], and I do not hesitate to say that the mastication of even a small portion of it affords more relief to a traveller than the drinking of any amount of water. [p. 151]

"We saw traces of an elephant upon the road...and a rhinoceros, which scarcely ever drinks water but lives on roots and melons. Chapman has observed that the elephant never eats the *marwhae*, nor any grass, except a very sweet kind near the Zambesi, though we see now and then places where they have torn up the ground for roots that are agreeable to them." This was near Thounce, also called Leetje Pierie, by Bechuanas, "...both names signifying Wolf Fountain — the Stink Fountain of Anderson." [Kameelpan]

27 September — Between Thounce and Kobis [Kobe Pan]:

"During the afternoon I finished sketches of the *wagt-een-beetje* [possibly *Acacia luederitzii*], the *kameeldoorn*, *Acacia giraffae* [*Acacia erioloba*], the *vyndoorn* [possibly *Acacia nebrownii*], and the *haakdoorn* [*Acacia mellifera*]". [pp. 154, 155]

September — Near Kobis:

"The Bushmen...bring in bits of tusks broken off as the elephants are digging roots..." [p. 159]

10 October — Kobis:

"... The Bushmen had brought us a quantity of *ovumbapoo* berries [possibly *Mimusops zeyheri*, although the fruit of several species is used for the same purpose] and, putting these into a keg, we set the Damara to treat them, *secundum artem*, with boiling water. When the orthodox interval had elapsed we tried our beverage and persuaded ourselves (no Devonshire man being present to resent the insult) to call it cider with a winey flavour...and it was more like bad vinegar with a taste of apple shreds than anything I know. I had formerly made a small quantity unfermented which was like a thin syrup with an exceedingly sweet and pleasant taste." [p. 173]

12 October — "This afternoon I found a tree [*Commiphora africana*] about 15 feet high and 8 inches in diameter at the base, with smooth green bark and perfectly rounded form, tapering gently undisturbed by any large limbs to its top. Strong thorns stood out nearly at right angles from its branches and on these, about half an inch from the point, were clusters of green berries and small purple and crimson flowers. This the Bechuanas and Bushmen told us was the tree under which they find their poison grub, the caterpillar [larvae of the beetle *Diamphidia*], feeding upon the berries." [p. 179]

Baines sketched a large tree, with the caption: "Damara Mother-tree in seed, but leafless." The seeds are massed at the ends of the branches. In the text he writes: "I sketched in water-colours, first the plant bearing a great resemblance to an alien leaf of which the Bushmen and Bechuanas make their twine; next, the [*Terminalia prunioides*, *motsiara*], or Damara mother-tree, from a fine specimen about 25 feet high near the wagon; and lastly the flattened seedpods of the tree." [p. 181]

17 October — Near Kobis:

"Within the last few days a small tree called sandalwood [probably *Croton gratissimus*] has put forth its beautiful light yellow flowers which droop most gracefully from its long and slender twigs.

"On examining these for the purpose of a sketch, I found that the number of stamens varied from a dozen to more than twenty on flowers of one cluster, but for a long time could not find the pistil. We sent for branches from several trees, and at last found that some of the racemes carried two or three flowers bearing the organ, spreading in six parts over a small central sphere, and growing indiscriminately with those bearing the stamens!

"Chapman next reports having found a small *mowane Adansonia digitata* or baobab which I was surprised to see in the shape of a great irregular rocky-looking block of root with a stump of about 4 feet high, more like a pollard willow than anything else, and

clusters of young twigs - some fresh and others broken down - growing from its ragged sides, suggestive on a first glance of anything but youth and vigour.

"The smallest I have seen on the Zambesi, from 12 inches in diameter, were tall, shapely, youthful-looking trees; and those in Australia, before age had made their stems gouty, were smooth and round, and long necked as a champagne bottle which, with a branching twig stuck in its cork, would be no bad representation of them.

"Chapman has remarked, as I have, that a young baobab is seldom seen, and he is astonished at my telling him of one so small as 12 inches." [p. 182]

Baines sketched the bud of a flower [*Pancratium tenuifolium*] which opened in the evening "...into a perfect flower of the most delicate transparent white...diffusing its refreshing odour in the breeze."

He describes it: "Calyx funnel-shaped, divided into six narrow and equal sepals each about 3½ inches long adhering to the corolla ¾ inch from their opening. The neck about 5 inches long as thick as a common quill, swelling a little over the ovary, free, or not adhering to the pistil; bracts two, twisted spirally, as are also the leaves; corolla monopetalous, bell-shaped, hexagonal, the angles being formed by the filaments of the stamens which grow up in the white transparent petals.

"It is deeply scalloped at the edges so as to leave two tongues overhanging each of the six angles; stamens, six epipetalous, rising ¾ of an inch above the edges of the corolla, and curving inwards; pistil 7¾ inches long, standing higher than the stamens, and perhaps receiving the pollen when the flower droops. [p. 185]

"The effects of the little rain we have had are now beginning to be apparent. The loose surface soil seems as dry as ever but on digging 3 or 4 inches we find that it has filtered through and is retained by the ground beneath. The dry sunburnt leaves of various bulbs are imbibing fresh vigour, and it is curious to see 2 or 3 inches of cool glossy green leaf topped by a chisel-edge of dry sear yellow.

"The trees partake of the vivifying influence, and the Damara mother [tree] [*Terminalia prunioides*] [it appears that Baines confused species of *Combretum* and *Terminalia*: he consistently refers to *T. prunioides* as the Damara mother tree although this name is classically applied to *Combretum imberbe*], just before my wagon is really beautiful with her drooping seed, clusters of rich brown yellow supported by the green of the young leaves... [p. 186]

21 October "I sketched a very beautiful umbel of white and pale purple flowers...apparently a kind of *Amaryllis* [*Crinum lugardiae*]. The main stem was flattened, 1¼ inches wide and a ¼ inch wide and a ¼ inch thick, the bracts had fallen down and withered, and the pedicels were arranged, not in a circle, but four lozenge-wise in the centre, then a row of four on each side of them, and one filling up the interval at each end... The stamens were six with a curved bright yellow anther in each, and the pistil about an inch longer, and of the same delicate purple tint, toward the end, as the leaves and the flower. [p. 188]

27 October "We saw a small tree in full leaf with its green berries about the size of a sloe. These generally ripen before the first rain and fall off as soon as moisture comes, but probably the showers we have had are premature.

"Flowers are coming out freshly in all directions. One, a beautifully-spreading white flower on a rather sprawling shrub [possibly *Bauhinia petersiana*], presents in some instances the curious appearance of supplementary petals growing on the stamen and overshadowing the anther. We have yet found only a few thus doubled, and are at a loss whether to consider it an accidental or a regular arrangement. This shrub has a purple sweet-pea-like flower.

"The euphorbium too is beginning to show its claims to rank among the ornaments of the wilderness. [p. 198]

13 October Sketched a couple of beautiful amaryllidae with which the country now abounds." He then describes his technique of painting, and adds: "Whenever my paper admits of it I make my drawings of the natural size but in some cases the umbels of these lilylike flowers are so large and beautiful that I am obliged to reduce them to one-fourth. Unfortunately we are neither of us [Chapman and Baines] deeply skilled in botany and, besides, this the 'Flora Capensis' of Harvey and Sonder in Chapman's possession has only reached its first volume. Lindley's 'School of Botany' gives us considerable help but this refers only to strictly British vegetation." [p. 220]

Thunderstorm. "Every day brings forth its floral novelty which I sketch, and Chapman photographs... The beautifully delicate white flower, already described like an upturned hexagonal bell [*Pancratium tenuifolium*] is now plentiful and no less evanescent. As the day leaves us, the swelling bud bursts into full and perfect beauty, and before 3 hours of the morning sun have shone upon it, it has drooped and withered, and is no more a flower.

"A bush with smooth sea-green leaves [*Catophractes alexandri*], in like manner, is covered at sunrise with funnel-shaped flowers of purest white, with the slightest of purple on the long tube. But they must be gathered at once: after breakfast, in vain might the dilatory collector search for a perfect specimen.

"A more hardy ornament of the veldt is the flower of the grappler thorn [*Harpagophytum procumbens*], richly marked with crimson and purple on a yellow ground, and reminding one in shape of the foxglove, monk's-hood..." [p. 222]

18 November "...splendidly-coloured little beetles, resplendent with blue, green, and gold, with pale and deep tints of red on the under parts, that cluster on the berries of the sandalwood..." [p. 224]

19 November Left Kobis for Mahalaapie [Kuke Pan], c. 22 km away:

"...we passed a large *motjeerie* tree [*Combretum imberbe*, *motsariri*] and spanned out under two smaller ones, 150 yards from the dry pit... [p. 227]

"The tree [*Motjeerie*] nearest our wagon is not a first-rate specimen. It is 8 feet 4 inches in circumference. At knee-height above this it bifurcates and the stems measure 4½ and 5½ feet respectively. The bark is dry and grey and divided into small oblong pieces by longitudinal cracks. The branches are gnarled and contorted like those of an oak, and in a fine specimen the top spreads so as to afford a shade of 20 or 30 yards across.

"Of one, or rather a group of two nearly in one, distant 40 yards the vertical angle is 16 degrees 24' 30", and the horizontal 22 degrees 24' 00".

"The appearance of a small bough with leaves on is very like that of an oak but the leaves themselves are oval, about 2 inches long, and ¾ inch broad, of a warm glossy green and not indented at the edges.

"The wood is dark, close-grained, and as nigh as possible like that we used to cut on the Zambesi under the name of *Lignum vitae* for the engine of the Ma Robert [Livingstone's boat for the Zambesi expedition of 1858, but found unsuitable]." [p. 227]

22 November Mahalaapie:

"...a curious little flower, or raceme of flowers [*Cleome gynandra*]... First, the stem, 6 or 8 inches long and as thick as a crow-quill, sent forth at intervals of ⅛ inch a number of foot-stalks with three leaves, one large and the other two smaller, at their junction with the stem. At about an inch from this the flower commenced with a calyx of four small green leaves. The petals were small and white, four in number and grew on little foot-stalks half-an-inch long all of them turning upward while, from the calyx, projected an angle of 45 degrees what appeared another pedicel about an inch long with the stamens and pistils growing on it, the latter, as the flower died, sending forth a seed-pod 2 inches long, and less than ⅛ inch thick.

"Chapman says the root is used medicinally in cases of colic or other similar disorders...

"The young grass and the long rest our cattle have had have worked wonders on them..." [p. 234]

23 November East of Mahalaapie, near The Kopjies [Mabeleapudi Hills]:

"About an hour after starting [from Mahalaapie] we caught a glimpse of 'the Kopjies' on our left on a bearing of 75 degrees and gradually turned through the bush till we shaped a serpentine course toward them. The country here becomes more agreeable to the eye; the young grass mixed with the dry stems of last season. The mimosas and acacias are putting forth their leaves; while little rain plashes [alt. for splashes] lie upon the flats and cause *Convolvuli* and other beautiful flowers to add to their beauty and scene. [p. 238]

"Our path through the bush, winding as it does to avoid the larger shrubs, trees, and hills or other impediments, together with the impossibility of seeing the path a hundred yards in advance, puts it out of question to keep a strictly accurate compass route. [p. 239]

"...we found the other wagon outspanned under a fine *mallapie* tree [possibly *Boscia albitrunca*, *motlopi*] growing, like almost all of the kind I have seen, out of a small anthill, but whether the tree attracts the ants, or the fine soil of the hill is necessary to the growth of the tree, I cannot say. [p. 240]

"...a plant called *ombooa* [probably *ombowa*: *Amaranthus* sp.,], the leaves of which are boiled by the Damaras, then moulded by the hand into a nearly round cake and eaten, either moist or after being dried in the sun. I dare say it was good enough but the appearance of the mess was quite sufficient for me.

"John busy trimming a new axle which I find, on cutting it, is not a Damara mother [tree] [possibly *Combretum imberbe*] but more resembles the Stinkwood of the Colony and the *matundo* [perhaps *Cordyla africana*] of the Zambesi. But is [it] seems [to have] a firmer grain than either and, although cut only yesterday, works smooth and pleasantly under either saw or plane." [p. 245]

30 November "Chapman has found a large vlei, 50 yards wide and waist-deep, 5 miles to the northward and westward. And this is likely to be our first move as the Bushmen say the country to the east is too thickly wooded; in addition to which we do not want to risk the cattle by going into the fly country." [p. 246]

2 December Quarantine Tree, east of Mahalaapie:

"The *motjiharra* (Sichuana) [*motsiara*: *Terminalia prunioides*] or *oomahaama* (Damara [Herero, Himba etc., not Damara]) [*omuhama*: *Terminalia prunioides*], of which wood...it appears that our new axle is made of a tough-grained wood much resembling the stinkwood of the Colony or the *matundo* of the Zambesi.

"The heart is of a yellowish brown, of medium depth and much harder than the outer wood which is lighter and nearly the colour of beech. Its fibre is very close, but not straight, being subject to sudden and unexpected undulations which cause it to tear up with a certain woolliness if not worked with exceedingly sharp tools, though in this respect it is much less unpleasant than either of the varieties mentioned above.

"It possesses in great power when freshly cut the peculiar smell from which the wood derives its name; but this soon becomes fainter and in a few hours hardly perceptible.

"Its seed-pods hang in clusters of about a dozen in each on pedicels 1½ or 2 inches long; and numbers of these, grouped together on the end of the smaller branches, hang in drooping masses. The pod is very thin and flat, and oval, or rather of a long heart-shape, the point being attached to the pedicel, and the indentation at the opposite end. The seed is contained in a thickened portion of long oval form in the centre. The colour is light burnt sienna which, when relieved by the cool green of the young leaves, also growing in small clusters of five or six from the end of a short foot-stalk projecting nearly at right angles from the branch, imparts a peculiar richness of colouring to the whole.

"The bark is rough and of a greyish-brown, and in the larger trees is impressed with lozenge-shaped hollows, the projecting edges between having in consequence the appearance of a net drawn over the tree.

"Chapman, on being again consulted, says the people told us distinctly this was the Damara mother [tree]; and Green, who ranks among the foremost of explorers and hunters in the country, has the same opinion. The flower I have seen only in the bud, but Chapman says it is white or pale yellow and, when developed, will almost overpower the green of the leaves. The flower of the *matundo*, formerly sketched on the Zambesi, is of a deep chrome yellow, and reminds me, as far as I now remember, very much of the laburnum. [p. 247]

"Andersson, in a footnote, states his impression that this has been described as *Quercus africana* but neither the wood nor the leaf resemble an oak; and I think I remember the 'stink haut' of the Colony being called in a list at the end of a book of travels *Laurus bullata* [*Ocotea bullata*]. He says, in truth, it is well adapted for various purposes, as wagons, gunstocks, ship-building, etc., but I remember when, at Dr Livingstone's request, I assisted the native carpenters in building a boat for Major Secard, the latter advised me to use only the dark heart of the wood as the whiter outside was not so durable, especially in the water.

"The *motjeerie* [*motswere*; *Combretum imberbe*] wood is hard but not tough in rain, and splits more readily than the other. Its fibre does not tear up even under the saw which cuts it as smoothly as if it had been planed. In the young tree there is on one side 2 inches and on the other 1½ inches of hard close-grained white wood which has not shown a symptom of splitting since we cut it, while the heart, 2 inches in diameter of dark brown slightly waving grain, rifted through its whole length almost as soon as it began to dry.

"In the older trees the white wood diminishes in proportion as the heart increases, and those we cut at Mahalaapie had every appearance of *Lignum vitae*. We cut large quantities of similar wood on the Zambesi for the engine, or rather the furnace, of the Ma Robert. [p. 249]

"This we think may now be considered as the tree entitled to the Damara name of *omborumbongo* [*omumborombonga*: *Combretum imberbe*] - or, as Andersson gives it, *omumborambonga* - and of which he says in his note 'The grain of this tree is so very close, and the wood so exceedingly weighty, that we gave it the name of the iron-tree'. He also mentions that the tree, said to be that from which the Damaras are descended, is to be seen at Omururu; but somehow there must be more than one parent tree for, both in going and coming, we met with several omborumbongos, all of which the natives treated with filial affection.

"For my own part, I still think that Andersson is right in his affiliation of the Damaras, and that our people have misled us. But I have no doubt whatever of having at last ascertained the native names, both in Damara and Sichuana, correctly, and Chapman, who speaks the latter tongue fluently and the former tolerably, has taken great pains with Koobie [one of their waggoners] who says 'he knows all the trees' as also with the Damaras.

"I consider myself however pretty safe in saying that our Damaras regard with a veneration almost amounting to horror the timber of either tree, to avoid which, especially if seen in combination with a saw and a chalk-line, they will go many a mile out of their way.

"Chapman has just showed me the seeds of the *Omborumbongo* [omumborombonga, *Combretum imberbe*], the pods of which consist of two thin flat disks, three-quarters of an inch broad set at right angles to each other, the seed being enclosed where the centres of the two cross each other.

"Another subject of enquiry still in hand is the Ngwa or Kaa, the grub furnishing the poison for the Bushmen's arrows... [p. 250]

"Chapman has closely questioned Koobie and others respecting the antidote to this poison but everyone denied all knowledge of any such, or else brought purposely the wrong root. Chapman then asked one of them 'And what, then, do you call the *kala huetlwe*?' The man...brought the plant, the root of which is chewed and rubbed on the scarified wound, grease being applied afterwards.

"The *kala huetlwe* [possibly *Talinum caffrum*] is a small soft-stemmed plant with leaves 2½ inches long by a quarter broad. It has a small yellow flower with 5 petals, a number of stamens, and the calyx divided into two sepals. Its root is something between a bulb and a tuber, rough and brown outside, and, when cut, is seen marked with concentric rings of light, reddish-brown and purple. [p. 250]

"Koobie says there are three kinds of *kala huetlwe*. One which I have sketched with small five-petalled flowers and long leaves, the midrib appearing in relief on the lower side, and in depression on the upper. Another with a broader leaf, tasting nearly like sorrel, and a larger flower; and the third with the leaf of a wrinkled or wavy form. Fat is used after the chewed root of the *kala huetlwe* has been applied to the wound.

"On a former occasion a Bushman gave Chapman a remedy for the bite of the tsetse. It seemed to be a parasitic plant [Loranthaceae or *Viscum* sp.] growing either in a hollow of a tree or between the wood and the bark..."

5 December — Near Quarantine Vlei, east of Mahalaapie:

"...we reached 'the big tree' a *mowana* or baobab *Adansonia digitata*, growing by a pool of water... [p. 258]

"Our road, or rather our course, for we had to axe our way more than once through the bush...till we crowned the western base of the third Kopje... We now turned eastward... we outspanned at last on a barren flat... Not a blade of grass was in sight and the trees looked bare and dry as if vegetation had ceased for ever..."

7 December — "We halted after about 6 miles under a fine mowana [*Adansonia digitata*] 'the big tree'... The tree measured 50 feet in circumference at the base and was in full leaf with a few of the beautiful pendent white flowers still upon it. I made a hasty sketch and Chapman took three very good photographs." [p. 259]

Libebo, near Ngami:

"We next crossed a flat with small thorny shrubs but now entered a somewhat closer bush of mimosas [*Acacia*], *oomahaamas* [*Terminalia prunioides*], and other trees of medium size, but destitute of the baobabs which we had found were becoming plentiful in the morning."

"Came to a hill from which the waters of Lake Ngami could be seen. [p. 260]

8 December — Lake Ngami:

"We…saw the low land of Ngami with the reeds marking the former extent of the waters which had now receded so far that, as the Bechuanas said, the usual outspan on the shore was not damp enough to breed a mosquito.

"We stopped to let them breakfast on *Motlope* [*Boscia albitrunca*, *motlopi*] berries and wild plums, and then descended to the shores of 'the Dam' as it is generally called among our people who have learned the word from the Dutch and Hottentots.

"The base of the hill was bordered by a rich belt of trees, under the shadow of which canoes used formerly to pass but, beyond these, was now a dry plain on which flocks of birds, seemingly black and white ibis, were feeding on the freshwater snails.

"We could see the trees in the distance stretching round the northwestern side and, after walking about a couple of miles to the northward of east, came to where the water approached within half a mile of the woody belt, and chose the most elevated bit of land we could under a fine Kameeldoorn, *Acacia giraffe* [*Acacia erioloba*] for our outspan. The bit of water in sight was a mere strip and the horizon was bounded by reedy islands less than three-quarters of a mile distant." [p. 262]

12 December — "I could see the trees extending all round upon my left or western side, to the north, and apparently terminating about 70 degrees more to the eastward... The distant trees did not seem to be above 10 miles away, and certainly, I would say, not 15 miles, and I believe this end is called Little Ngami." [p. 265]

14 December — Lake Ngami (Little Ngami):

During the night, he estimated from a rough raingauge in an old teapot, c. 4 inches of rain fell. "It is said by the natives that the rains do not affect the depth of the lake, and probably they do not to any extent. But this morning the clump of reeds that I walked to the other day had become an island with 3 or 4 inches of water all round it, and small patches of water appeared in many places that had only been mud before..." [p. 268]

22 December — Letchuatebe's [Lechulatebe's], Lake Ngami:

"Harry brought in some of the wild folum or *morootoonoque*, and made 'beer' of the pulp shaken up with water. It was curious stuff producing a sour curd when milk was added; but they say Jem got drunk on it." [p. 277]

29 December — Mamu-ka-hoorie [The Baobab Tree], Lake Ngami:

"We walked forward...to the big tree, *mowana* [baobab], at Mamu-ka-hoorie and found the country much improved. Rain-vleis had formed all along the road and the new water at the tree, preserved by the growth of grass and rushes from admixture with the mud, was sweet and pure. And many flowers that had passed away at Koobie [Kobe] before we left it were here in full bloom... In the afternoon we found the trees (so bare and dry when we had passed up) putting forth their leaves vigorously..." [p. 294]

31 December — Near Quarantine Vlei, Lake Ngami, near Mahalaapie [Kuke Pan]:

Passed through "...a tolerably open forest where the graceful foliage of the *oomahaama* [*Terminalia prunioides*], with its grey stem, its pale yellow flower-tufts and crimson seeds, contrasting with its cool green leaves and the darker masses of the *mollopie* [*Boscia albitrunca*], with its short leaves closely gathered like moss on its stout branches, growing as it does in close proximity to an anthill... We outspanned under a fine *motjihaara*, or *oomahaama* [*Terminalia prunioides*], with an anthill and the inevitable *mollopie* [*Boscia albitrunca*] beside it..." [p. 296]

1862 Baines, T. (1864)

2 January — Approaching Mahalaapie:

"Walked ahead through groves of *oomahaama* [*Terminalia prunioides*] full of blossom, and flats of grass, and prickle-thorns."

3 January — Outspanned under the *motjeerie* [*motswiri*, *Combretum imberbe*] trees at Mahalaapie..."A mile more westerly brought us to Observation Tree which looked so small that none of us could recognise it after the land of the baobabs..."

4 January — Kobe Pan:

"An inspection of the wells at Koobie by no means bore out the conception I had formed from last night's report. It is true they were filled so that the actual holes we had dug were no longer visible, but they were still separate and not united, as in former days, in one large vlei..." [p. 298]

7 January — From Observation tree near Mahalaapie, going east:

"The first mile or two was a grassy open plain of grey sandy soil consolidated by the grass roots and the late rains. Then came groves of mimosas [*Acacia*], *oomahaama* [*Terminalia prunioides*] and *motlopies* [*Boscia albitrunca*] growing as usual from anthills, and these again alternated with patches of low bush of brittle wood with smooth spear-shaped leaves (for a wonder destitute of thorns). This, I am told, is a favourite food of the elephant.

"Water we passed every 15 or 20 minutes, and resting at one vlei overshadowed by a pair of *haakdoorns* [*Acacia tortilis*] and a *motlopie* [*Boscia albitrunca*]..." His Bushman found a large bullfrog. [p. 302]

13 January — Had passed Union Vlei turning northwest, northeast of Lake Ngami [was based on a valley at Union Vlei]:

"...turning northwest down the valley, which became broader and more open as we went on, outspanned under a sweet gumtree [probably *Acacia karroo*, sweet thorn] in its grassy bed." [p. 316]

Trekking in the valley, an 'Omaramba' which would lead to the 'Omaramba Otchombinde', 8 or 10 miles above Reitfontein [sic], or Kounobus [Tounobis]:

"For about two hours we trekked over elevated undulating plains of grey firm soil, apparently calcareous, covered with grass (which indicated that the rain had fallen long since) and patches of low bush alternately thorny and without thorns, the latter called in Sichuana, *mo khononga* [mokononka, *Garcinia livingstonei*], and a favourite article of food with the elephant.

"We passed several vleis dried or drying up, and deeply marked with the spoor of elephants, rhinoceroses, and giraffes searching for water.

"At 11 o'clock, from the northwestern brow of the rise, we saw before us a broad valley with lines of dark brown trees..." [p. 320]

Trekking on "...brought us past half a dozen vleis, shaded by fine thorn trees encircled by white sandy beaches and from a third to half full of water." [p. 321]

20 January — The party "...turned east over a flat with anthills and a rather pretty grove of tall straight *Oomahaama* trees [*Terminalia prunioides*] from which poles, 30 or 40 feet in length and 8 or 10 inches at the base might be obtained." [p. 324]

23 January — Deep Vlei [so-named by Baines], northeast of Lake Ngami:

"...at present only a deep mud hole..."

24 January — Left 'Deep Vlei' going "...northward over a rise; then, passing through a hollow with a limestone bottom, and a small pit, where the long green grass indicated the possibility of water... [p. 330]

"During this and the last two or three days we had seen many trees of considerable size overturned by elephants. More than one of these appeared to be certainly more than 8 and perhaps 10 inches in diameter, and they were not dry rotten wood but strong growing *motjihaaras* [*Terminalia prunioides*], such as we had made our axle of, overthrown in all their strength, and with the green foliage and crimson seeds still as full and rich as any on the trees still flourishing beside them." [p. 331]

10 February — The farthest point reached on this trip. This was newly explored country, north or northeast of Lake Ngami. He called it 'Wait for the Wagon Vlei':

"The haakdoorns [probably *Acacia mellifera*] and underwood (like large hedgerow thorns of England) while offering no impediment to an elephant, materially embarrasses a man, and by their density prevented my seeing beyond a very short distance..." [p. 357]

18 February — Place unknown:

"...we reached an omuramba with a chain of small vleis...we left it and turned again south over an extensive sand bult covered with a thick forest of tall seringa [possibly *Burkea africana*, wild syringa] and other trees, one so like another that without a constant reference to my compass I could not have kept course."

He was temporarily lost and even his Damaras were lost. "Shortly after noon we off-saddled in a little hollow, perhaps the beginnings of another valley going to the west, with tracks of cameleopards...leaving this we continued southward through the seringa forest till nearly sunset when a broad valley opened before us..." [This must have been in more open country with some bush, because a Brindled Gnu was seen] [p. 368]

23 February — Northeast Ngamiland:

Down a valley on the south side of a pan "...which, instead of the unsightly bed of damp pipeclay trodden into the holes of elephants, now presents a uniform surface of waving grass about a foot high [possibly *Setaria verticillata*] gracefully bending under the weight of its seeds and ready at any moment to discharge them into the socks and trowsers of the passer-by. Once there, their barbed points prevent their falling out, and every motion forcing them farther through they keep up...a constant and wholesome irritation in the skin." [pp. 369, 370]

24 February — Eastern Ngamiland:

"I went ahead over an open grassy flat with low thorns and small bushes bearing a berry of which Chapman makes a vinegar-like drink that we try to fancy cider, and... went on through a thick bush or shrubbery of young seringa trees [possibly *Burkea africana*, wild seringa] and elephant bush about as high as the wagon, and mostly without thorns. We had passed the *motjihaara* [*Terminalia prunioides*] grove at about 5 or 6 miles distance... [p. 378]

27 February — "We were crossing a low sandy-ridge covered with small but thick bush of seringa *boom* [possibly *Burkea africana*, wild seringa], sandal wood [probably *Croton gratissimus*],

omooti onjou berries [unidentified], and other shrubs...” when they ran into three large elephants. [p. 380]

“Finding a couple of water melons [*Citrullus lanatus*], I shared them with my steed...” [Near Union Vlei on the return] [p. 382]

29 February — Junction of Tamalukan River [Thamalakane River], and Botletle River:

“...the tall reeds here render the water completely invisible and anyone might pass the spot without remarking it. [p. 390]

1 March — “The river becomes more open above the junction of the Tamalukan, showing in many places broad reaches of clear water fringed by reeds for a considerable distance. The stream coming from the north is not known here as the Tamalukan but is called by the Makobas ‘Zegannie Noka e a Lingalo’ after a chief of the Makobas, the Bechuanan Noke. In very rainy seasons one of its upper branches communicates with a branch of the Chobe or Zambesi and, at such times, as probably will be the case in August, a boat might pass from Lake Ngami up the Botletle river and Tamalukan right into the Zambesi.” [p. 391]

6 March — Near New Years Vlei, east of Lake Ngami:

“...we followed the valley as far as it served our purpose, then, trusting to the compass only, we crossed an open plain of forest of *motjihaara* [*Terminalia prunioides*] and the vigorous thorns scattered according to the nature of the ground over the country. Here and there we found small patches of limestone, and sometimes beds of a different grass, indicating that long ago the Bechuanas of the lake had kraaled their cattle here.” Reached Quarantine Vlei. [p. 390]

17 March — Sebubumpi Vlei, south of The Kopjes:

“...passing the dried-up vlei called Sebubumpi and striking the head of the valley which, clothed at first in thick bush, opened into a broad grassy hollow in which we halted at a fine deep vlei called Molenyani.” [p. 400]

18 March — East to southern base of Lubelo:

“Without a path, the country presented alternately grassy flats, on red or grey sand or limestone, sometimes open, and at others, moderately covered with bush, but nowhere so thick as to impede a wagon.” Nquiba Mountains in the distance, east northeastwards. [p. 401]

24 March — Quaebie Hills [Khwebe Hills]:

“We found several baobabs *Adansonia digitata*, some of which had been stripped of their bark for cord, but evidently many years ago as the ring which is left around them, where the ends of bark are cut off at breast high, had now grown nearly double that height, and no fresh one indicated a second operation. Some of them, however, had pegs driven into the bark to enable the Bushmen to ascend and gather the fruit which, still young and green, was hanging on the branches.

“We found several wild medlars, ? *Vangueria* sp. [*Vangueria infausta*], and the acid fruit before mentioned which, after a long thirsty walk, was particularly agreeable... After climbing masses of black igneous rock, more or less hidden by long dry grass, we saw in the far distance the waters of Lake Ngami stretching from N to NW by W, and could plainly distinguish the shore on the opposite side, as well as the smoke from the heaps of reeds and bulrushes burned by the natives about this season.

“When we returned, one of the Bushmen had made us a stew of wild medlars ? *Vangueria* sp. [*Vangueria infausta*], and most of us neglected pea-soup in consequence.”

28 March — Trekked northeast from Quaebie Hills:

“We passed through several patches of thick bush and *motjihaara* [*Terminalia prunioides*] forest as we left the westernmost end of the Quaebie Hills...”

29 March — *En route* to the Botletle River:

“About noon we lost sight of the Quaebie hills and began to find large open groves of *motjihaara* trees [*Terminalia prunioides*] upon the plain. Between one and two, the bush became a forest...and by half-past two we outspanned on the edge of the bush near a small open reach of the Botletle River. Small enough it was in truth, 300 yards long, perhaps, and fifteen wide with a smooth slope covered with long dry grass down to the edge of the translucent water, the dark surface of which was adorned with lilies and fenced round on the northern side by tall thick reeds which, sweeping round to our shore on both ends of us, formed an impassable barrier to navigation of any kind.” [p. 411]

30 March — About a quarter-mile further on "...formed camp under a nobly-spreading kameeldoorn [*Acacia erioloba*] in a small open plain surrounded by forest." [p. 414]

4 April — Camp on Botletle River:

Went exploring nearby. "The reeds, I found, though still dense, were only for a short distance so close as to obstruct the passage of a canoe, and, shortly, open reaches appeared along which a boat might sail freely before the general southeast breeze. When quite full, the river, spreading to the high banks and trees within the line of which I rode, with its many islands, must be a noble sheet of water; but at present, in many places, it is an insignificant channel, and in some places a mere plashy swamp, across which the cattle could hardly be said to wade. Some noble baobabs *Adansonia digitata* grew along the line of forest on the northern side... [p. 423]

5 April — "A shallow portion of the river was crossed by mats of reed set on end and curved into various forms so as to form a labyrinth from which the fish would find it difficult to escape... Returning, I sketched a heavily-laden canoe paddling against the wind with a huge top-hamper of reed mats laid above the cargo, and landed upon the north shore to show Edward a tall solitary palm tree [*Hyphaene petersiana*], the only one within view, and the first he had ever seen. We measured the height with a sheet of paper folded to an angle of 45 degrees. The base and perpendicular being, of course, equal, all you have to do is to step backward till the diagonal coincides with the top of the object to be measured; then the distance at which you stand from the object, with 5 feet added for height of eye, will be very near its altitude. In this manner the tree, one tall smooth stem without knot or branch till the crown of fan-shaped, recurved, leaves spread from the top, measures as nearly as possible 60 feet." [p. 428]

7 April — Leshulatebe's Town, on the Botletle River:

"...passing through the town to the two large *Mowanas* [baobabs, *Adansonia digitata*] - most likely those mentioned by Livingstone as his latitude station - we sketched and photographed the trees and turned to take a view of the town. [p. 440]

"I landed on the opposite or north shore, and walked in a westerly direction past the palm tree, the first Bell had ever seen and which he made by triangular measurement to be 75 feet to the top of the leaves."

Along edge of Lake Ngami:

"...walked along a ridge of low sand-hillocks that marked the former margin of the lake till, finding a tree worth climbing, I saw beyond the line of reeds, perhaps a mile and a half in breadth, the waters of the lake, the hills of Quaebie bearing at the same time from south by southeast. [p. 443]

12 April — "...with the data afforded by the trip to the lake and the bearings of Quaebie, I set to work to correct my map using Dr Livingstone's latitude 2020 for the *mowana* trees, *Adansonia digitata* south of the town..."

17 April — Along Botletle River, from Leshulatebe's town:

"...we made four or five miles through a thick undergrowth which had completely choked the road, disused now for some years. Men were sent forward with axes to clear the road. [p. 452]

20 April — "Our...vehicles lay...upon a plain about half-a-mile wide covered with dry grass, some of the stems, remaining in sheltered spots, being more than 6 feet high. On each side is the boundary of thick forest, the passages of which are choked up with undergrowth. On the north side of the plain is a line of reeds marking the course of the river..." [p. 454]

30 April — On the Botletle River, southeast of junction with the Tamalukan River:

"...sometimes through the thorn-groves at a little distance from the river, and sometimes along the reeds by the very margin. [p. 392]

2 May — "We found a tolerably good path, mostly in a grassy hollow like a side-channel for the overflow of the river... At a shallow place, Moreemie's Ford [Tsanoga Rapids], where stones were laid across the river to enable the Makoba to ensnare the fish, I bought a barbel and two other fish shaped like pike but with a small mouth formed only for suction...

"In the afternoon we passed through forests of large kameeldoorn *Acacia giraffae* [*Acacia erioloba*]."

5 May — Along the Botletle River:

"In two treks we made 12¾ miles mostly over sandy country with open thorn groves and halted by a camp of Henry Chapman's among some fine trees which are now becoming scarcer than hitherto..."

11 May — Moroomohooto [Moremaoto]:

"…where the river coming from about SW by W (magnetic) sweeps round with its convex side to the N, and runs finally to the SSE. On the N side the current cuts into a bank of soil about 30 feet high, its sides clothed with reeds and straggling bush, and its upper level covered with fine thorn and other trees. The south or interior of the curve was, as usual in such cases, a low flat point, several hundred yards of which had apparently been recently formed, as no trees grew within that distance from the water." [p. 394]

15 May — Near Moromohooto Drift [Moremaoto] on the Botletle River:

"The Bushmen here deny all knowledge of the poison grub, and tried to mislead Chapman respecting the juice of the *Euphorbia*, at one time saying that it was merely to fix the poison on to the arrows and, at another, that it was merely rubbed as a charm upon their arms to make them strong in shooting... I have heard from old Hottentots in the [Cape] Colony that the *Euphorbia* is used with other ingredients in poisoning their arrows, and I believe that its qualities as an irritant considerably assist the action of the real poison while its glutinous properties bind it firmly to the barb of the weapon." [p. 406]

16 May — Trekked from the drift. "We turned from the river up a little valley, thickly wooded... [p. 407]

"The character of the country changed almost suddenly. The thorns through which we had been tearing our way ever since we left the lake, now gave place to the sandalwood [probably *Croton gratissimus*] and other thornless trees and shrubs, with a *Mimosa* (*Acacia*) here and there to remind us that those unpleasant adjuncts of the rose were not quite gone out of existence... [p. 408]

"Before leaving the river, Chapman had seen the remains of the *Moroomohooto* [Moremaoto] or 'tree with legs', in the little hollow hardly a hundred yards from his scherm. The main stump stands in the centre and round it are about a dozen smaller ones. It had been a fine *motjeerie* [*Combretum imberbe*], and we suppose the little hollow, having been worn since the tree attained its maturity, had swept away the earth from beneath the roots which might then have become stronger and perhaps more numerous as the tree felt the want of support."

17 May — About 12 miles from Moroomohooto [=Moremaoto] Drift. Trekking "…through country sparsely dotted with scrubby thorns, we saw no living creature." Came to a place called "…Ganna or Channa in the Bushman tongue" and "…halted to breakfast between a couple of stunted *motjeerie* trees [*Combretum imberbe*] where the ashes of former fires indicated an outspan, perhaps Polson's a couple of years ago...

"At sunset we passed a Bushman village (deserted) on a little sandhill covered with dwarf palms, 6 or 8 feet in height being in fact merely the leafy crown growing at once from the ground without a stem..." [p. 409]

20 degree 06'56" latitude "…over undulating country of tolerably firm sand with long dry grass, low prickle thorns, and here and there *Mimosa* [*Acacia*] groves." [pp. 410, 411]

19 May — From Moroomohoto to Ntwetwe Pan [Lake Makarikari]:

"The sun rose on a desolate expanse of sandy plain covered with saline encrustation, slightly raising its edges in irregular octagonal figures, and cracking, as clay may be seen to do under a hot sun, at which the last shallow tide had been driven by the wind in large ripples. Low islands with dry grass and leafless trees (the *mahuru papeerie* or Bushman's grub tree [*Commiphora africana*]) studded the flat here and there...the salt water oozed from the black mud where our wheels had sunk... [p. 412]

"The sand plain on which we were, formed part of the Ntwetwa salt pan which stretches for 80 miles or more to the east or northeast with an average breadth of 18 miles. To the south of this again is a much larger trail, fully as long as this, and perhaps 60 or 70 miles wide. We fixed upon a lofty baobab about 3 miles north." [p. 413]

21 May — Ntwetwe Pan:

"A long circuit brought me...to the clump of baobabs we had seen yesterday from the wagon. Five full sized trees and two or three younger ones were standing so that when in leaf their foliage must form one magnificent shade. One gigantic trunk had fallen and lay prostrate but, still losing none of its vitality, sent forth branches and young leaves like the rest. The general colour of the immense stems was grey and rough, but where the old bark had peeled and curled off, the new (of that peculiar metallic coppery-looking red and yellow which Dr Livingstone was wont so strenuously to object to in my pictures) shone through over many portions giving them, according to the light and shade, a red or yellow-grey, or a deep purple tone. [p. 416]

29 May — "We travelled five hours SSE making 10 miles and nearly 200 yards over a dry undulating grassy country with a few thorns which, at the end of the trek, increased to an open wood intermixed with dwarf palms. The only vlei we saw was quite dry." [pp. 418, 419]

9 June — Ntwetwe Pan, at Makarikari Pan:

"A remarkable group of seven palms, or rather two clumps of three and four respectively standing like out-pickets on the southern limits of their kind, bore south of us 600 or 800 yards, while to the north others were scattered over the undulating plain, one or two bare leafless poles holding their place like partially dismasted wrecks among a well-appointed fleet. In two or three hours the palms and open grassy plain had given place to thickets of *Mimosa* intermixed with small baobabs [*Adansonia digitata*], a *maruru pepeerie* tree [?*Commiphora africana*], a poison tree, and *mopane*, *Colophospermum mopane*, the sere and yellow leaf of which gave quite an autumnal character to the scene. I overtook the wagons as the bush began to assume a more forestlike aspect... We spanned out under a fine baobab with several others in sight, one, it is said, with hollows in which a man might comfortably shelter himself... [p. 422]

"Some Bushmen are here nearly starving, or at least reduced to drive pegs into the trunks of baobabs and to climb them for fruit which now only hangs on the most inaccessible twigs and generally bears marks of the sticks and stones thrown to bring it down. [p. 423]

10 June — "...over hard limestone country thickly clothed with *mopanes*, some of which began to assume the dimensions of timber trees. A mile or so on we passed Odeaque [=Odiakwe], a limestone vlei with plenty of water...and halted under a baobab about 200 yards nearly north of the water at Gna-kou... [p. 427]

"We rattled on over rough limestone through a dense *mopane* forest with here and there more open plains, passed Makowzie, a small pit...and outspanned half a mile beyond Rakhopalie. [p. 428]

12 June — "The same limestone country, alternately rough or smooth, clothed with bush or forest of *mopane*, with baobabs of considerable size here and there...

"In the afternoon I saw a baobab with 'A.C. Green' neatly carved in such letters as are used in writing, and 'J.W.B.' (most likely Bonfield) in Roman capitals beside it." This was near Tsagobia after passing Tsagobiana. [p. 429]

16 June — Ntwetwe Pan, somewhere near Mitsibokluko, 'the bitter water':

"...after a toilsome journey, the inconvenience of which, especially to the panting oxen, was increased by the dry black ashes of the newly-burnt grass choking up the organs of respiration...and outspanned...under a *motjeerie* tree [*Combretum imberbe*]..." [p. 431]

20 June — On a ridge at the edge of Ntwetwe Pan, at Makarikari Pan:

"On our right or south was the ridge that divided us from the Ntwetwe salt pan, and on the north was another extending northwest as far back as Zougarra [Tsaugara Pan] and stretching forward nearly but not quite parallel to our course. By 5 p.m. we came to heavier sand with low shrubs or trees of the *mopane*, and at 7 we outspanned in a grove of fine young *mopane*...

"Chapman had recognised a poisonous shrub called *makouw* (*Dichapetalum venenatum* [*Dichapetalum cymosum*]) which is said to be fatal to oxen, but harmless to horses, and as they grew in plenty on the flats, the cattle were sent to graze upon the sandhill. [p. 437]

"The Bushmen are trying evidently all sorts of schemes to delay us here. They have brought us to the south of our course into the locality of the *makouw*, or cattle poison, and now use every argument to keep us." They were near Gerufa.

They were now moving out of Botswana into Zimbabwe. [p. 439]

ZIMBABWE

1860 — **Baldwin, W.C. (1863)**

4 August — Victoria Falls:

„Victoria Falls at last... I struck the river about 2 miles above the falls and there it is not less than 2 miles wide covered with islands of all sizes, one at least 10 to 12 miles round, wooded to the water's edge - mowana trees [Baobab, *Adansonia digitata*], palmyra [*Borassus aethiopum*], and palms [*Hyphaene petersiana*], and plenty of wild dates [*Phoenix reclinata*] (some of the former measuring twenty yards round the bole)." Describes the falls. [p. 396]

"There is a never-ceasing rain for fifty, and in some places a hundred, yards, on the high land opposite...and the ground where there are no rocks is a regular swamp where the hippopotamus, buffalo and elephant come to graze on the green grass... [p. 398]

9 August "I had the honour yesterday of cutting my initials on a tree [reportedly *Kigelia africana*] on the island above the Falls, just below Dr Livingstone's, as being the second European who has reached the Falls, and the first from the East Coast." [p. 399]

1862 Baines, T. (1864)

10 August Victoria Falls:

"We halt but for a moment before the inscribed tree to read the letters 'D.L. 1855', and below them 'C.B. 1860' with the broad arrow of the Government cut beneath them..." [p. 520]

19 NAMIBIA

1761 Hop, H. in Mossop (1947)

22 December — Lowen [Löwen] River, ± 30 km south of Keetmanshoop:

"The land lying before them seemed flat with a few hills here and there. It was covered with grass and renoster bush [true renosterbos, *Elytropappus rhinocerotis*, does not occur in Namibia; perhaps a sp. of *Eriocephalus*). On the plains were large herds of wild animals, rhinoceri, giraffes, buffaloes, kudus, gemsboks, stags, aurochs."

En route to Fish River, c. 60 km southwest of Keetmanshoop:

"The Fish River was also dry and had waterholes at only a few places, but on the other hand fair grassy pasture on both sides." [p. 142]

December — Lowen River:

"As to the land, its southern and western parts are mountainous and rocky, on which neither trees nor grass grow. In the east and in the north there are beautiful grasslands where, consequently, a large variety of big game is to be found." [p. 144]

1836 Alexander, J.E. (1838)

Warmbad, Great Namaqualand:

"The Warm Spring was about 500 yards from the house and among the rocks. The water continually bubbled up from two or three 'eyes' and the heat was of the agreeable temperature for bathing of 103 degrees. [1: 159]

"…a wide sandy plain on which the grass was at this season as white as hay and where a solitary ostrich pecked the tops of the shrubs. The course of a river marked by tamarisk [*Tamarix usneoides*] and *Acacia* trees along its banks..." [1: 178]

1837 Alexander, J.E. (1838)

January — Kurekhas [probably Gorechas, 14 km west southwest of Karasburg, near Bondelswart Reserve, Warmbad District]:

"...a reedy fountain..." [1: 204]

March — c. 50 km north of Bethany, Bethany District:

"...we descended a most beautiful plain which waved with high white grass like a harvest ripe for the sickle; there were numerous ant-heaps among this, a sign of abundant pasture. Clumps of green *Mimosa* [*Acacia*] and brown and red hills, 300 or 400 feet high..." [1: 257]

Chuntop River, south of Bullspoort [? Tsondab River, Bullsport, 120 km southwest of Rehoboth]:

"We naturally found the Kei Kaap, or Great Flat, like all other great flats, exceedingly dull and tiresome; its surface was covered with thorn bushes and here and there we passed rainwater in clay holes... In the evening we were rewarded for our dull day's journey by finding ourselves in the midst of scattered trees like those in an English park, with broad pastures and plenty of water: this was at the Chuntop or Springing River, one of the finest in this part of Boschman land. [1: 292]

30 March — "At last on the morning of the 30th March, we saw a fine plain before us which had lately been entirely covered with grass but which now exhibited broad bare patches; on looking to the right we saw the cause of this, for a red cloud, as of sand rising and falling, again indicated a thick flight of destroying locusts. On the left of the plain was a broad and winding belt of high trees and bushes indicating the course of a river, the Chuntop... [1: 257]

2 April — "On 2 April we continued our progress through the pass...crossed the Chuntop three times... We then went over some high ground among the mountains, passed some remarkable trees, eight feet high only, but six and a half feet in girth; the bark smooth and silvery and the leaves oval [most probably *Moringa ovalifolia*]..." Descended again to the "…banks of the Chuntop where I was agreeably surprised by finding many lofty figtrees [*Ficus cordata*], 50 or 60 feet high, and covered with ripe fruit, growing along the course of the stream.

"The stems of these trees were thick, numerous, rather tortuous and covered with a pale shining bark; the leaves were entire, like those of *Ficus religiosa*, and unlike those of fig trees of gardens, divided into 3 parts; the fruit was of the size of Smyrna figs and was very palatable though I warned the people against indulging their appetites, for I was afraid of their eating unripe fruit and thereby producing dysentery." [2: 16]

12 April — Bed of Kuiseb River, c. 130 km southeast of Walvis Bay:

"On the 12th, after 20 miles we got a glimpse of heaven (as it were) in the river's bed below. Many acacias of pale green foliage [probably *Faidherbia albida*] flung their arms over high grass of deep green growing beside large pools of clear water... The oxen too got a good belly-full of capital grass. [2: 55]

13 April — "In the bed of the river, over sand and under trees which we brushed as we passed along; we had much trouble with packs owing to the oxen rubbing them off under the branches. The pools of water appeared at long intervals and, after four miles, they entirely ceased..." After 12 miles they came to "...a small hole under a rock containing a scanty supply of greenish water full of frogs and small fish...there was no water for cattle, and only a mouthful for the people. [2: 60]

"The *dubbee boom* or tamarisk, *Tamarix usneoides*, apparently the type of this part of Africa and which I had constantly seen from the Kousie [the Buffelsrivier in Namaqualand] was now covered with white bloom." [2: 62]

Came to a "...sort of step in the river's bed, among a large patch of reeds...a good supply of water...Bare and extensive plains lay to the north. [2: 63]

16 April — "Trees and grass were plentiful in the broad bed of the river but no water was seen. Sandhills continued on our left...on our right was a plain covered with granitic sand." [2: 65]

Found naras melons [*Acanthosicyos horridus*]. [2: 68]

18 April — "...reached Aban-huas or Red-bank [Rooibank, 30 km southeast of Walvis Bay], a part of the river so named from the red colour of the sandhills on the south side... beside [a hut] among reeds, there was excellent water." [2: 71]

? May — South of Gamsberg, 80 km west of Rehoboth:

"We passed over a most beautiful plain with scattered bushes and sand heaps, and on it saw two of three rhinoceroses. [2: 149]

"We passed over one of the finest plains in Africa, covered with sweet grass and with high trees, and bushes dispersed on it in detached groups and among which wild horses were seen." [2: 152]

1 June — Northeast Rehoboth District:

Had a long march which "...was through very beautiful country abounding in trees and grass. The remarkable Bid Stone and White mountains were passed on our right." Later came to a valley several kilometres in breadth. "It was enclosed with hills on the north, south and west; towards the east it was open and in that direction it afforded a pleasant prospect of some steep and lofty mountains terminating in sharp ridges. There was quite a forest of thorntrees of several miles in extent in the valley, and in which grass stood like corn." [2: 186]

"A warm spring of temperature of 126°F rose from the rocks, flowed freely and then was lost in the sand. "I was so delighted with the valley of the Bath, abounding as it did in water, grass, and trees, that I remained a couple of days in it. [2: 187]

5 June — "The country we traversed was a vast plain with hardly a rise to be seen in any direction but everywhere there was most abundant pasture and water in pools." [2: 192]

1840 Backhouse, J. (1844)

29 January — Southern Warmbad, after crossing Orange River from Henkries in Namaqualand:

"On reaching the Upper Ford we rode to an island where the horses grazed and we rested under some Doornbooms [*Acacia*]... We took off our saddles under a *Royena* [probably *Euclea pseudebenus* or *Diospyros lycioides*], a small tree allied to Ebony not affording much shade, in the vicinity of a few rushes on which the horses browsed. There were a few Dabby-trees [*Tamarix usneoides;* from Nama Hottentot word *daba-heis* for the dabee tree (Smith, 1966: 196)]..."

The river was about "...a quarter of a mile wide" on a rocky bed. "The banks were clothed with doornboom [*Acacia*], *Rhus, Royena* [*Diospyros*], etc. In many places *Tamarix orientalis* [*T. chinensis*: if correct then an early record for this exotic species] was mixed with the Dabby-tree [*Tamarix usneoides*]. Both are confounded under the name of *abiquas-geelhout*, which belongs however to the latter."

Rode up bed of the Drooge Rivier, c. 75 km southwest of Warmbad. "There were a few kameeldoorns [*Acacia erioloba*] growing in it, and dabby-trees and other shrubs, particularly the one like spanish broom [probably *Crotalaria* sp. or possibly *Sisyndite spartea*] noticed after leaving Muishond Fontein. [p. 549]

30 January "Two more hours brought us to Kleine Fontein.

"In two hours we reached Lorisfontein [Aluries-fontein, 12 km southwest of Warmbad]. There were a few fine kameeldoorn [*Acacia erioloba*] trees at this place."

In two hours reached Nisbetts Bath [Warmbad]. [p. 550]

1 February Nisbetts Bath:

Several springs, all flowing towards the head of the Drooge River. "The moist places near them produced the common brack bushes of the country, with dabby-trees [*Tamarix*], kameeldoorn [*Acacia erioloba*], etc." [p. 552]

5 February From Nisbetts Bath to Korikus, or Karekhas, on the Drooge Rivier. [p. 553]

6 February To Xammus on the Amse River [? Ammas, 60 km north northeast of Warmbad on the Hams River or Homsrivier]:

"...sandy plains on which grass was thinly scattered. Water was good and tolerably plentiful...bordered by luxuriant doornbooms [*Acacia*] and a few other trees." [p. 557]

7 February Up one of the little branches of the Amse River:

"There were a few small trees among the rocks of this periodical rivulet nevertheless it was difficult to find an effectual shelter from the scorching sun... [p. 558]

"...in this part of the country the kokerboom [*Aloe dichotoma*] is scattered..."

Came again to the bed of the Amse River. At their night camp "...and in several places near the lower drift of the Amse River, *Stapelia gordonii* [*Hoodia gordonii*] were growing in considerable tufts. In this neighbourhood there was also a small species of *Cucumis* [possibly *Acanthosicyos naudinianus*], cucumber, the fruit of which was slightly bitter but it was eaten in small quantities by the children..." [p. 559]

8 February "The Amse River is wide and margined by lofty *doornbooms*." Crossed at the lower drift or ford, where there were signs of recent rain: "It had caused an annual grass of good quality to spring abundantly in the sandy places. Where the ground was strong, the vegetation consisted of small bushes among which a bryony [*Coccinia rehmannii*] was climbing which had a beautiful rose-coloured fruit the size of a gooseberry, and an esculent root. Here were also a few scattered kameeldoorns [*Acacia erioloba*] loaded with the nests of the social phileterus, *Philetaerus lepidus* [Sociable Weaver, *Philetairus socius*]..." [p. 560]

Rode 25 miles from Amse River to Afrikaners Kraal, or Jerusalem [Mission of the London Missionary Society, 85 km east of Warmbad], "...mat huts under the shade of large *rozyntje booms* [probably *Rhus lancea*] which are trees seldom seen in this part of South Africa except on the banks of the Orange River." [p. 561]

10 February Afrikaners Kraal, an outstation of Nisbetts Bath:

"The vegetation of the country is very thin. Among the rocks of Afrikaners Kraal there were a large white-flowered *Martynia* [*Rogeria longiflora*], a pretty *Hibiscus* with yellow purple-eyed blossom, and many other striking plants." [p. 567]

11 February Returned to Nisbetts Bath [Warmbad]. [p. 568]

17 February Went to Lorisfontein and then on to Kleine Fontein. [p. 571]

18 February Down bed of the Drooge River:

"In a corner of the bed of the Drooge Rivier, under the shelter of some high rocks, there were a few trees [unidentified] of cypress-like figure, probably of the genus *Pachylepis*."

Reached the Orange River and camped. Crossed. [p. 572]

20 February "The place where we stopped was a sandy flat between the mountains and the river. All the grass was consumed except some of the bushy ligneous variety called Stick-grass [probably *Stipagrostis namaquensis*], and this was closely cropped..." [p. 574]

Appendix D: xxvi

Extract of a letter from Edward Cook dated 8 December 1840:

Nisbetts Bath, Great Namaqualand, in the Koorsip River Valley [Kuiseb River] inland of Walvis Bay:

"...thickly inhabited by Hottentots and Berg Damaras, chiefly the latter.

All the different tribes, we found, had been completely stripped of their flocks and herds. They now subsist, with a few additions from game and other varieties, upon a small but very agreeable bulb which grows chiefly upon the stony hills. The ground in the vicinity of Koorsip produces spontaneously this nutritious and agreeable vegetable in such abundance that hundred of natives live together in robust health and with very little moving about..."

Appendix D: xxvii

Near Walvis Bay:

"The country is barren yet not incapable of supporting sheep and cattle. The wide beds of the Koorsip and Swakop afford abundance of reeds and other varieties for cattle in the driest seasons, and abound in fine timbers suitable for building... In the neighbourhood of the sea, nine buffaloes were shot in one day."

c. 1850 Holden, W.C. (1855)

Damaraland, northeastern Namibia:

"...Damaraland is hilly. The northern part consists of wide plains covered with thornbushes, low shrubs, and grass. All the rivers are periodical: on their banks grow high and thick trees, chiefly of the *Acacia* kind. Compared with Namaqualand the country is well watered.

"The rainy season commences about October and lasts till March or April..." [p. 436]

1851 Galton, F. (1889)

August — Bed of the Kuisip River [Kuiseb River], having travelled from Walvis Bay to Scheppmansdorf:

"...the Kuisip, a river that only runs once in four or five years but, when it does, sweeps everything before it. The bed was very broad and hardly definable; there were marks here and there like the bottom of dried-up pools where the ground had been made into a paste and afterwards cracked by the drought.

"Bushes (dabby bushes [*Tamarix usneoides*] I have always heard them called) not unlike fennel but from 8 to 12 feet high grew plentifully.

"A prickly gourd, the '*nara* with long runners [*Acanthosicyos horridus*], covered numerous sand-hillocks..." [p. 11]

23 August — "I have mentioned above the '*nara*, a prickly gourd [*Acanthosicyos horridus*] which grows here. It is the staple food of these Hottentots, and a very curious plant. In the first place it seems to grow nowhere but in the Kuisip and in the immediate environs of Walfisch Bay [Walvis Bay] and, in the second place, every animal eats it, not only men, cattle, antelopes and birds, but even dogs and hyenas. It is a very useful agent towards fixing the sands, for, as fresh sand blows over and covers the plant, it continually pushes on its runners up to the air until a huge hillock is formed, half of the plant, half of sand. I do not much like its taste; it is too rich and mawkish." [p. 14]

August — Scheppmansdorf [Rooibank, Swakopmund District]:

"Scheppmansdorf is prettily situated on a kind of island in the middle of the Kuisip River bed near a clump of fine trees somewhat resembling elms [*Faidherbia alba*]...

"... All round is sand... A small streamlet rises from the ground and runs through the place, watering about 3 acres of garden and field, and losing itself half a mile off in a reedy pond full of wildfowl." [p. 18]

12 September — Damaraland north of Windhoek, and Namaqualand south of Windhoek:

"There are, indeed, only two kinds of timber trees in Damara and the greater part of Namaqualand. One is the *unna*, ? *anna-boom*, *Acacia albida* [*Faidherbia alba*] which grows about Scheppmansdorf and looks something like an elm. The other the camelthorn [*Acacia erioloba*] which also is a fine tree but much more gnarled.

"Unna wood is soft and porous and of very little use. Camelthorn [*Acacia erioloba*] is almost too hard to be worked; it is very heavy indeed, and very brittle. Still, for want of better wood it has to be used for most carpentering work. We therefore made an expedition in search of a tree as none grew within some 6 miles of Scheppmansdorf... After a long search we found one, and my best axe splintered sadly in cutting it down." Required a new axle-tree for his wagon.

"When we got it home I learnt how to season wood in a hurry. A trench was dug, a good fire made in it, and, after the time, the ashes swept out. Then, water was poured in which steamed the hot earth. Lastly the wood was placed in the trench, covered up, and left to lie for a day." [p. 21]

September — Scheppmansdorf to Swakop River, at Oosop [Husab, Swakopmund District]:

"The first sight of the Swakop, in its deep hollow, charmed us... The bed was as smooth as a lawn and as green with grass - a little sand peeping out here and there - a thick fringe of high reeds bordered the river bed. Clumps of fine camelthorn trees [*Acacia erioloba*] were clustered wherever there was room for them, and a small rivulet of water trickled along. [p. 25]

"The Hottentots come over now and then from the Bay [Walvis Bay] when the '*Naras* [*Acanthosicyos horridus*] are not in season, and bring their cows and oxen to give them a good feed. The place is not suited for savages for there are not roots for them to grub up and feed upon..." [p. 26]

25 September — From Oosop towards Davieep [Davib, Karibib District] *via* Erongo Mountains [Omaruru District]:

"We came to a water-hole in a sandy river bed at a place where it was flanked with deep reeds... There were lions roaring about us all night and there was a long reach of dry reeds. We set fire to it. It makes a glorious bonfire, frightens the wild beasts, and improves the pasturage very much." [p. 30]

September — Near Tsobis [Tsaobis River, Otjimbingwe Reserve]:

"We now emerged from the deep gorges [of the Tsobis River up which they had been travelling for 7 days] and high cliffs that so long had shut us in, and could breathe more freely in the open country that lay about us. We had left the arid Naanip plain behind and were arrived to where thorn-bushes and scanty grass overspread the sandy country... The grass was withered, the bushes stunted and sear..." They were two days from Otjimbingwe. [p. 34]

Otjimbingwe Missionary Station:

"Water...is here of sufficient quantity, as a small streamlet runs down the bed of the river. Grass, the next essential in the eyes of a pastoral people like the Damaras, is also in abundance, for the Swakop, at this place, instead of lying between abrupt cliffs, runs through a wide plain that shelves for miles down its bed, and which, though covered with thorn bushes, affords a fair allowance of grass-bearing soil."

Made camp "...among a group of fine trees, and close by a spring of good water." [p. 36]

From Otjimbingue [Otjimbingwe] to Barmen, 18 km southwest of Okahandja:

Encountered 'hakis thorns' [*Acacia mellifera*] *en route*. "These hakis thorns have overspread the whole country on this side of Tsobis. The tree is seldom more than 15 feet high with a short straight stem and a spreading bushy head. The thorns are all curved (hakis [haak-doring] is the Dutch for hook) and consequently they do not hurt you like other thorns when you tumble in a bush, but only when you try to get out of it... Besides there were the 'black thorn' [possibly *Acacia nilotica*] and the 'white thorn' [*Acacia karroo*] (I take the names as I heard them). The first produces crisp tasteless gum in great abundance, the other a very sweet gum that tastes and feels exactly like jujubes, but has a great tendency to ferment." [p. 51]

Barmen:

"We had, after a long drought, a most terrific thunder-storm. The lightning flashed so continuously that I could read a newspaper by its light without stopping, my eye taking in enough words by one flash to enable me to read steadily on until the next one. It lighted in three parts and we were in the middle. There were some flowers in front of me and the lightning was so vivid, and its light so pure, that I could not only see the flowers but also their colours. I believe this is a very rare thing with lightning." [p. 53]

December — Barmen to Schmelen's Hope:

"Barmen was a bad place for me to encamp at as grass was extremely scarce; so I moved on to Schmelen's Hope" which was about three days journey away.

Refers to gum from local trees [*Acacia* spp.]:"...of which there was vast quantities about. It oozes down from the trees and forms large cakes in the sand..." [p. 68]

To Rehoboth:

"A great part of the distance, we went through broad plains bordered by high and distant hills, and full of grass, but hardly any water... Rehoboth is situated on a bare white limestone rock with a hot spring of mineral water gushing out..." [p. 71]

1852 **Galton, F. (1889)**

March — Schmelen's Hope, Okahandja District:

"As a proof of the extreme difficulty of worming out facts from the Damaras, I may mention that Okandu Fountain which lay only 5 miles from Schmelen's Hope...was unknown by the missionaries. [Not found]

"At Schmelen's Hope itself there is only vley (pool) water and wells which a dry season might exhaust, and, although abounding in grass, trees, and garden land, the place was reluctantly abandoned and the headquarters of the Mission were established at Barmen which has much fewer natural advantages... Now, constant inquiries have been made for years as to whether there were any fountains near Schmelen's Hope but without success, and yet this one, lying in full sight and right in the middle of the river-bed, had never been spoken of to the missionaries or discovered by them..."

On from Schmelen's Hope; visible were the two cones of Omataka mountain, 80 km south of Otjiwarongo and long escarpment on Koniati mountain [? Okonjati, 63 km south southwest of Otjiwarongo]:

"The sandy soil was covered with thin, dry grass, and a scanty thorn coppice, without underwood, overspread the land." [p. 82]

4 April — Near Omanbonde [Omambonde, 22 km north northeast of Okahandja]:

"Five hours travelling over undulating ground brought us on the brow of a hill below which lay a broad grassy river-bed 500 yards across. This was the Omoramba. Up it was a projecting rock, and round that Omanbonde. On a hilltop in front was a cluster of camelthorn trees *Acacia giraffae* (*omanbonde* [*omumbonde* in Herero: Palmer & Pitman, 1972] means camelthorn trees [*Acacia erioloba*]) and below that the lake was said to lie..." They moved forward, turning a corner "...but another provoking reach of the river-bed was before us. Then we plunged through a field of dry reeds and were walking on when the guide loitered behind and seemed to be looking for something. The truth slowly dawned upon our minds that we were then in Omanbonde and that the guide was actually looking for water.

"It was really too ridiculous that our magnificent lake should be reduced to this. However there proved to be truth in the story of the hippopotami. The fact is that a country like Damaraland is as different, after a heavy rainy season to what it is after a dry one, as the sea-beach is at different times of the tide. Our luck was that we travelled in one of the driest years known, and Omanbonde, which is a reach of the broad Omoramba, of about 9 miles long, bears every mark of having been full of water. The course of the Omoramba, as I found out long afterwards, is towards the great river of the Mationa country and, up it during the rainy season, hippopotami travel; many have been killed in Omanbonde."

Two days from Omanbonde. Left a place he called Vley River "...as we called it, and the bushes being more open with fewer thorn trees among them... At about the point where we now were, Omuvereoom [not found, but might have been about 50 km north of Okahandja] was identified with the plain. There were no thorns at all about here but the country was covered with high green-leaved bushes. The wood was very brittle so that the waggon crashed through trees whose stem was as thick as a man's thigh, and we had not to use the axes. Indeed, we have very seldom had occasion to employ them considering the country that we have pushed through..." [p. 97]

8 April — "...we rode three or four hours down the Omoramba and then turned to the left, and in four or five hours offpacked by the side of one of the most agreeable objects - as the harbinger of richer vegetation - a magnificent palm..." [p. 100]

En route to Okamabuti in Ovampoland [not found; possibly near Otjiwarongo]:

"We had passed through a broad belt of palms [*Hyphaene petersiana*], high, magnificent trees with fan-shaped leaves and prickly stems, bearing clusters of fruit exactly like that of the North African doum palms, that is to say, a ruddy, dry fruit with a fibrous kernel that no power we had at command could make any impression upon. I brought some specimens home with me and they are planted at Kew Gardens."

17 April — Arrived at Okamabuti. [p. 102]

Walvis Bay and Ovampoland:

"There are salt-springs in the lower part of the Swakop near where we first struck it when we left Scheppmans-dorf, and there are large saltpans, as I afterwards found out, in Ovampoland, and also in the far east but none whatsoever in Damaraland. In Europe it is generally supposed that salt is a necessary of life but here we never find it so. I was once on a riding excursion with Andersson and three other men for six weeks, and a pill-

box full of salt was all we used. We had then nothing else whatever but meat and coffee... The Namaquas occasionally use salt, but they set no store upon it. There is no doubt that people who live on meat and milk would require much less salt than those who live on vegetables, but half the Damaras subsist simply on pig-nuts, the most worthless and indigestible of food, and requiring to be eaten in excessive quantities to afford enough nourishment to support life.

"The Hottentots by Walfisch Bay who live almost entirely on the '*Nara* gourd [*Acanthosicyos horridus*] and who have the sea on one side and salt springs in front of them hardly ever take the trouble to collect salt which they certainly would do if they felt the craving for it which distresses many Europeans. The last fact that I have to mention... is that the game in the Swakop do not frequent the salt rocks to lick them as they do in America..." He visited the rocks at Oosop [Husab] and found no tracks leading to the salt. [p. 111]

24 May — Otchikango or Baboon Fountain [Otjikango, 40 km northeast of Otjiwarongo]:

"Arrived at Otchikango, the baboon fountain, passing a very curious circular hole in the middle of a chalky patch of ground; it was exactly like a bucket, 90 feet across and 30 feet deep. Its name was Urujo. The sides were perpendicular, the bottom flat, and in the middle was a small well down to which a person could easily scramble. All the ground about is limestone and, wherever there is a bare patch of it, numbers of circular holes like miniature Orujos are to be seen. Generally they are about the size that would just admit a round lucifer box [match box], some a few sizes larger, several a foot across, and in these trees are often growing, just as they would in a flower-pot; those that are open making dangerous pitfalls. The effect is very curious. Mr Oswell tells me that by Lake Ngami he met with the same things. [p. 121]

25 May — "...we left Otchikango and travelled all day...passing over some very rugged ground and dense thorns such as no waggons could get across. It was a pass over a low chain of hills...

26 May — "Without the least warning we came suddenly upon that remarkable tarn, Otchikoto [Otjikoto, 20 km west northwest of Tsumeb]. It is a deep bucket-shaped hole, exactly like Orujo but far larger, for it is 400 feet across. Deep down below us lay a placid sheet of water which I plumbed, leaning over from the cliff above, to the enormous depth of 180 feet, the same depth within 5 or 6 feet at four different points of its circumference.

"The water could be reached by a couple of broken footpaths, to the top of one of which the oxen were driven to drink out of a trough, and a line of men handed up bambooses of water from one to the other to fill it.

"There were small fish in the water; it is curious how they got there. I was told that fish were also to be found in the fountain-head of Otjironjuba [not found, but presumably not far from Tsumeb] but I did not see them."

Refers to the superstition that swimmers would die there; he and two companions swam there safely. [p. 122]

30 May — Etosha Salt Pan:

"Came to Etosha [probably near Namutoni] a great saltpan. It is very remarkable in many ways. The borders are defined and wooded. Its surface is flat and effloresced, and the mirage excessive over it. It was about 9 miles in breadth but the mirage prevented my guessing at its length... It certainly exceeded 15 miles. Chik said it was quite impassable after the rainy season, and it must form a rather pretty lake at that time.

"We arrived late in the evening at another werft on the south border of the grand flat, Otchikako-wa-Motenya [of the Eastern Etosha], which appears to extend, as a grassy treeless estuary, between wooded banks the whole way hence to near the sea." [pp. 123, 124]

Crossed Etosha Pan:

"It was 19 hours actual travel and told cruelly on the oxen, for they were weak and had been badly off for grass on the road... Four hours from the north border of the flat we passed a magnificent tree. It was the parent of all the Damaras [*Combretum imberbe*]... the savages danced around it in great delight...

31 May — "We pushed through thick thorns the whole time...when quite of a sudden the bushes ceased. We emerged out of them and the charming corn-country of the Ovampo lay yellow and broad as a sea before us. Fine dense timber trees and innumerable palms of all sizes were scattered over it. Part was bare for pasturage, part was thickly covered with high corn stubble. [pp. 124, 125]

"The palms that grew here [*Hyphaene petersiana*] were of the same sort as those that I saw at Omanbonde, but the fruit of these was excellent, exactly like those of the Egyptian doum, while those that of the others was bitter.

"The other trees that I observed were fruit trees. They were sparingly scattered over the country, but nearly all that I saw were of magnificent size, as large as those in any English park. Their foliage was so dense and green that a real shade from the sun could be obtained, which never is the case in Damaraland, as the straggling stunted thorn with its few shrivelled leaves offers little more than a screen to its rays than an English tree in winter time. The fruits are of two kinds, one, which I never saw myself because it was not the season for it, was a kind of cherry [possibly *Diospyros mespiliformis*], according to Timboo's authority [Galton's black assistant] who recognised at once all the produce of his own country (Masapa, by Moviza) here in Ovampoland [Ovamboland]. The other is a very acid fruit not unlike an apple in shape, colour, smell, and size, but with a stone in it [*Sclerocarya birrea*]. No other tree stands in this corn country of the Ovampo, or at least gives any feature to the landscape." Near Ondonga [Ondangua, Ovamboland]. [p. 126]

Early June — Ondonga [Ondangua]:

"There is no town whatever at Ondonga... At last a particularly fine clump of trees came in sight...but we had hardly any firewood, grass, or water...the country is remarkably uniform, intersected with paths, and quite destitute of natural features to guide us. It is also slightly undulating, enough so to limit the view to a mile or two ahead. There was vley water, if we did not miss it." [p. 128]

August — From Scheppmansdorf [Rooibank] inland towards Jonker's [Klein Windhoek]:

"The dryness of the country was now really alarming; all the watering places that remained were crowded with cattle and every blade of grass within miles of them was being eaten off. Over a great part of Damaraland rain had not fallen more than ten times during the whole rainy season, and a mortality from actual starvation had already begun among the cattle. The year will probably be remembered and named by the Damaras as that of the great drought.

"It was therefore no easy matter for me to travel about but I had one great advantage on my side, which was, that on the road, when far away from watering-places and the grazing limits of the cattle by them, I often found grass, and there I outspanned to sleep and let the oxen feed, then travelling on in the morning I came to the next watering place in the middle of the day...

"On the road to Jonker's we found hardly any grass, and I do not know how I should have been able to keep my cattle at his place if it were not that a valley was left unoccupied owing to a superstitious feeling arising from a cattle-watcher having been lately murdered there by the Damaras." [p. 155]

30 August — To Elephant Fountain [Gobabis, 200 km east of Windhoek] from Jonker's:

"...Elephant Fountain, a deserted station on the northern frontier of Amiral's tribe. No waggon had passed that road for years...a border district between Damaras and Namaquas.

"Elephant Fountain and the country immediately adjacent had been the *Ultima Thule* of missionaries and traders, but the Oerlams, under Amiral, had recently extended themselves 40 miles further to the east... I was assured that the appearance of the land would be found to alter considerably, the thorns and rugged hills of Damaraland giving place to broad plains and grass and timber trees. Beyond was the desert which hitherto had been considered quite impassable... [p. 156]

"Elephant Fountain is a rather copious spring on the side of a black thorny hill above a narrow river bed. Herds of animals come here to drink and the ground at the principal place is bored full of pitfalls...

"Elephant Fountain acquired its name from the enormous number of tusks that were found in the water of this place. When the Hottentots settled there, the pool into which the water runs was overgrown with reeds, and harboured lions and hyenas, and all kinds of wild beasts. So the reeds were burnt down and the pool was cleared out. It was not at all a large one, perhaps 25 paces across...

"Wesley Vale was 4 days south of Elephant Fountain, but covered with grass at this latitude." [Not found; presumably in southern Gobabis District] [p. 159]

14 September — Left Jonker's [Klein Windhoek] on 30 August and arrived at Elephant Fountain on 14 September [15days]. [p. 161]

26 September — East towards 'Tounobis [Rietfontein, Ngamiland]:

"…we...had entered the Bushman country. We travelled along the brow of a long ridge that rose...to perhaps 1 000 feet above the wide plain which stretched far away to the east and was covered with timber trees. This was the margin of the great desert. I was told that we could continue journeying along this ridge till we reached the furthest point Amiral's men had yet travelled, and thence our course would, if we intended to go to 'Tounobis, lie across the plain." [p. 163]

Camped at "...a charming spot among blackthorn trees [*Acacia* sp., perhaps *A. fleckii*].." [p. 164]

28 September "...a valley in front, where smoke rose among the trees, announced that we had arrived at 'Tounobis." There was much water here in pools and holes. Game was ambushed here in a big way. Bushmen lived here. [p. 166]

'Tounobis:

"The Bushmen assured me that the character of the country between that place and the lake was of exactly the same description as that around us, a sandy soil with not infrequent dried-up vleys and covered with trees, but by no means so thickly as to impede the progress of the waggon." [p. 172]

21 November Tsobis River, Swakop River [Tsaobis, a tributary of the Swakop River, Otjimbingwe Reserve]:

Reached Tsobis. "The oxen were very weak but there were plenty of reeds in the Swakop for them to eat." Galton was warned that the Ghou Damup had poisoned the wells to kill buffaloes there. The oxen were kept from these wells, but one dog died from drinking poisoned water. "The oxen became still weaker, the change of food from dry grass to reeds quite upset them..." [p. 189]

There was plenty of grass at Oosop [Husab, Swakopmund District]. [p. 190]

Flowers in Damaraland:

"The flowers were very few and wretched-looking. I really only know one that would look presentable in an English garden. What few seeds I brought from Ovampoland are now planted in the gardens at Kew." [p. 192]

1861 Baines, T. (1864)

5 May Left Walvis Bay for Kuiseb River:

"...we came to the edge of the plain, an elevated flat of sand, destitute of everything - even the scanty tamarisk [*Tamarix usneoides*], ganna [*Salsola aphylla*], underbosch, and naras [*Acanthosicyos horridus*], closely stripped by natives of their fruit, were not left behind, and not a solitary flower 'wasted its fragrance on the desert air'. [p. 22]

"At length we reached the Dupa River which, like the Kuisip [Kuiseb], has not been known to contain water for the last 10 years." Came to Hykom Kop [Haigamkab] in the valley of the Swakop...

"In this valley, about seven years ago, a tree called the wild tobacco [*Nicotiana glauca*] had been introduced and, spreading rapidly, became with its cool glazed green leaves and yellow tubular flowers quite a feature of the landscape. The *Mimosa* [*Acacia karroo*], the kameeldoorn (camel-thorn [*Acacia erioloba*]), and a tree like the shadak of Australia also grew among the reeds that fringed the sandy bed of the Swakop... [p. 23]

"...in its sandy bed we came upon a bulbous plant [*Welwitschia mirabilis*] with four leaves, 14 or 16 inches wide and, when perfect, 9 or 10 feet long, lying in a cross upon the ground. The ends were withered and curled up, and in the centre was an assemblage of small stems 6 inches long and three-quarters of an inch thick, and marked with scales like a fir-cone." [p. 24]

Hykom Kop [Haigamkab] in the Swakop River:

"Vegetation, it may be said, there was none, for the bare grey leafless shrubs rather suggested the idea of birch brooms that had gone adrift than anything else..." [p. 25]

11 May Roodeberg:

"...we saw the bold outline of Roodeberg, its peak barren as before but its sides lightly tinted by the dwarf aloes and scattered bush among the huge sandstone boulders." [p. 26]

12 May Near Tincas River [Tinkas River]:

"As the country opened more, the vegetation improved, and frequent bushes of *Euphorbia* [*Euphorbia burmannii* ?], its stemlike leaves shooting up 5 or 6 feet like half-inch green rods, alternated with still-scanty grass with wild flowers..." Crossed the Tincas River. [p. 28]

13 May Under the Wittewater Range:

"The country was gradually improving. The kameeldoorn *Acacia giraffae* [*Acacia erioloba*] began to be a feature of the landscape, and aloes and many other flowers clothed the broken rugged slopes and valleys..." Slept that night at Chobie. [pp. 30, 31]

17 May — Kurikop:

"…pleasantly situated on the south side of the Swakop...

"It is encircled by mimosas [*Acacia karroo*] and kameel or giraffe-thorns [*Acacia erioloba*] and, along the sandy bed of the river, grows quite a refreshing fringe of willow-like trees [probably *Rhus lancea*]. Water, however, there is none..." except by scratching in the sand. [p. 32]

19 May — "On the plain he drew my attention to a small creeping plant [*Harpagophytum procumbens*], the seed of which is the celebrated haak-doorn frequently brought as a curiosity to the Colony; and among the mimosas [*Acacia karroo*] we caught a number of brilliant butterflies and beetles..."

22 May — Otjimbingue to Kurikop *via* Platte Klip flats:

"... I visited the singular granite peaks which had been compared to Westminster Abbey. In their immediate neighbourhood, I noticed what seemed like an ordinary dragon tree or baobab *Adansonia digitata* - a familiar object to the South African traveller. On approaching to sketch it more minutely I found that it was a gigantic *Aloe* [*Aloe dichotoma*]. Kneeling on the ground so as to bring my arms low enough to embrace the trunk, I found its circumference to be nearly 12 feet. Above this it divides into five stems, each of which at nearly the same height sent forth branches as thick as my arm, of uniform size, even to the top where they were crowned each by the wellknown star of *Aloe* leaves, and adorned with three or more magnificent spikes of yellow flowers.

"The stems were smooth and round but, at the base, the bark appeared to burst and curl off in large flakes... The effect of this magnificent crown of leaves and flowers, perfectly rounded in contour, and 15 or more feet in diameter and as many from the ground, contrasted with the sterile rocks on which it grew, was lovely in the extreme...

"... I ought to remark also a peculiarity of the euphorbium with the rod-like leaf [probably *Adenia pechuelii*]. The root enlarges itself above ground when the soil is hard until it looks like a great block of grey stone as big as a table, and the green rods grow abruptly out of this mass." [p. 33]

22 May — Anna Wood, near Otjimbingwe (at Mr Runcie's place):

Halted "...before the house under the most magnificent anna-trees (a kind of thorn) *Acacia albida* [*Faidherbia albida*] I had seen in the country..." There was some water in the Swakop River then. "At Anna Wood I am told the water is always at the surface, and certainly the gigantic thorns must require a watered locality in which to flourish." [p. 42]

24 May — Sketched at Mr Runcie's house "...the noble trees [*Faidherbia albida*] that overshadowed it. Some of these were, I suppose, 90 feet high and 6 or 7 feet in diameter at the base. They seemed to be a kind of *Acacia*, the leaves being similar, and the flowers hanging in catkins rather than golden balls, like the *Mimosa*.

"The wood is very light, easily worked even when wet, and very flexible until dried. It is said that there are no worms in the living tree, and that if the wood is worked with the saw and not hewn, none will enter it. Others tell me that if cut at the present season it is almost sure to be free of worms.

"It is very extensively used for building, but is not close-grained enough for wagon-work, all the wood for that purpose being imported from the Cape at an advance of 75% upon the price." [p. 43]

14 July — Great Barmen, Okahandja District:

"We passed the garden in which were a couple of palm trees bearing fruit, I believe, for two seasons..." [p. 49]

August — Mount Seeace, near Quieep, or Elephant River [Olifants River, Gibeon District]. Haikoos Mountain (Vaal doorn or yellow dun thorn) was visible about 16 km away, and Awass beyond it at about 32 km; Noosop hills 40 km to the north:

"The flat or redder earth than hitherto was scantily covered with pale yellow grass and small scattered *Mimosa* [probably *Acacia haematoxylon*], except where it was intersected by the sandy bed of the Elephant River..." [p. 76]

In the bed of the Nossop River saw "...a group of the largest *'wagt-een-beetje'* (wait-a-bit) thorn trees [most likely *Acacia hebeclada*] I had ever seen.

8 August — "The Damaras lingered behind to dig roots, one of which called *onaque* [*ona* (Herero): *Vigna frutescens*] was rather watery, and another the *otjintory* [*otjitore* (Herero): *Babiana hypogea*] was not very different in taste from a white radish. These, with the seeds of a creeper, the *otjipewa* [*otjipiva* (Herero): *Tylosema esculenta*], and a larger root than that I have not yet seen, are often their only means of subsistence." [p. 78]

11 August — Gobabis (Elephant Fountain) of Chief Amiral:

"Gobabies...on a dry stony hill covered with leafless thorns...scanty puddles in the dry river bed." [p. 82]

13 August — Twass or Quass [Oas, Gobabis District]:

"We halted in a small grove of fine thorn trees in lat. 22 deg. 35'50", and crossing the grassy plain, with here and there a patch of thorns, entered a poort in which is the small beginning of a waterless river running to a place called Twass or Quass..." [p. 86]

16 August — North of Twass:

"Reached a steading...called by Chapman 'Pest Grass Fountain' because all the varieties of grass seeds, pointed, barbed, spiked, or feathered, for penetrating the clothes and irritating the skin are to be found here" [probably including *Setaria verticillata*]. [p. 89]

1960s Tinley, K.L. (1971)

The Kaokoveld, northwestern Namibia [Modern comment for comparison only]:

"A typical feature of the extreme arid country is the nomadic movements of animals following the availability of their life requirements.

"By way of example, in April 1967 the writer counted a gathering of more than 1 000 Mountain Zebra and 2 000 springbok over a distance of 15 miles where an isolated thunderstorm in the Unjab River basin had made the desert bloom. On either side of this site the desert was bare of plants and ungulates.

"The Kaokoveld and adjoining Namib Desert are also of extreme importance in the conservation of natural systems, as this is probably the last place in Africa where big game (e.g. elephant, black rhino, giraffe, lion) occur on a desert coast by following the seasonal river courses which traverse the desert. Elephant and rhino also walk across the bare desert between their courses, a distance of 30 miles or more. The intermontane valley plains support the wild ungulates and the mountains support most of the endemics." [p. 11]



20 CAPE OFFSHORE ISLANDS

DASSEN ISLAND

1601 Van Spilbergen, J. in Raven-Hart (1967)

29 November — Dassen Island, southwest of Yzerfontein, Malmesbury District:

"It is about a mile round [Dutch mile]...very low, and very rocky around the shore, but inland it is sandy, adorned with good pasture and very sweet-scented flowers, though without any shrubs or firewood, and with no fresh water to be found...

"We found no fresh water but considered that it could be had by digging wells.

"...as far as we could judge of it, this island would indeed be very convenient for ships to refresh here...if there were fresh water." [p. 26]

1653 Van Riebeeck, J. (1952)

4 December — Dassen Island:

"Went ashore again, taking with us the corporal and two diggers to dig wells. After trying several places, however, they declared that there was no prospect of penetrating the rock once the depth of a man's height had been reached, so that we had to abandon it..." [p. 131]

1654 Van Riebeeck, J. (1952)

19–21 October — Dassen Island:

After mentioning that the wind had been blowing more "…vehemently than ever" at the Cape, causing much damage to vegetable crops: "If such winds were to blow when the corn ripened there would hardly be a grain left to gather. We will therefore try the wheat on Dassen Island where, the assistant Jan Wouterssen informs us, the south-east winds do not blow nearly as strongly as here, and where he found a suitable plot of land. We will therefore send him some wheat at the very first opportunity to try there." [p. 267]

12 November — "The men were...occupying themselves with the preparation of the rich soil, which is being sown with wheat, etc. by way of experiment. The watermelons etc. were growing well." [p. 271]

1655 Van Riebeeck, J. (1952)

12 July — Dassen and Robben Islands:

The islands were being inspected by Van Riebeeck: "In the afternoon Riebeeck anchored safely at the Robben island which he found most beautifully green with vegetation; the sheep doing excellently. The pigs seemed less successful... The grain was not doing well either... Riebeeck went on board in the evening…

13 July — "...and sailed on to Dassen Island where he arrived safely on the 13th in the afternoon. He inspected everything and found the island very barren..." [No mention is made of crops or sheep on Dassen.] [p. 330]

1699 Wintergerst, M. in Raven-Hart (1971)

October — Dassen Island:

The voyage had resulted in many cases of scurvy, but on reaching Dassen Island "...we were regaled in repayment of our misery, since this is such a lovely spot (though barren of mankind) that I wished then and still wish, to have a good painter who could properly depict such a lovely zoological garden. It would truly be as beautiful a picture as has ever been seen." They had lost 40 dead on the voyage. "God steered our ship to this island where we found a certain herb in great abundance, by which we all became fit and well again; since as soon as we landed, some of us were ordered to see whether anything for refreshing was to be found there, and among other things we found this herb which

we took (although ignorant of what it might be for) and cooked as a green vegetable, and it proved an excellent remedy for the said sickness." [Raven-Hart, the editor, calls this purslane (*Portulaca oleracea*), introduced]

Found penguin eggs in abundance: "...of these eggs we now took as many as we wished, boiled up a cauldron full of the above-mentioned herb and broke 70 or 80 eggs into it, and found it very tasty."

Rock dassies: "Of these we took a good quantity, and so as to have meat with our green vegetable and eggs, we stewed up these tasty beasties with them, and satisfied ourselves with this, so that we regained much of our strength..." [p. 458]

1896 **Sclater, W.L. (1896)**

July — Dassen Island:

"The island is low and flat, and hardly rises more than 20 or 30 feet above the level of the sea. It is about two miles long and one mile across at its widest point.

"There are no trees on the island but at the time of my visit it was covered with a fresh growth of green herbage which, later on, I was told would attain a height of 5 or 6 feet. Everywhere the ground was riddled with short wide burrows not more than a foot or so in depth, and each of these burrows was the home of a pair of penguins." [p. 520]

ROBBEN ISLAND

1601 **Lancaster, J. in Raven-Hart (1967)**

29 October — Robben Island, Table Bay:

"...we put to sea and went out by a small Iland [Robben Island] that lieth in the mouth of the bay, which is exceedingly full of Seales and Pengwines so that, if there were no more refreshing, one might very well refresh there..."

Raven-Hart quotes another entry by the same author for 1603, reading:

"In this baye there is a small island, not inhabited, nor any good thing groweth. Thither did the general send six sheep and two rammes, for the relief of strangers that might come hither..." [p. 24]

1601 **Van Spilbergen, J. in Raven-Hart (1967)**

December — Robben Island:

"We also set on the Isla de Cornelia [Robben Island] a couple of rabbits or Stone Badgers [dassies from Dassen Island] to breed and multiply there." [p. 27]

1608 **Jourdain, J. in Raven Hart (1967)**

July — Robben Island:

"This eiland will make the leanest sheepe that we can chuse to bee fat within one monneth, as per experryence of our tyme of beeinge there wee made profe; putting sheepe on the iland at our first comminge, and within the time aforesaid were very fatt; which seemed to some strange, seeinge that there was noe good feedinge for them, onlie wild hearbes and longe grass, and noe fresh water." [p. 42]

1608 **Matelief, C. in Raven-Hart (1967)**

April — Robben Island:

"The Admiral found here also the eighth of those sheep which were slaughtered was found to be unbelievably fat; the tail was twenty-five inches thick and weighed 18 lbs, being nothing but fat only and the fat of the guts and the kidney-suet weighed 34 lbs... The meat was too fat to eat...

"The island is very sandy and has no water, but the bushes are full of yellow blossoms [*Chrysanthemoides monilifera* and/or *C. incana*]." [p. 37]

1612 **Standish-Croft Journal in Raven-Hart (1967)**

16 June Robben Island:

Sheep had been put on Robben Island: "For if they be neuer so Leane in a monnth or six weeks tyme they wilbe verie fatt there, for yt is shortt sweeter grasse than the mayne..." [p. 58]

1615 **Terry, E. in Colvin (1912)**

Robben Island:

Eight men were left on the island as a punishment. "And, which made their condition while they were in it most extremely miserable, it is a place where grows never a tree, either for sustenance or shelter, or shade, nor anything beside (I never heard of) to help sustain nature; a place that hath never a drop of fresh water in it, but what the showers leave in the holes of the rocks." [p. 187]

1620 **De Beaulieu, A. in Raven-Hart (1967)**

April Robben Island:

He did not land but was anchored off the island due to adverse weather. He described it as "...almost round, and about a large league in circumference" and having upon it nothing but sand and some bushes under which the penguins hatch their eggs. [p. 102]

1627 **De Vries, D.P. in Raven-Hart (1967)**

1 August Robben Island:

"They also found a well made with two casks set one on the other, with fresh water... There is no greenstuff there such as sorrell." [p. 125]

1638 **Gijsels, A. in Raven-Hart (1967)**

9 March Robben Island:

"Gerritsen went with the longboat to Robben island to plant there 109 coconuts, and a large quantity of lemon and pumpkin seeds ('Carrels') in some suitable place... [p. 148]

"107 or 8 coconuts were planted on Robben Island after removing the husks...a great quantity of lemon pips and some 1000 pumpkin seeds were also planted, and some mustard seed..." [p. 149]

1652 **Van Riebeeck, J. (1952)**

15 September Robben Island:

"Went right round the island and across it a few times, and found it in many places quite sandy and covered with a small bush; some places had a fair amount of grass and all sorts of pretty sweet-smelling herbs and flowers...at several places streamlets of fresh water welled from the earth, trickling over the beach and over the rocks into the sea. One need not suffer from thirst for there is enough water, and if wells were dug a large supply would probably be found." [p. 59]

1670 **Ogilby, J. (1670)**

Conney and Badger Islands [Robben Island and Dassen Island]:

"Northward of the Great Cape lie three islands in the sea, viz. Conneys Island, so called from the many Rabbits breeding in the Cliffs, and on the shore, lieth before the Mouth of Table Bay, a league or thereabouts from the Land, five miles southward from Badger-Isle. It contains a Mile and a half in compass but more overgrown with bushes than Badger which received its name from the abundance of Rock-badgers there.

"Neither of these islands have any fresh water; and although the ground be sandy and full of Bushes, yet they bear many good Herbs and Flowers, and abound with cattle.

"The Conneys were first brought there by the Dutch in the year one thousand six hundred and one.

"The sheep, carried thither first by the English, grow extraordinary fat, and increase exceedingly, so that some have been found whose tails were five and twenty inches thick and nineteen pounds in weight, with four and thirty pound of sewet about the kidneys,

besides the Fat that came from their Flesh; but the meat gave no satisfaction in the eating, by reason of exceeding fatness." [p. 596]

early 1700s **Valentyn, F. (1726)**

Robben Island:

"It looks low and very sandy, but is somewhat hilly here and there, and its dreary shores... are full of shells and corals... It is the more dreary in that no fresh water is found there but nevertheless the dassies and rabbits flourish and multiply very well. On it is a large subterranean cavern which was probably made there by the Portuguese." [p. 43]

1772 **Thunberg, C.P. (1793)**

April Robben Island:

"In Robben Island a great quantity of shells are collected and made into lime for the Company's service by criminals exiled there." [p. 117]

1855 **Matthews, J.W. (1887)**

Robben Island:

"Robben Island is a sandy dry exposed little island of about 3 000 acres in extent...and covered with short thick bush affording excellent cover to quails, pheasants, and rabbits, all of which game are found in abundance." [p. 344]

1890 **De Vasselot, M. (1890)**

Robben Island:

Afforestation of Robben Island: "In June last year [i.e. 1889] accompanied by Mr Heywood, I made an inspection of Robben Island with a view to determine with him the basis of a working plan for afforesting that island. I have no doubt that it will prove successful, if, as I have recommended, Mr Heywood is charged with carrying out what we have advised should be done.

"It is an undertaking of the most beneficial kind; and when the plantations are in a good way of growth, everyone stationed on the island will feel deeply indebted to Mr Dixon, Surgeon Superintendent, the promoter of an improvement which can only be carried to a successful termination with the co-operation of his persevering goodwill." [p. 22]

Page 81 of the report gives measures that should be taken to afforest Robben Island, e.g. control of rabbits, sheep and cattle.

1905 **Annual Report of the Forestry Department, Cape (1905)**

Robben Island:

Discusses the problems of tree-planting under the peculiar conditions on the island. Experiments were carried out at the Tokai nursery but nothing suitable had yet emerged. The short report concludes with this statement: "Seed of the following trees had been sent by the Conservator of Forests, South Australia, for planting on Robben island: *Casuarina distyla, Hakea rostrata, Hakea ulicina*" [p. 27]

1933 **Adamson, R.S. (1934)**

September, October and March Robben Island:

Island is oval in shape: about 2 miles in length and more than a mile wide at its widest. Interior is low-lying. Highest point 99,6 ft a.s.l. No surface water except for temporary rain-pools in rocks and quarries. Rainfall about 19 ins., mostly in winter.

The greater part of the island has never been enclosed. The inhabitants keep cattle, sheep, goats but not in large numbers. They cart wood for firewood.

In 1933 the rabbits were flourishing and abundant with burrows everywhere.

Soil over most of the island is sandy. Lacks humus. Limestone shows on the surface.

Vegetation:

Decided uniformity both in flora and in general characters of the plant communities. All are open, and composed of rather low-growing plants which are generally herbaceous and subherbaceous.

There are also some shrubs, e.g. lyciums. *Oxalis cernua* [*Oxalis pes-caprae*] abundant in spring; also *Dimorphotheca, Brunsvigia, Albuca*. Not much *Mesembryanthemum.*

One-fifth of the island is cultivated. Trees have been planted, e.g. gums, cypresses.

Existing vegetation to be regarded as consisting of the survivors from long-continued intensive grazing. Rabbit burrows reduce the vegetation too.

Grasses scarce and poor. Some *Cynodon dactylon, Poa annua, Bromus capensis* [*Bromus pectinatus*], and other *Bromus; Phalaris*; *Ehrharta villosa* and *E. longiflora*.

[The publication includes a comprehensive list of the flora.]

1960 **Gillham, M.E. (1963)**

[The publication gives plant lists for a number of offshore Islands]

"*Albuca* is also closely associated with the rabbits of the three well vegetated islands (Robben, Meeu and Schaapen) and there seems little doubt that the animals help in its dispersal...numerous bulbils...readily detached...when the rabbits were exploiting the underground storage organs.

"*Albuca* is especially abundant on the Langebaan islands. On Robben Island it is somewhat more localised.

"The numerous minute brown bulbils of *Oxalis pes-caprae* would seem to be similarly distributed by excavating rabbits." [pp. 282, 283]

SALDANHA BAY ISLANDS

1648 **De Flacourt, E. in Raven-Hart (1967)**

October Jutten, Meeu and Skaap Islands:

"All the soil of these islands, and of the mainland in these regions, is very good, and would produce everything if it were cultivated. For the most part it is all black earth, and is all covered with a verdure of various sorts of flowering plants and of bushes: there are no large trees." [p. 174]

1666 **De Rennefort, M. Raven-Hart (1966)**

17 December Saldanha Bay:

"... They found five islands in the bay, on two of which they considered that it would be possible to grow some plants and feed cattle, if water could be dug out; the others barren, where only cormorants could live, or other birds living on fish and seaweed." [p. 27]

1772 **Thunberg, C.P. (1793)**

September Saldanha Bay Islands:

"Grass grew on the islands in abundance; but there were neither sheep nor oxen in them." [p. 146]

JUTTEN ISLAND

1923 **Symons, R.E. (1926)**

September Jutten Island, entrance to Saldanha Bay, off the Malmesbury Coast:

"It has very little vegetation as it is so stony that there is very little room for anything to grow." [pp. 31, 32]

1960s **Gillham, M.E. (1963)**

Jutten Island:

"On the shrubless guano islands the number of rabbits is severely limited during the summer food shortage when succulent halophytes, Chenopodiaceae and Aizoaceae are almost the only food available. The animals appeared to be most abundant on Jutten Island when *Albuca* sp. supplemented the dominant *Prenia pallens* as a fodder plant." [p. 282]

MALGAS ISLAND

Broekhuysen, G.J. & Rudebeck, G. (1951)

Malgas Island, Saldanha Bay:

"There is very little vegetation although, according to the headman - Mr Geldenhuys - some plant growth occurs during the winter months when rainwater accumulates at a certain low-lying spot called 'die dam'." [p. 1]

MARCUS ISLAND

1923 **Symons, R.E. (1926)**

September Marcus Island, Saldanha Bay:

"The vegetation consists of weeds and a small shrub which grows profusely in certain parts." [p. 34]

MEEUW ISLAND

Liversidge, R. *et al.* (1958)

Meeu and Skaap Islands, Langebaan Lagoon:

"Prior to 1953 the islands had a long-established domestic rabbit population. Meeuw was not seriously affected, but Schaapen Island had a different vegetation due to the rabbits' presence. About 1953 a new strain (white) of rabbits was added to both islands and the resultant vigour of new blood led to severe over-population and serious depredation upon a surviving vegetation." [p. 98]

1960s **Gillham, M.E. (1963)**

Meeu Island:

"About a quarter serves as a bird roost and is seasonally bare of plants. A thousand black-backed gulls were seen there in June 1960, and large numbers of cormorants congregate there at night.

"With the onset of plant growth in winter, the sward is grazed by Egyptian geese which were concentrating on the newly emerging *Albuca* shoots in June 1960. Their feeding was wasteful, like that of Mute Swans *Cygnus olor* in Britain, leaf segments two to five centimetres long having been bitten off and discarded. [p. 281]

"On Meeu Island, Egyptian geese eat *Asparagus capensis* and *Disphyma crassifolium*. [p. 283]

"…because of the manner in which the rabbits browse on the lower leaves of the densely spinose *Lycium austrinum* [probably *Lycium ferocissimum* is meant], opening out the bases in so doing and into which the Egyptian geese tunnel just above ground level and penetrate several metres into these thickets. [p. 287]

"Guano damages herbage when excessively deposited, and the feeding of Egyptian geese also inhibits the growth of herbage." [p. 289]

SCHAPEN ISLAND

1803 **Lichtenstein, (1815)**

October Skaapeiland, Langebaan Lagoon:

Gives the vegetation as "…some sorts of *Mesembryanthemum*, especially *M. crystallinum*, or ice-plant, and some shrubby little plants."

Rabbits: "European rabbits are also to be found, the descendants of some brought here, and which have increased exceedingly." [p. 54]

1904 **Sclater, W.L. (1904)**

Skaapeiland:

"Vegetation thick and high" [pp. 79, 80]

1923 **Symons, R.E. (1926)**

September Skaapeiland:

"This island has far more vegetation on it than any of the other islands I have visited. In places the grass is two or three feet high, and a shrub of about four feet high grows freely all over the island." [pp. 33, 34]

pre-1953 **Liversidge, R. *et al.* (1958)**

Schaapen Island:

"This relatively flat crown is partly covered with exposed granite rocks. The areas in between have thin top soil in which grow thorny bushes.

"Some wattle trees grow on the north side...

"There is no fresh water on the island." [p. 96]

1960s **Gillham, M.E. (1963)**

Skaap Island:

"*Albuca* is especially abundant on the Langebaan islands. On Robben Island it is somewhat more localised.

"The numerous minute brown bulbils of *Oxalis pes-caprae* would seem to be similarly distributed by excavating rabbits." [pp. 282, 283]

VONDELING ISLAND

1970 **Supt. Govt. Guano Islands (*in litt.* 15.10.1970)**

Vondelingeiland, just south of entrance to Saldanha Bay:

"Has rabbits." [Therefore there must be some sort of vegetation on this island.]

DYER ISLAND

1923 **Symons, R.E. (1924)**

June

Dyer Island, southwest of Pearly Beach, off the Bredasdorp Coast:

"The only vegetation is a weed which grows freely in certain parts, and this is used by the birds in the construction of their nests." [pp. 253, 254]

SEAL ISLAND

1946 **Courtenay-Latimer, M. & Gibson-Hill, C.A. (1946)**

Seal Islet, Bird Island group, Algoa Bay:

Has sea-spinach, *Mesembyranthemum angulatum* [possibly *Mesembryanthemum guerichianum*] (much affected by climatic conditions). [p. 76]

ST HELENA ISLAND

? 1806 **Lichtenstein, H. (1815)**

March

St Helena Island, Atlantic Ocean [on his return voyage to Europe]:

The native trees of the island: "Among the hills stood many single trees, native of the country, in general from 10 to 12 feet high with naked stems and large broad leaves, the systematic names of which my companion could not give me. Three sorts of them are here called cabbage-trees and, to other sorts, gum-trees. The higher we went, the more moist we found the soil and the more did the grasses, which were almost all of the pure European sorts, give way to ferns...(The mists and rains occurred here more frequently than on the lower ground of the island)... After seeing many beautiful plants of the *Polypodium, Asplenium, Blechnum, Jungermannia* and *Marchantia* species, with a variety of others, we came at length to the spot which is the true native place of the largest among all ferns, *Dickinsonia arborescens*. This plant may very fairly be likened to the palm which, however, it far excels in the beauty of its leaves. The stems of many of the plants were from 12 to 14 feet high. They stood singly, growing out of the refts of the rocks. They are only found on this one spot in the island and grow in no other country, so that it would not be a difficult matter to extirpate the race from the earth." [pp. 459, 460]

Lichtenstein mentions Indian fig-trees, *Ficus religiosa* and *Ficus benghalensis* which have been introduced. Also *Barringtonia speciosa* which, according to the book's index, was planted on St Helena by Capt. James Cook.

South African plants evidently introduced onto the island: "*Protea, Erythrina, Sophora* and other wellknown plants of the Cape were presented to my view..." [p. 458]

APPENDIX A

FIRING OF VELD

These extracts include quotes from the preceeding texts:

1488 **Axelson, E. (1973)**

February — Inland of Cape St Francis, Humansdorp District:

As Bartolomeu Dias sailed along the Humansdorp coast off Cape St Francis he saw fires sweeping across the veld towards the mountains. He named the cape Ponta das Quiemadas because of these fires. [p. 59]

1601 **Valentyn, F. (1726)**

November — Inland from St Helena Bay, Vredenburg/Piketberg Districts:

Admiral Joris van Spilbergen, when anchored there "...saw some animals and many fires, but no people."

1652 **Van Riebeeck, J. (1952)**

8 December — At the Cape:

"Today some Saldanhars set fire to the grass, and as the fire came rather close to our pasture grounds we requested them not to come so near with their fire, whereupon they immediately set to and extinguished it without delay, for which we rewarded each of them with a finger-length of tobacco..." [p. 109]

1653 **Van Riebeeck, J. (1952)**

12 January — At the Cape:

"Today obtained from the Saldanhars two more sheep which they had driven a good two days journey to get here. They pointed out their fires to us, which we could see burning very far to the east in and beyond the mountains..." [p. 128]

1679 **Vogel, J.W. in Raven-Hart (1971)**

Cape Peninsula:

"The grass in general grows so high that it comes up to one's knees and, when it is too old and tough to be any more eaten by the beasts, it is set on fire by the inhabitants, so that it is at times to be seen burning for several miles. But in order that the fire may go no further than the inhabitants wish, they dig out a trench at which the fire decreases and dies out when the fire reaches it for lack of more near-grass to feed it. The ashes of such burnt grass manure the land where the fire was, and make it so fertile that, when light rain falls, in a short time new or young grass grows up into which the animals are driven to graze; and thus in one region after another, where the grass has become too old, it is thus renewed by the operation of burning it." [1: 213]

1772 **Thunberg, C.P. (1793)**

October — George District:

"In many places I observed the land to have been set on fire for the purpose of clearing it; though in a very different manner from what is done in the north. Divers plains here produce a very high sort of grass which, being of too coarse a nature and unfit for cattle is not consumed, and thus prevents fresh verdure from shooting up, not to mention that it harbours a great number of serpents and beasts of prey. Such a piece of land as this, therefore, is set on fire to the end that new grass may spring up from the roots.

"Now, if any of these places were overgrown with bushes, these latter were burnt quite black and left standing in this sooty condition for a great length of time afterwards, to my great vexation as well as that of other travellers who are obliged to pass through them." [1: 179]

1775 **Sparrman, A. (1786)**

September — Between Swellendam and the Gourits River, 36 km west of Mossel Bay:

After explaining how bad pasture control had resulted in the overgrazing of veld and the consequent heavy invasion of renosterbos, *Elytropappus rhinocerotis*, Sparrman remarked that one farmer who had burnt the renosterbos in order to get rid of it, found that it came up all the more densely afterwards. [1: 250, 251]

1776 **Sparrman, A. (1786)**

9 March — Eastern part of Tsitsikamma, on the plain near Humansdorp town, not in the Tsitsikamma forest itself:

"On the 9th we again visited the Sitsicamma where we now found a number of snakes which, on account of the farmers having set fire to the grass for the purpose of manuring their lands, had fled to the sands and there, at this time, lay dead..." [2: 321]

11 March — Wagenboom's River in the upper Langkloof, 2 km west of Joubertina:

"On the 11th, having taken up our quarters at Wagen-booms rivier, the most easterly part of the Lange-kloof, we discovered at night on a sudden, that a tract nearly three miles in length, consisting of fields of dry grass, was in flames. This conflagration, which a neighbouring farmer had occasioned for the purpose of destroying the arid plants, grass, and bushes that grew on his lands (though it must be owned that he set about it very *mal-a-propos*, both as to time and weather), spread with the wind that blew very hard, with incredible rapidity, proceeding in a direct line to the farm where we were." [2: 322]

1782 **Le Vaillant, F. (1790)**

Southeast of Bedford:

Went east across "...a canton burnt out, but now sprouting green. Fine country destitute of inhabitants..." Flocks of ostriches, springbok and gnu. [2: 247]

1797 **Barrow, J. (1801)**

August — From Assegaaibosch Farm just east of Sidbury, Albany District, towards the Kariega River in the southeast:

"We had not travelled many miles beyond the Hassagai-bosch river till the discovery of the whole surface of the country in flames indicated our approach to some of the stations of the Kaffers." [p. 168]

4 September — From Kowie River eastwards to the Great Fish River Mouth:

"The country through which we passed was perfectly flat and in those parts where the Kaffers had not been, there was an abundance of long grass. On approaching the sea coast we observed a long train of fires... The flames ran in all directions among the long dry grass and heathy plants with incredible celerity. The face of the country for several miles was a sheet of fire..." [p. 184]

Swartkops River Valley, near Uitenhage:

"The whole valley is divided between four families, each having not less than 5 000 acres of land independent of the inclosing hills covered with wood.

"Yet, not satisfied with this enormous quantity, they have made several attempts to burn down the forest that the cattle might get more conveniently at the hefts of the sweet grass that abound within it.

"Hitherto all their efforts have proved fruitless. The moment that the succulent plants, particularly the great aloes and euphorbias, became heated, the expanded air within them burst open the stems, and their juices, rushing out in streams, extinguished the fire." [p. 184]

1803 **Alberti, L. in Fehr (1968)**

East of the Keiskamma River, Ciskei:

"...the grass, which reaches an uncommon height there, is nearly everywhere, indeed in the utmost degree, sour. In consequence of this characteristic it attains such harshness

after a long journey that it cannot be eaten by any animal, which is why the Kaffirs go in for burning such grass so as to cause young grass to come on. Without such precautions they would not be able, owing to the lack of nourishment for their cattle, to live in this stretch of country. Only in the area adjoining the sand-dunes bordering the beach is the nature of the soil fairly favourable for grazing animals." [p. 17]

1803 **Lichtenstein, H. (1815)**

December — From Groot Brak River eastwards to George:

Refers to the heavy rainfall there throughout the year and its effect on the vegetation. "The different sorts of rushes and liliaceous plants exhaust all the nourishment and prevent the growth of wholesome grass... In this, as well as in some other districts that partake of the same soil, it is common to burn the lands every year, by which means they are manured and the foundation laid for a wholesome vegetation. But this must be done with great caution lest the fire should spread too far and catch the bushes, by which means it might be communicated to the forests when incalculable mischief would ensue." [p. 228]

1804 **Lichtenstein, H. (1815)**

Keiskamma River towards Alice:

He quotes Alberti, who accompanied him on the expedition, as saying: "The Koosas, to amend the quality of the grass, sometimes burn them, when a new and better vegetation springs up." [p. 349]

1809 **Collins, R. in Moodie (1860)**

February — Northwestern Komga District, within a few kilometres of the Great Kei River:

"Many parts of the country were observed in flames which had been lighted by the Kaffers to clear the land of the old grass in order to attract wild animals to the young shoots which soon succeed..." [p. 39]

1811 **Burchell, W.J. (1822)**

13 April — Genadendal, Riviersonderend District:

"Firewood is an article generally very scarce in the vicinity of the Hottentot settlement [at Genadendal], and, in all the grazing parts of the Colony, it is rendered much more so by the wasteful and destructive practice of annually setting fire to the old withered grass as the means of clearing the pastures." Describes the desecration by fire at Donkerbosch near Baviaanskloof [Genadendal]. [1: 116]

2 November — Up the west bank of the Vaal River, north of Riet River confluence:

"In some parts of the plain the Bushmen had burnt away the old grass for the purpose of attracting the game by the young herbage which subsequently springs up..." [1: 419]

November — Between Schmidtsdrift and Kimberley:

Where the grass had been burnt the young growth had attracted a great quantity of game. Large herds of springbok, a steenbok, some quaggas. [1: 432]

1812 **Burchell, W.J. (1824)**

21 June — Knegts Fontein, 21 km north northeast of Klipfontein:

The dry grass had been burnt off along part of Burchell's journey. *Tarchonanthus*: "...prevailing shrub in the plains...Where they had been burnt down to the ground they had in one season thrown up a multitude of strong shoots not less than five feet long." [2: 270, 271]

1820 **Moodie, J.W.D. (1835)**

East of Van Staden's River, 34 km west of Port Elizabeth:

"This was the season for burning the grass which becomes too rank and coarse for the cattle when allowed to grow too long... [Moodie had been talking to a farmer there] Shrugging his shoulders with the tears in his eyes, the farmer told me that in burning the grass some time ago, supposing that his sheep were elsewhere, they had all been scorched to death in the deep ravine from which they could not make their escape." [2: 38]

Attakwas Pass, George District:

After describing the ascent of the mountain: "...what materially added to the grandeur of the scene was that someone had set fire to the dry grass and bushes. The conflagration spread rapidly up the steep sides of the ravine in long lines of flame to the summit of the mountains, leaving all black and dreary behind it. At one place we were obliged to drive the waggons through the burning grass and were sometimes almost stifled with the clouds of smoke." [2: 31]

1821 **Philipps, T. in Keppel-Jones (1960)**

April — Right bank of the Great Fish River:

After noting that black people lived on the opposite bank [Peddie District of Ciskei], Philipps wrote: "The Caffres cross over [into Bathurst] to look for honey and game; the grass had lately been burnt by them." [p. 95]

1829 **Kay, S. (1833)**

August — Between Butterworth and Morley Mission, Mqanduli District:

After stating how the grass grows so high that a horseman is lost in it and has to travel along paths made through the grass by elephants: "At this season of the year, however, the natives usually burn off all old grass with a view to rendering the expected rains more beneficial. Hence, blackened fields, or fields of flame, everywhere presented themselves."

The fires burnt out huts, etc. One fire was caused by children making a fire on a footpath in order to 'braai' a piece of ox-hide; the dry long grass caught alight and set the veld aflame. [pp. 324, 325]

1836 **Harris, W.C. (1839)**

October — From the Molopo River to Mosega [Sendelings Drift, Marico District]:

"...across extensive plains covered with grass waving in the breeze which stretched away to the northward and eastward as far as they could reach... [p. 68]

"A large part of the country had been set on fire a few weeks before in order to clear off the withered grass, and, the bountiful thunder-clouds having caused the young grass blades to make their appearance, large herds of game had been attracted to the spot." [p. 69]

1837 **Alexander, J.E. (1838)**

June — Southern Rehoboth District:

"In the evening before going to sleep we had set fire to an old tree near our lair to keep off the lions; it fell in the middle of the night with a terrible crash and the frightened bullocks ran over us. Some of the party were for firing, thinking we were attacked by a troop of lions and it was fortunate that no one was hurt either by the fall of the tree, the feet of the bullocks or by the indiscriminate discharge of firearms." [2: 203]

1839 **Krauss, F. in Spohr (1973)**

1 January — Between Swellendam and Buffelsjagtrivier:

"... I again had the strange experience of seeing a bushfire... In the fields and on the slopes of the mountains the farmers set fire to the dead bushes and the dry, sour, Restiacean grass to make way for fresh grass to grow again. It was lovely to watch the strips of fire running in all directions into the ravines of the mountains." [p. 32]

6 March — Koksbosch [Clarkson, 41 km west of Humansdorp]:

The poor sourveld "...was not recommended for the farming of cattle and sheep... After prolonged feeding on these plants [which he lists] the oxen become thinner and thinner... The sour veld could slowly be improved by frequent burning of the fields during the dry season which actually reduced the sour vegetation." [p. 45]

1840 **Delegorgue, A. (1990)**

20 January — Between Bushman's River and the Drakensberg, north of Estcourt:

"On the evening of the second day I had the opportunity to feast my eyes on a wonderful sight. A bright light enabled one to distinguish objects a long way off. It was produced by a grass fire to the north which, in a line of two miles wide, was coming down the

mountainside like a river of flame, and seemed to engulf everything in its path. Towards midnight the destructive fire, for want of fuel, died out on the banks of the stream which put an end to its ravages..." [pp. 104, 105]

1844 **Cumming, R.G. (1850)**

27 August Sabie, Bamangwato Reserve:

"...into a dense forest... In the meantime a tremendous conflagration was roaring and crackling close to windward of us. It was caused by the Bakalahari burning the old dry grass to enable the young to spring up with greater facility, whereby they retained the game in their dominions. The fire stretched for many miles on either side of us darkening the forest far to leeward with a dense and impenetrable canopy of smoke..." [2: 2]

1847 **Cumming, R.G. (1850)**

12 May Meritsane River [Maritzani], east of Mafikeng:

"On the 12th I drew up my waggons on the north bank of the famous Meritsane. Here I had the pleasure to find that, owing to a large tract of the country having been burnt by the Bakalahari some months previously, and favoured by the rainy season, a rich and verdant crop of young grass had sprung up giving the undulating plains a fresh and vernal appearance. I was delighted on beholding this because I knew that it would have the effect of attracting the game hither from the surrounding parts..." [2: 314]

1848–52 **Black, W.T. (1901)**

Fish River Bush:

"Fire makes no impression on the everlasting verdure of the bush, and if a grass fire stretches to its margin it merely consumes a little at its edge that is of a more open character, but never penetrates into the recesses of a kloof..." [p. 22]

1850 **Baines, T. (1864)**

28 May Potchefstroom:

"The Hottentots at work in the field set the dry grass on fire, and shortly after I reached home, the flames and smoke were seen moving rapidly before a fresh breeze towards us... About four in the afternoon the fire had passed the farm on the opposite bank of the river and, on the near side, was following quickly. At length it reached the dry reeds below the garden and the flame increased rapidly. Volumes of smoke, black and grey, overspread the heavens; while the fire, now subsiding and now again leaping high above the tall feathery reeds, crackled and snapped among them with a noise resembling that of a rapid and incessant discharge of musketry. When the sun had set, the scene was indeed magnificent: the grass was burning on a line of upwards two miles in length while the reeds continued to send up rolling clouds of smoke mingled with sheets of vivid flame..." [p. 86]

1851 **Andersson, C.J. (1856)**

Great Namaqualand:

"For my own part I have frequently passed through localities abounding with game, and, repassing them in a short time, I have found them deserted without any apparent cause. As I proceeded, however, I have discovered them in quite different quarters and ascertained that the attraction has been the young grass which was either produced by the moisture of the atmosphere or from the natives having fired the old grass. The rapidity with which parched and sunburnt pasturages, in tropical climes, are converted by any of these causes into luxuriant savannahs, is incredible, and can only be duly estimated by those who themselves have witnessed such changes." [p. 190]

1858 **Baldwin, W.C. (1863)**

11 August Boatlaname, Bakhatla Reserve:

"We have just had a narrow escape from being burnt up. Our road lay through thick mopane *Colophospermum mopane* trees with tall white grass, thick and dry as deal board on each side. Someone had set the grass on fire in fifty places behind us and below the wind." [p. 295]

1859 **Baldwin, W.C. (1863)**

12 June — Boatlaname, Bakhatla Reserve:

"The country is very dry here; scrubby mapani [mopane, *Colophospermum mopane*] trees and a great scarcity of game which I attribute to the want of water and dryness of the grass. We came to some new burns the other day where the grass was green and sweet and found a great variety of game..." [p. 311]

1860 **Baldwin, W.C. (1863)**

August — On return to Sechele's country in Botswana from the Victoria Falls [probably Zimbabwe]:

"The Maccalacas [Makalaka] Kaffirs rile me frightfully; during my absence they have set the velt on fire in a hundred places; the grass is as dry as old tinder and, with the high wind we have daily, it roars away for scores of miles thus driving the little game there is away. What their object is I don't know, as they have no cattle, sheep or goats." [p. 402]

1863 **Dobie, J.S. (1945)**

28 July — Source of Ibisi River, Umzimkulu District:

"Crossed what seemed to be the main head of Ibisi [Bisi] River here... Grass however very scarce; no spring rain on burnt ground, and old grass very dry."

29 July — Near Mount Currie [Kokstad]:

"...the Berg all clothed in white, ending the distance like a barrier of snow. Country all burnt and very bare of grass... [p. 100]

31 July — "...along the gently undulating valley to some old burnt ground where the appearance of grass made us pull up... On again and camped on further bank of the river, plenty of old grass..." [p. 102]

August — Between Tsomo and the White Kei River, near Qamata:

"...fine grass for horses..." Camped "...on an old 'burn' in a pretty thorny valley, all intervening ground burnt bare here, both old and new grass. After crossing the White Kei, Major Hook camped on the western side in the Queenstown area." [p. 109]

1864 **Hook, Major (1906)**

Southern Transkei, notably the Idutywa District and neighbourhood:

"Veldt fires, when the whole prairie would be ablaze, were of frequent occurrence and, as the Tambookie grass [any of several species of *Cymbopogon*, *Hyparrhenia*, and *Miscanthus* (Smith, 1966: 456)] was several feet, and the ordinary grass luxuriant to an excess, these fires in windy weather swept over the country in a most destructive manner, preceded by dense volumes of suffocating rolling clouds of smoke, mixed with firebrands, along the veldt and through the air, spreading dangers to camps and travellers, destroying pasture.

"More than once, when off-saddled on patrol, there would be a panic as a fire suddenly broke out through the act of a careless smoker or zealous cook... Sometimes a whole camp built of flammable material, such as thatch-huts and reed-stables, would be burnt, and the men great losers of property, horses burnt to death, saddlery fried, etc. I venture to assert that few people could realise the magnitude and extent of these Transkei veldt fires in those days when the country was denuded of population after good seasons." [p. 140]

The army instituted fire drill. "The rapidity of motion required to repulse a fire during a westerly gale on the prairie can be imagined, but not justly described by me. For it was not acres or morgen of veldt in flames but hundreds of thousands of morgen (as a prairie) rushing with a lightning zigzag advance to the accompaniment of roar and cackle of wind and flame." [p. 141]

1865 **Hook, Major (1906)**

Kentani District [Centane]:

After the Cattle Killing Episode of 1857/58, Gcakela-land, Kentani etc. must have come into good grass. Great veld fires were reported by Hook. Most of the natives had moved out, and the veld, being rested, grew luxuriantly. [p. 144]

1867 **Rose-Innes, J. (1949)**

Kagaberg, Bedford District:

"Along the eastern end of the berg, the timber had been destroyed by fire, and the contours, lightly veiled by grass and scrub, were distinctly outlined." [p. 6]

1869 **Cape Monthly Magazine (1877)**

From Kokstad to Insizwa, Mount Ayliff District, to Mfundizweni, Flagstaff, and to Port St Johns:

"In passing through this country...we were disappointed at the total absence of game of any description whatever. The presence of the Kafir probably accounts for this with his propensity for burning the grass." [p. 332]

1869 **Dower, W. (1902)**

May Gatberg area, Maclear District:

"From the Gatberg settlement, now Maclear, there was only the roughest track... From the Gatberg we saw no human habitation until we reached the vicinity of Matatiela [Matatiele]. Our way for many miles lay through the ashes of burnt-off veldt." [p. 29]

1870 **Mauch, C. in Burke (1969)**

14 June Just east of Botsabelo, Middelburg District:

"...a bare plain, burnt out, but plenty of game." [p. 44]

Late 1880s **Bulpin, T.V. (1955)**

From Natal to Witwatersrand:

Quoting Frank Oates, who passed that way in winter: "A more wretched country could hardly be conceived. Not a tree to be seen, and half the country burnt black as, if the dry grass is set on fire, it burns for weeks..."

c. 1900 **Henkel, C.C. (1903)**

Transkei:

"The rainfall is variable in amount but much larger near the mountain ranges and forests. While plains or flats are parched up with the heat of the sun, the slopes of the mountains are green and cool. By the cutting down of trees and the burning of the veld, the permanence of the springs has been affected and some streams once permanent have dried up all over the territories. When the bushes or grasses are burnt off, the sun bakes the soil and the rainwater runs off into the rivers, forming new 'sluits' as it runs, and is lost in the sea without replenishing the underground supplies." [p. 40]

APPENDIX B

LOCUSTS

Note by C.J. Skead, December 1970:

These few early records have been extracted merely to emphasize the fact that the ravages of locust swarms came as far south as the Cape Peninsula, even before Van Riebeeck's time, and with a widespread coverage of southern Africa.

Such swarms might have had an influence on springbok treks, but no extract on trekbokke mentions locust swarms preceding or following the trekbokke.

The last serious large-scale invasion of locusts into the Albany District (Grahamstown) and elsewhere in the southeastern Cape was in 1933. When C.J. Skead was farming then near Grahamstown, both veld and mealie crops in the district were stripped bare by the Brown Locust, *Locustana pardalina* (Walker).

[Subsequently, inland locust control became more effective, and invasions were confined to irregular outbreaks dealt with in the hopper stage, as far as was possible. A severe outbreak occurred, for instance, in the summer of 1971 in the districts of Middelburg (Cape), Colesberg, southern Free State and Namibia.]

1627 **Herbert, T. in Raven-Hart (1967)**

July — Diet of Hottentots at the Cape:

„...now concerning their diet...they have plenty of locusts brought hither by winds, which, being sprinkled with salt they eat greedily..." [p. 120]

1653 **Van Riebeeck, J. (1952)**

9 February — At the Cape:

"In the afternoon, having gone about two miles behind Table Mountain, we found so many locusts there that the earth and sky were hardly distinguishable - as when the sky is filled with flying snowflakes. If we judge from the grass which they devour so completely that the earth is left quite denuded, then we must fear that our crops will be ruined if they come near the Fort and in the gardens. I hope however that the Lord will protect us from that." [p. 141]

1685 **Theal, G.M. (1905)**

October — Swartdoringrivier, tributary of the Groenrivier, 125 km south of Springbok, far southwestern Namaqualand:

"Here some Sonquas were seen... They were wretchedly thin for they were living upon nothing better than tortoises, caterpillars, locusts, and bulbs of wild plants." [p. 242]

1779 **Gordon, R.J. in Cullinan (1992)**

18 November — Near Kakamas, Gordonia District:

"In the afternoon a large swarm of locusts on the move came from the east, whirling off towards the [Orange] River, being very hungry. They serve as food for men, fishes, lions, springbok, and horses eat them readily. They were just like the ones last year at Sneeuwberg." [p.188] [Gordon's account of locusts at Sneeuberg does not appear in Cullinan's edited version of the original journal]

1779 **Wikar, H.J. in Mossop (1935)**

Along the Orange River, below Augrabies Falls:

"Up in these parts are locusts in such numbers that you sometimes take them for a cloud in the sky. They always trek with the wind, and, as the wind changes direction, they turn with it.

"They change colour three times. First, when young, they are black for, where a large swarm of locusts has settled, they leave so many eggs that the following year in the same place you find as many small black locusts. These are all the same size and one would think that the dust or the sand of the earth had turned into locusts.

"While they are black and small they do not fly but hop along the ground, all going in one direction. I noticed something remarkable about these little ones. We were digging a ditch in a dry river bed in which to catch them, and they hopped into it. Those that had already passed came back and also hopped into the ditch as soon as they saw that their companions were not following them.

"When half-grown they are red and when they are full grown they are a dull greyish brown. Wherever they settle they leave barely the stumps of the bushes and grass. When the locusts settle upon a wide grass plain the Bushmen set fire to the grass and gather up the roasted locusts in heaps, keep them in skin bags and, with the heads and wings broken off, they eat them with relish. When the Bushmen see the locusts coming they proclaim their great joy by clapping their hands and shouting, for this is their harvest. Last year there were migratory locusts on the Cape side of the Great River; they were within three stages of the Camusberg [Kamiesberg] and there they turned back.

"I have seen them following one another so faithfully that they hopped into the Great River [Orange River] so that at last the river washed up the dead in heaps along its bank." [p. 175]

1797 Barrow, J. (1801)

22 October — Below the southern base of the Compassberg, c. 50 km north of Graaff-Reinet:

Encountered a swarm of locusts. "They covered a space of about one square mile in extent so completely that the surface appeared to the eye at a little distance to have been burnt and strewed over with brown ashes. Not a shrub nor blade of grass was visible." [p. 242]

October — Plettenberg's Beacon on the Seekoei River, 30 km northwest of Colesberg and 30 km south of the Orange River:

"...a clump of about half a dozen large bushes, the first that had occurred for many days." Barrow found the bushes to be full of locust-birds' nests, i.e. the Wattled Starling, *Creatophora cinerea*, at a time when locusts were swarming there. This species had not been seen in the Colony for a space of thirteen years, that is to say since the last time that the locusts invaded the Sneeuwberg. Nobody who had not seen locust larvae could possibly conceive how numerous they were. "For the space of ten miles on each side of the Seacow River, and 80 or 90 miles in length...the whole surface might literally be said to be covered with them. The water in the river was scarcely visible on account of dead carcases that floated on the surface, drowned in an attempt to come to the reeds which grew in the water. They had devoured every green herb and every blade of grass; and, had it not been for the reeds on which our cattle entirely subsisted while we skirted the banks of the river, the journey must have been discontinued, at least in the line that had been proposed.

"The larvae...are much more voracious than the perfect insect; nothing that is green seems to come amiss to them. They are not, however, without a choice in their food. When they attack a field of corn just struck into ear, they first alight on the summit and pick out grain before they touch the leaves and stem... The insect seems constantly to be in motion... When on the march during the day it is utterly impossible to turn the direction of a troop, which is generally with the wind. The traces of their route over the country are very obvious for many weeks after they have passed it, the surface appearing as if swept by a broom or as if a harrow had been drawn over it."

Barrow describes how, towards evening when the larvae stop their marching, they divide into groups and look like swarms of bees surrounding "...the small shrubs, tufts of grass, or anthills." There they await the next day's sunshine. "When thus assembled at night, a farmer would drive a flock of two or three thousand sheep over them, trampling them to death.

"Luckily such visitations were periodical, otherwise the whole country would have to be deserted by farmers..." The year Barrow was there, 1797, was the third successive locust invasion at Seekoeirivier. He remarked that no locusts had been there during the preceding ten years and that after their last visit into the Cape Colony all fully-grown flying locusts had been driven into the sea by a high northwest wind, when drowned bodies washed up on the beach were so dense that they formed a bank three or four feet high which extended for 70 km from the Bushman's River mouth in Alexandria District to the mouth of the Beeka [Bhira] River in Peddie District. When those dead locusts putrefied, the stench from their bodies was so strong that heavy winds carried the odour inland to the Sneeuwberg, i.e. Graaff-Reinet. But, as the Bushmans River runs into the

sea on the southeastern Cape coast, a good 350 km away, Barrow's credulity must have been unduly naive if he could believe that those flying insects had been driven into the sea before they had laid their eggs. The larvae he had seen and described at the Seekoei River had been migrating northwards in such numbers that their column took more than a month to pass the houses of two of his party. When they left, the Wattled Starlings left with them. [p. 256]

1 November — Near confluence of Seekoeirivier and Orange River, Colesberg District:

"In what part soever we approached the river, hippopotami were snorting and playing in vast numbers. Of these animals our party killed four in one day. They were all very lean, a circumstance that was attributed to the locusts having devoured every green plant for a considerable distance from the banks of the river." [p. 300]

1798 Barrow, J. (1801)

5 May — Hantam, near Calvinia:

"As in the Sneeuwberg, they are here also very much infested with locusts. One troop of these, in their last stage of existence, passed on the wing along the eastern side of the mountain when we were encamped there. For several hours they continued to hover in the air as they passed along at such height as not to be individually distinguished; but their immense numbers formed a sort of fleecy cloud that completely took off the radiated beams of the sun and made it appear as when seen through a mist. Like a thin cloud also they cast a confused shadow over the ground.

"In the Bokkeveld and Khamiesberg [Ceres and Namaqualand respectively] for the past two years these insects have been particularly troublesome.

"After repeated experiments to get rid of them, they at last hit upon one at least that saved the corn. This they affected by making fires of sour acrid plants, by the smoke of which they were driven away, having however repeatedly extinguished the fires by the myriads that flew into them." [p. 401]

1827 Philipps, T. in Keppel-Jones (1960)

Upper part of the Cape Colony:

Heavy infestation of locusts which were depositing their eggs. The air was thick with them.

"The upper part of the Colony is now in this state, their grass is all eaten. The cattle and sheep are forced to feed on the devourers. This occasions disorders and they are lying in numbers. The spring bucks are so reduced that they could be knocked down with sticks, but are so miserably poor as to be unfit for use." [p. 326]

1835 Alexander, J.E. (1840)

Up the Swartkops River valley, Port Elizabeth:

After saying that his visit there "…was not exactly the season to see the Cape bulbs, geraniums and heaths which, in October and November carpet the ground..." [i.e. it was not in Spring], he added: "Locusts flew up in clouds wherever we went..." [p. 338]

1839 Delegorgue, A. (1990)

June to September — Umkomazi River, Natal:

"On our way back from Om-Zinto we crossed the Om-Komas where we saw for the first time innumerable swarms of locusts which settled on the green pastures and on every variety of tree whose appearance they altered completely so that the trees seemed more luxuriant than usual, and the dull green of their foliage now appeared purplish with gleams of silver and mother-of-pearl. To the observer, the colours were admirable although the beat of thousands of glazed wings made an oppressively loud noise. At our approach these destructive insects rose into the air in huge drifts to reveal the denuded skeletons of abandoned trees, while all about us fresh swarms darkened the sun and made so much noise for half a league around that we were unable to exchange a word.

"These countless multitudes are finally driven off by a strong breeze which carried them away and scatters them, exhausted, over lands which they have already ravaged or where the grass is no longer green. More numerous than all the blades of grass in the whole of the land, they soon fall to the ground where, for the want of food, and unable

to fly, they die and are burnt by the sun which dries them out and bakes them. Then the sheep, cattle and horses graze on them. But their numbers are so great that they fill the air with noxious gases which give rise to pestilential maladies. This is why at least once a year, all over Caffre Land, care is taken to burn the grass. The fire destroys an immense quantity of the eggs and larvae of these insects and, by this simple means, the crops are protected from complete devastation."

Delegorgue then tells how swarms of hoppers are destroyed by driving a flock of from 500 to 1 000 sheep over them to crush them underfoot. After the sheep come kites and crows to feed on what remains. Crops are also defended by beating with bushes, etc.

"When an area is devastated, there is nothing for it but to travel twenty or thirty leagues in search of grazing. It is principally because they destroy the grazing that the locusts are so much feared by Colonists and Caffres alike, but for the Boschjesman who owns nothing, their arrival is an occasion for joy. He collects them, stuffs them into skin bags and uses them as food when hunting is bad." Describes how these are prepared and eaten, as well as their flavour. [p. 80]

1844 **Cumming, R.G. (1850)**

15 May — Between Kuruman and Vryburg, Northern Cape:

Had just crossed the Mathlwareng River, 26 km northeast of Kuruman "...an insignificant stream" when he "...met a huge swarm of locusts". He does not enlarge, but the country there was "...rank yellow grass which, waving in the breeze, imparted the idea of endless fields of ripe corn...varied with detached clumps of thorny *Mimosa* [*Acacia*]." [1: 227]

1848–1852 **Black, W.T. (1901)**

Great Fish River Valley, Albany District:

"That white smoky line advancing along the undulations of the bush-covered valley, like the progressing margin of a grass fire, is a squadron of winged locusts (*Acrydium*) in line, the hindmost of which are constantly flying over their comrades ahead to take up the unconsumed vegetation while they leave behind them a leafless desert. On nearer inspection the bushes are seen completely covered with the brownish grey bodies, heaps of which may be knocked off, like snow-wreaths, by the stroke of a stick, while your horse may be seen with avidity clearing another bush of its devastators." [p. 20]

1850 **Stirk, J. (unpublished). Journal of Joseph Stirk (in Cory Library, Rhodes University)**

Breakfast Vlei, Peddie District:

25 January — "A swarm of locusts passed over; destroyed my Indian corn [mealies]."

11 February — After a hippo-hunting trip to the Keiskamma River: "Arrived home at breakfast time; found all my Indian corn destroyed by locusts."

12 June — "Locusts approaching near the farm."

17 June — "A swarm of locusts came to the field."

18–20 June — "Drove locusts out of the lands all day."

1852 **Stirk, J. (Unpublished). Journal of Joseph Stirk (in Cory Library, Rhodes University)**

21 May — "The locusts have made their appearance."

11 June — "The locusts have eaten all our oathay. 30 acres."

2 December — "A great many locusts all over the Colony."

APPENDIX C

ELEPHANTS

1816 **La Trobe, C.I. (1818)**

19 April — Between Coerney and Addo Drift, Alexandria District:

"By the way we saw abundant traces of recent works of elephants; trees pushed down or pulled up by the roots...as likewise a large thorntree with a stem nearly a foot in diameter standing topsy-turvy on its crown with only one large root at the top, all the smaller being devoured as well as the more tender parts of the bush and the leaves." [p. 239]

1820 **Moodie, J.W.D. (1835)**

Just east of Kaffirdrift on the Great Fish River, Peddie District:

Over ridges and valleys. Hundreds of mimosas [*Acacia*] turned up by elephants. [2: 65]

'Fredericksburg', just east of Peddie village:

Troops of elephants often seen browsing among the scattered mimosas [*Acacia*]. [2: 74]

1822 **Shaw, W. in Sadler (1967)**

13 August — Between Alice and Grahamstown [probably Great Fish River Bush]:

"It is much infested with elephants, many trees lay along the road, which these animals had torn up by the roots and left as token of their strength."

1822 **Pringle, T. (1835)**

April — Koonap River Valley, Adelaide District:

"Among the *Mimosa* [*Acacia*] trees (thorntrees) sprinkled over the meadows, or lower bottoms, the traces of their (elephant) operations were not less apparent. Immense numbers of these trees had been torn out of the ground and placed in an inverted position in order to enable the animals to browse at their ease on their juicy roots which form a favourite part of their food. I observed that, in numerous instances, when the trees were of considerable size, the elephant had employed one of his tusks, exactly as he would use a crowbar, thrusting it under the roots to loosen their hold on the earth before he attempted to tear them up with his proboscis. Many of the larger mimosas had resisted all their efforts, and indeed, it is only after rains that they can successfully attempt the operation." [p. 126]

1842 **Delegorgue, A. (1990)**

February — West of Black and White Mfolozi confluence, ? Mhlahatini District:

"...frequently a tusk is broken in the effort which the elephant makes to uproot a tree... These tusks bore longitudinal fissures such as those which appear in a fallen tree which has been stripped of its bark; apart from this the rough surface reveals a great number of superimposed layers, detached at the base and standing up almost like the tips of thatch on a rustic roof. Each of these layers may be considered as a splinter off the base of the cone and, the more closely I inspected them, the more convinced of this I became." [p. 277]

1844 **Cumming, R.G. (1850)**

Approach to Booby from a southerly direction, Bamangwato Reserve:

18 June — Near Booby. "I had ridden about half a mile in a northeasterly direction through shady groves of mokala trees. [1: 292]

19 June

"...took a stroll through the forest. Here I found some old dung of elephant and observed several fullgrown trees torn up by the roots, and others that had been shivered by the gigantic strength of those animals... Our march lay through an interesting country... The forest was in many places thin and open with here and there gigantic old trees of picturesque appearance standing detached, some half-dead and others falling to pieces from age..." [1: 293]

To the fountain of Bootlonamy [Boatlaname]:

"... I... held east through a grove of lofty and wide-spreading mimosas [*Acacia*], most of which were more or less damaged by the gigantic strength of a troop of elephants which had passed through there about twelve months before..." [1: 295]

25 June

From Lepeby [Lephephe] Fountain to Massouey [Mashowe], Botswana:

"This was a very remarkable spot on the southern borders of endless elephant forests... The fountain was deep and strong, situated in a hollow at the eastern extremity of an extensive vley, and its margin was surrounded by a level stratum of solid old red sandstone... The soil of the surrounding country was white and yellow sand but grass, trees, and bushes were abundant. From the borders of the fountain a hundred well-trodden elephant paths led away in every direction like the radii of a circle. The breadth of these paths was about 3 feet. Those leading to the northward and east were the most frequented, the country in those directions being well wooded...

"From the margin of the fountain there extended an open level vley without a tree or bush, that stretched away about a mile to the northward where it was bounded by extensive groves of wide-spreading mimosas [*Acacia*]." [1: 303]

Near Massouey:

"Here the trees were large and handsome but not strong enough to resist the inconceivable strength of the mighty monarchs of these forests. Almost every tree had half its branches broken short by them. At every hundred yards I came upon entire trees, and these the largest in the forest, were uprooted clean out of the ground, or broken short across their stems. I observed several large trees placed in an inverted position having their roots uppermost in the air... [p. 307]

"The food of the elephant consists of the branches, leaves and roots of trees, and also of a variety of bulbs, of the situation of which he is advised by his exquisite sense of smell. To obtain these he turns up the ground with his tusks and whole acres may be seen thus ploughed up... He is extremely particular in always frequenting the freshest and most verdant districts of the forest; and when one district is parched and barren, he will forsake it for years, and wander to great distances in quest of better pasture... [p. 310]

"...spreading out from one another and proceeding in a zigzag course they smash and destroy all the finest trees in the forest which happen to lie in their course. The number of goodly trees which a herd of bull elephants will thus destroy is utterly incredible. They are extremely capricious, and on coming to a group of 5 or 6 trees they break down not infrequently the whole of them when, having perhaps only tasted one or two small branches, they pass on and continue their wanton work of destruction. I have repeatedly ridden through forests where the trees thus broken lay so thick across one another that it was almost impossible to ride through the district... During the night they will feed in open plains and thinly wooded districts..." [p. 312]

23 July

Letlochee, southeastern Botswana:

"The country before me was a vast level forest extending to the north and east for about 20 miles without a break..." [1: 349]

Came upon a place where elephants had been feeding "...the ground also was here and there ploughed up by their tusks in quest of roots..." [1: 351]

APPENDIX D

EARLY INCIDENCE OF PRICKLY-PEAR (*Opuntia* spp.)

1848 **Baines, T. in Kennedy (1961)**

16 March — Probably near Fort Brown, Albany District:

"We crossed the swollen and turbid waters of the Great Fish River at 'Vyge Kraal' drift, so-called from the 'Turk fig' or cactus which abounds in that locality." [p. 37]

1849 **Baines, T. in Kennedy (1964)**

18 February — East of Colesberg:

"... I found the people had gathered a quantity of the fruit of the cactus or prickly-pear [*Opuntia* spp.]. These are excellent eating but are so covered with little clumps of minute and almost invisible spines that a person is almost sure to get his fingers full. The best way is to cut off both ends and make a longitudinal slit in the rind which may be turned back on each side, and the seeds and pulp laid bare." [p. 11]

1851 **Baines, T. in Kennedy (1964)**

14 March — Between Carlisle Bridge and the Fish River Rand, probably on farm Ettrick Hills [then Boerboonfontein], 48 km northwest of Grahamstown, or at Schelm Drift, Albany District:

"...after a breakfast of the fruit of the cactus which grows here abundantly and, when washed down, may be eaten without inconvenience from the downy thorns that cover it, we crossed the Fish River." [p. 190]

1851 **Black, W.T. (1901)**

Fish River bush generally, near Ecca Bush, between Fort Brown and Committees Drift, Albany District:

"Clumps of prickly-pear with their leaflike succulent branches studded with golden-yellow flowers...grow here and there luxuriantly, the fruit affording rich food for wild pigs, and giving the name Vyge Kraal to a locality of the Fish River." [This Vyge Kraal was more or less the present Kentucky, a portion of the Andries Vosloo Kudu Reserve] [p. 20]

1851 **Stubbs, T. in Maxwell & McKeogh (1978)**

March — Swartwaterspoort, Swartwatersberg, 52 km west southwest of Grahamstown:

"...on the side of the hill this part was very thickly studded with prickly-pear [*Opuntia* spp.] and bush..." [p. 165] [This area was still heavily infested with prickly-pear in 1982 – C.J. Skead]

1863 **Dobie, J.S. (1945)**

6 September — From Cradock and down the Fish River, across the Tarka River near the confluence:

"At a stream the road turned, a fine pile of trap clothed with cactus or prickly-pear [*Opuntia* spp.] opposite." [p. 125]

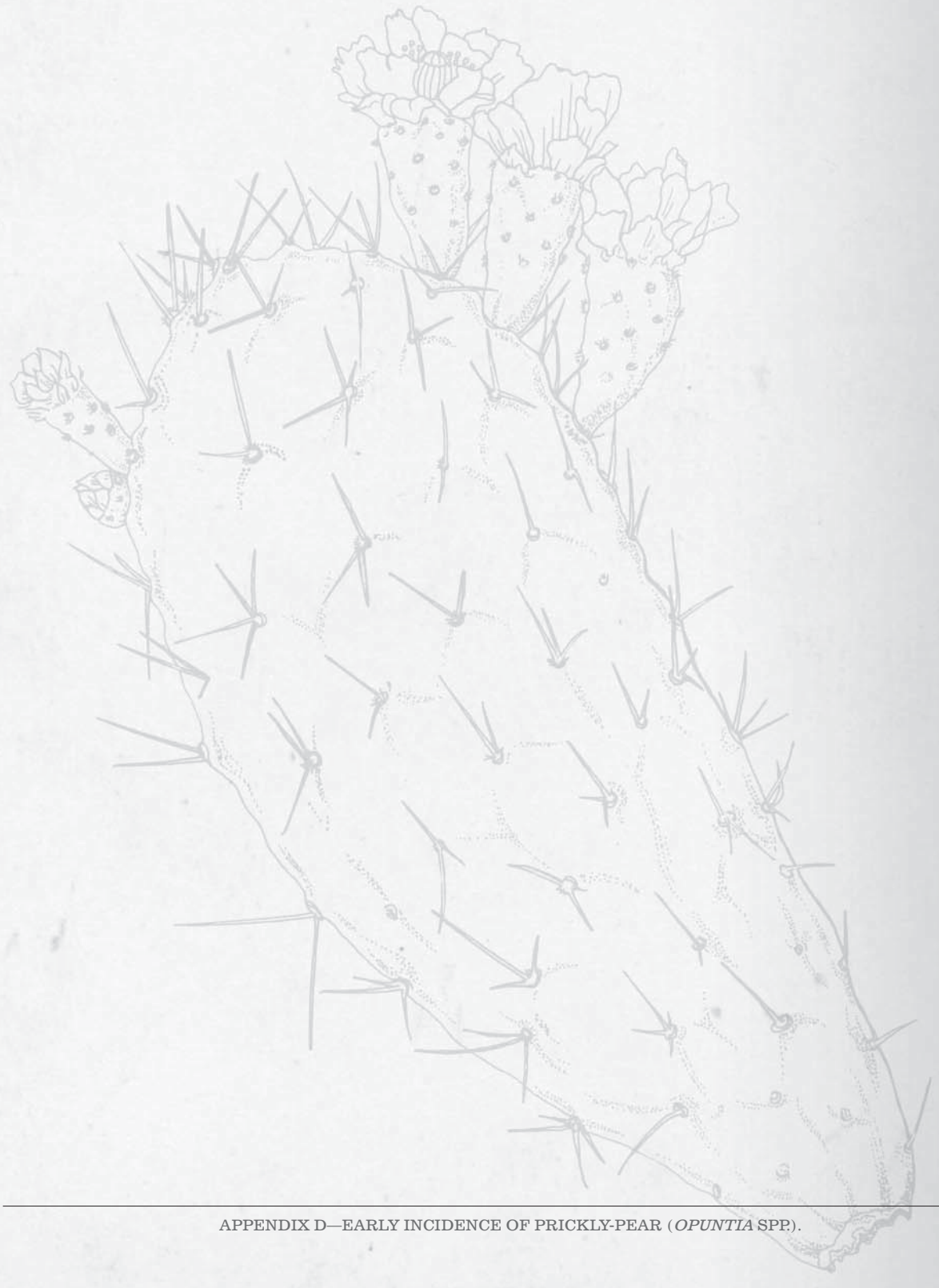
1876 **Ballantyne, R.M. (1879)**

Cookhouse, Somerset East/Bedford Districts:

"...the prickly-pear was very prolific, and the bush so dense that it formed a pretty safe retreat to escaped convicts..." [p. 93]

Describes eating the fruit - i.e. the thorniness, and mentions that monkeys also ate them. [p. 94]

[These areas of the districts became densely covered in prickly pear [*Opuntia* spp.] and were only cleared in the 1940s by, firstly, biological control with *Cactoblastis cactorum* moth larvae, and Cochineal insects introduced from Australia; and, secondly, Italian prisoners-of-war who collected the prickly-pear stumps into heaps and poisoned them *in situ*. – C.J. Skead]



APPENDIX D—EARLY INCIDENCE OF PRICKLY-PEAR (*OPUNTIA* SPP.).

BIBLIOGRAPHY

ADAMSON, R.S. 1934. The vegetation and flora of Robben Island. *Transactions of the Royal Society of South Africa* 22: 279–296.

AINSLIE, W. 1899. *Sixty-six years residence in South Africa*. Privately published.

ALEXANDER, J.E. 1838. *An expedition of discovery into the interior of Africa, through the hitherto undiscovered countries of the great Namaquas, Boschmans and Hill Damaras*. Vol. 1. Henry Colburn, London. [1957: facsimile reprint. *Africana Collectanea* 22. Struik, Cape Town.]

ALEXANDER, J.E. 1840. *An expedition of discovery into the interior of Africa, through the hitherto undiscovered countries of the great Namaquas, Boschmans and Hill Damaras*. Vol. 2. Henry Colburn, London. [1957: facsimile reprint. *Africana Collectanea* 23. Struik, Cape Town.]

ANDERSSON, C.J. 1856. *Lake Ngami, or explorations and discoveries during the four years wandering in the wilds of South Western Africa.* Hurst & Blackett, London.

ANNUAL REPORT OF THE FORESTRY DEPARTMENT, CAPE, 1905.

AUCAMP, H. (ed.) 1971. *Op die Stormberge*. Tafelberg, Cape Town.

AXELSON, E. 1940. *South-East Africa 1488–1503*. Longmans, Green, London.

AXELSON, E. 1960. *Portuguese in South-East Africa 1600–1700*. Witwatersrand University Press, Johannesburg.

AXELSON, E. 1973. *Congo to the Cape*. Faber & Faber, London.

BACKHOUSE, J. 1844. *A narrative of a visit to the Mauritius and South Africa*. Hamilton, Adams & Co., London.

BAINES, T. 1864. *Explorations in South West Africa. Being an account of a journey in 1861 and 1862 from Walfisch Bay to Lake Ngami and Victoria Falls*. Longman, Green, Longman, Roberts & Green, London.

BALDWIN, W.C. 1863. *African hunting from Natal to the Zambezi*. Publisher indet.

BALLANTYNE, R.M. 1879. *Six months at the Cape*. Nisbet, London.

BARROW, J. 1801. *An account of travels into the interior of southern Africa 1797–98*. Vol. 1. Cadell & Davies, London.

BARROW, J. 1804. *An account of travels into the interior of southern Africa 1797–98*. Vol. 2. Cadell & Davies, London.

BAYONEAN, A. 1970. From Grahamstown to 'King' by coach (about 1882). *Looking Back* 10: 101, 102.

BIGALKE, R. 1951. The discovery of the giraffe in South Africa. *Fauna & Flora* 2: 24–28.

BLACK, W.T. 1901. *The Fish River bush, South Africa, and its wild animals*. Pentland, Edinburgh & London.

BLOMMAERT, W. & WIID, J.A. (eds) 1937. The Journal of Dirk Gysberg van Reenen 1803. *Van Riebeeck Society* 18.

BOARD, C. (ed.) 1962. The *Border Region, natural environment and land use in the Eastern Cape*. Oxford University Press, Cape Town.

BORCHERDS, P.B. 1861. *An autobiographical memoir*. Robertson, Cape Town. [1963: facsimile reprint. Africana Connoisseurs Press, Cape Town.]

BRADLOW, E. & BRADLOW, F. 1979. William Somerville's narrative of his journeys to the Eastern Cape Frontier and to Lattakoe 1799–1802. *Van Riebeeck Society* 10.

BROEKHUYSEN, G.J. & RUDEBECK, G. 1951. *Ostrich* 22: 132–138.

BROWNLEE, F. 1923. *The Transkeian Native Territories: historical records*. Lovedale Press, Alice.

BROWNLEE, W.T. 1975. *Reminiscences of a Transkeian*. Shuter & Shooter, Pietermaritzburg.

BULLOCK, J.B. (ed.) 1960. *Peddie—settler's outpost*. Grocott & Sherry, Grahamstown.

BULPIN, T.V. 1955. *Storm over Transvaal*. Howard Timmins, Cape Town.

BUNBURY, C.J.F. 1848. *Journal of a residence at the Cape of Good Hope with excursions into the interior, and notes on the natural history and the native tribes*. John Murray, London.

BURCHELL, W.J. 1822. *Travels in the interior of southern Africa*. Vol. 1. [1967: facsimile reprint. Struik, Cape Town.]

BURCHELL, W.J. 1824. *Travels in the interior of southern Africa*. Vol. 2. [1967: facsimile reprint. Struik, Cape Town.]

BURKE, E.E. (ed.) 1969. *The journals of Carl Mauch, his travels in the Transvaal and Rhodesia, 1869–1872*. National Archives of Rhodesia, Salisbury.

BURMAN, J. 1963. *So high the road*. Human & Rousseau, Cape Town.

BURTON, A.W. 1950. *Sparks from the Border anvil*. Provincial Press, King William's Town.

CAMPBELL, J. 1815. *Travels in South Africa undertaken at the request of the Missionary Society of London*, edn 3. London Missionary Society, London.

CAMPBELL, J. 1822. *Travels in South Africa; being a narrative of a second journey in the interior of Africa*. Two volumes. London Missionary Society, London.

CAPE MONTHLY MAGAZINE 1877.

CHAMBERLAIN, J. 1974. The game of, and sport at, the Cape. *Journal of the Historical Firearms Society* 6: 26–29. [Reprinted from *The Field* 33: 340 (1869).]

CHAPMAN, J. 1868. *Travels in the interior of South Africa; comprising fifteen years hunting and trading with journeys across the continent from Natal to Walvisch Bay, and visits to Lake Ngami and the Victoria Falls*. Two volumes. Bell & Daldy, London.

CNOLL, COMMISSARY. 1710. Journey from Cape Town to Caledon. [1924: Reprinted in *Collectanea* (1st series). *Van Riebeeck Society* 5.]

COLVIN, I.D. 1912. *The Cape of adventure* [contains the Roteiro of Vasco da Gama 1497–1499, originally published in 1838, publisher indet.]. Jack, Edinburgh.

COURTENAY-LATIMER, M. & GIBSON-HILL, C.A. 1946. A preliminary note on the Bird Island Group in Algoa Bay. *Ostrich* 17: 75–86.

CRONWRIGHT-SCHREINER, S.C. 1925. *The migratory springbucks of South Africa* (*The trekbokke*). Fisher Unwin, London.

CULLINAN, P. 1992. *Robert Jacob Gordon 1743–1795*. Struik 'Winchester', Cape Town.

CUMMING, R.G. 1850. *Five years of a hunter's life in the far interior of South Africa*, edn 2. Two volumes. John Murray, London.

CUMMING, R.G. 1909. *The lion hunter of South Africa*, edn 1. Two volumes. Murray, London.

DAMPIER, W. 1924 (reprint), *c.*1691. *Extract from a new voyage round the world*, edn 5, 1703. London. [Reprinted in *Collectanea* (1st series). *Van Riebeeck Society* 5 (1924).]

DE BEAULIEU, A. 1669. *De rampspoedige scheepvaart der Franschen naa Oostindien, onder't beleit van der Heer General Augustyn van Beaulieu, met drie schepen uit Normandyen*. Reprinted in 1953.

DELEGORGUE, A. 1990 (English translation by F. Webb). *Travels in southern Africa*. Vol. 1. University of Natal Press, Pietermaritzburg.

DERRICOURT, R.M. 1973. *Prehistoric settlement in the Ciskei and Transkei regions of South Africa*. Department of African Studies, University of Fort Hare.

DE VASSELOT, M. 1890. Annual Report of the Superintendent of Woods and Forests, Cape of Good Hope.

DOBIE, J.S. 1945. South African Journal 1862–1866 [edited by A.F.K. Hattersley]. *Van Riebeeck Society* 26.

DOWER, W. 1902. *The early annals of Kokstad and Griqualand East*. [Printed by] Kemsley, Port Elizabeth.

DRAYSON, A.W. 1858. *Sporting scenes among the Kaffirs of South Africa*. Routledge, London.

DUMINY, A.H. & ADCOCK, L.J.G. 1979. *The reminiscences of Richard Paver*. Balkema, Cape Town. For Rhodes University (Grahamstown Series).

ELOFF, F. 1974. The story of the Kalahari lion. *Custos* 3: 36–41.

FEHR, W. (ed.) 1968. *Account of tribal life and customs of the Xhosa in 1807*. Cape Town.

FITZSIMONS, F.W. 1920. *The natural history of South Africa. Mammals*. Vol. 3. Longmans, London.

FLEMING, F. 1853. *Kaffraria and its inhabitants*. Smith, Elder, London.

FORBES, V.S. 1965. *Pioneer travellers in South Africa*. Balkema, Cape Town.

GALTON, F. 1853. *The narrative of an explorer in tropical South Africa*. Murray, London.

GALTON, F. 1889. *Narrative of an explorer in tropical South Africa being an account of a visitor to Damaraland in 1851*. Ward Lock, London.

GILLHAM, M.E. 1963. Some interactions of plants, rabbits and sea-birds on South African islands. *Journal of Ecology* 51: 275–294.

GOODWIN, A.J.H. 1952. Jan van Riebeeck and the Hottentots 1652–62. *South African Archaeological Bulletin* 6: 6.

HAMMOND-TOOKE, W.D. (ed.) 1972. *The Journal of William Shaw*. Balkema, Cape Town. For Rhodes University (Grahamstown Series).

HARRIS, W.C. 1838. *A narrative of an expedition into southern Africa during the years 1836 and 1837 etc.* American Press, Bombay.

HARRIS, W.C. 1839. *The wild sports of southern Africa*. Murray, London. [1963: facsimile reprint of the fifth edition (1851). Struik, Cape Town.]

HARRIS, W.C. 1840. *Portraits of the game and wild animals of southern Africa delineated from life in their native haunts during a hunting expedition from the Cape Colony as far as the Tropic of Capricorn in 1836 and 1837 with sketches and field sports*, edn 2. Pickering, London.

HASTINGS, H. 1920. Extracts from the diary of Harry Hastings 1820 (pseudonym of John Ayliff). In *Souvenir of Centenary of 1820 Settlers*. Dispatch Printers, East London.

HATTERSLEY, A.F.K. (ed.) 1945. South African Journal of John Sheddon Dobie, 1862–66. *Van Riebeeck Society* 26.

HENKEL, C.C. 1903. *The Native or Transkeian Territories*. Hamburg.

HEWITT, J. 1920a. Notes on the Eastern Province in the pre-Settler times. In *Souvenir of Centenary of 1820 Settlers*. Dispatch Printers, East London.

HEWITT, J. 1920b. Notes on the fauna of St Croix. *South African Journal of Natural History* 2: 98–112.

HOLDEN, W.C. 1855. *History of the Colony of Natal, South Africa*. Heylin, London.

HOOK, MAJOR. 1906. *With sword and statute*. Juta, Cape Town.

HUTCHINS, D.E. 1886. Forestry in India, the Colonies and the Cape Colony. In C. Cowen (ed.) 1885, *The South African Exhibition, Port Elizabeth*. Argus P.& P. Co., Cape Town.

ISAACS, N. 1836. *Travels and adventures in eastern Africa*. Two volumes. Edward Churton, London. [1935: Volume 1. *Van Riebeeck Society* 16. 1936: Volume 2. *Van Riebeeck Society* 17.]

JACOT-GUILLARMOD, A. 1971. *Flora of Lesotho*. J. Cramer, Lehre.

KAY, S. 1833. *Travels and researches in Caffraria, describing the character, customs and moral condition of the tribes inhabiting that portion of southern Africa*. Mason, London.

KAYSER, F.G. 1833. *In litt*. 20.07.1833. In *History of the Protestant Mission Station*, Author indet. [Translated in the 1970s from the German by J.R. Schwär of Frankfort, King William's Town.]

KENNEDY, R.F. (ed.) 1961. Thomas Baines. Journal of a residence in Africa 1842–53. Vol. 1. *Van Riebeeck Society* 42.

KENNEDY, R.F. (ed.) 1964. Thomas Baines. Journal of a residence in Africa 1842–53. Vol. 2. *Van Riebeeck Society* 45.

KEPPEL-JONES, A. 1960. *Thomas Philipps, 1820 Settler*. Shuter & Shooter, Pietermaritzburg.

KIRBY, P.R. (ed.) 1939 & 1940. The diary of Dr. Andrew Smith, Director of the Expedition for Exploring Central Africa 1834–1836. 1939: Volume 1. *Van Riebeeck Society* 20. 1940: Volume 2. *Van Riebeeck Society* 21.

KIRBY, P.R. 1958. *Jacob van Reenen and the 'Grosvenor' Expedition of 1790–1791*. Witwatersrand University Press, Johannesburg.

KOKOT, D.F. 1948. *An investigation into the evidence bearing on recent climatic changes over southern Africa*. Irrigation Department Memoir, Government Printer, Pretoria.

LA TROBE, C.I. 1818 (edn 1). *Journal of a visit to South Africa in 1815–16*. Seely, London. 1820 (edn 2). Seeley, London. [1969: facsimile reprint. Struik, Cape Town.]

LE VAILLANT, F. 1790. *Travels into the interior parts of Africa by way of the Cape of Good Hope, in the years 1780–85*. Two volumes (translation). Robinson, London.

LICHTENSTEIN, H. 1815. *Travels in southern Africa in the years 1803–6*. Two volumes. [1928: Volume 1 reprinted in *Van Riebeeck Society* 10. 1930: Volume 2 reprinted in *Van Riebeeck Society* 11.]

LITTLE, J.S. 1884. *South Africa: A sketch book of men, manners and facts*. Two volumes. Swan, Sonnenschein, London.

LIVERSIDGE, R., BROEKHUYSEN, G.J. & THESEN, A.R. 1958. The birds of Langebaan Lagoon. *Ostrich* 29: 95–106.

LIVINGSTONE, D. 1857. *Missionary travels and researches in South Africa, etc*. Murray, London.

LOXTON, A.E. 1973 (December). Wild rye – Wilde rog, *Secale africanum* Stapf. *Veld & Flora* 3,1: 75.

LUGG, H.C. 1970. *A Natal family looks back*. Griggs, Durban.

MARLOTH, R. 1917. *Dictionary of the common names of plants*. The Speciality Press, Cape Town.

MATTHEWS, J.W. 1887. *Incwadi Yami, etc*. Sampson, Low, Marston, Searle & Rivington, London.

MAXWELL, W.A. & McKEOGH, R.T. 1978. *The reminiscences of Thomas Stubbs*. Balkema, Cape Town. For Rhodes University, Grahamstown.

McGILL, E.A. 1970. St Croix birds. *Bokmakierie* 22: 54–56.

McKAY, H. 1943. Sketch map of Burchell's trek. *Journal of South African Botany* 9: 27–78.

McKENZIE, A.G. 1967. *Delayed action (life and times of the late Brigadier General Sir Duncan McKenzie)*. Private Print.

McKENZIE, P. 1967. *Reminiscences of Natal Midlands and transport riding through Orange Free State and Transvaal in ca. 1880's*. In A.G. McKenzie, *Delayed action (life and times of the late Brigadier General Sir Duncan McKenzie*). Private Print.

MENTZEL, O.F. 1785. A geographical and topographical description of the Cape of Good Hope. Translated by H.J. Mandelbrote. [1921: Part 1 reprinted in *Van Riebeeck Society* 4. 1925: Part 2 reprinted in *Van Riebeeck Society* 6.]

MERRIMAN, N.J. 1854. Passages of missionary life from the journals of Venerable Archdeacon Merriman. *The Kafir, the Hottentot and the Frontier Farmer.* George Bell, London.

MITFORD-BARBERTON, I. 1970. *Commdt. Holden Bowker*. Human & Rousseau, Cape Town.

MOODIE, J.W.D. 1835. *Ten years in South Africa (1819–1829)*. Two volumes. Bentley, London.

MOODIE, J.W.D. 1860. *The Record, or a series of official papers relative to the treatment of the native tribes of South Africa*. [1959: Smith, A. (ed.). Photostatic reprint. Balkema, Cape Town.]

MORGAN, A.N. 1833. An account of the Amakosae, a tribe of Caffers adjoining the eastern boundary of the Cape Colony. *South African Quarterly Journal*, Second Series 1, Part 1.

MOSSOP, E.E. (ed.). 1931. Journal of the expedition of Isaq Schrijver, 1689. *Van Riebeeck Society* 12.

MOSSOP, E.E. 1935. The Journal of Hendrik Jacob Wikar, 1779. Translated by S.W. van der Horst. *Van Riebeeck Society* 15. [Includes the Journal of Willem van Reenen, 1791.]

MOSSOP, E.E. (editor). 1947. The Journals of Brink and Rhenius. *Van Riebeeck Society* 28, Cape Town.

NOBLE, J. 1875. *Descriptive handbook of the Cape Colony, its conditions and resources*. Juta, Cape Town.

OGILBY, J. 1670. *Africa, being an accurate description of the regions of Aegypt, Barbary, Lybia and Billedulgerid, the land of Negroes, Guinee, Aethiopia and the Abyssines, etc*. London.

ORPEN, J.M. 1980 (re-issue 1964). Reminiscences of life in South Africa from 1846 to the present day. *Africana Collectanea* 10. Struik, Cape Town.

OWEN, W.F.W. 1827. *Journal of the Cape of Good Hope*. Woolwich.

PALMER, E. & PITMAN, N. 1972. *Trees of southern Africa*. Three volumes. Balkema, Cape Town.

PATERSON, W. 1790. *Travels in Africa 1777–79*. J. Johnson, London.

PETTMAN, C. 1913. *Africanderisms*. Longmans, Green & Company, London.

PHILIPPS, C. 1827. *Scenes and occurrences in Albany and Cafferland*. South Africa. William Marsh, London.

PHILLIPS, J.F.V. 1931. Forest succession and ecology in the Knysna Region. *Memoirs of the Botanical Survey of South Africa* 14. Government Printer, Pretoria.

PHILLIPS, J.F.V. 1960. The forests of George, Knysna and the Zitzikama 1778–1939. *Department of Forestry Bulletin* 40. Government Printer, Pretoria.

PRINGLE, E., PRINGLE J. & PRINGLE, M. 1957. *The Pringles of the Valleys*. Privately published, Adelaide, Cape.

PRINGLE, T. 1824. Description of the Zuureveld (from an unpublished journal written in 1821). *South African Journal* 14: 17–21. [South African Library Reprint Service 4: Cape Town.]

PRINGLE, T. 1835. *Narrative of a residence in South Africa*, new edition. Moxon, London. [1966: republished by Struik, Cape Town (pages do not correspond in these two editions).]

RAPER, P.E. 1972. *Streekname in Suid-Afrika en Suidwes*. Naamkundereeks 1. Tafelberg, Cape Town.

RAVEN-HART, R. 1965. Saar, John Jacob. 1662. 15 years military service. *Quarterly Bulletin of the South African Library* 20: 14, 15.

RAVEN-HART, R. 1966. De Rennefort 1688. The French at Saldanha Bay 1666. *Quarterly Bulletin of the South African Library* 21: 27.

RAVEN-HART, R. 1967. *Before van Riebeeck*. Struik, Cape Town.

RAVEN-HART, R. (translator) 1971. *Cape of Good Hope 1652–1702. The first fifty years of Dutch colonisation as seen by Callers*. Two volumes. Balkema, Cape Town.

REDGRAVE, J.J. 1947. *Port Elizabeth in bygone days*. Rustica Press (Printers), Wynberg, Cape.

ROBINSON, A.M.L. (ed.) 1951–1952. Thomas Pringle and Sir Walter Scott. 1951: Part 1 *Quarterly Bulletin of the South African Library* 6: 53–55. 1952: Part 2 *Quarterly Bulletin of the South African Library* 6: 113–115.

ROBINSON, A.M.L. 1973. *The letters of Lady Anne Barnard to Henry Dundas from the Cape and elsewhere. 1793–1803. Together with her journal into the interior, and certain other letters.* Balkema, Cape Town.

ROCHLIN, S.A. 1961. Henry Hall: pioneer South African cartographer lithographer. *Africana Notes and News* 14: 251–265.

ROSE, C. 1829. *Four years in South Africa*. Colburn & R. Bentley, London.

ROSE INNES, J. 1949. *Autobiography* (edited by B.A. Tindall). Oxford University Press, Cape Town, etc.

SADLER, C. 1967. *Never a young man*. Extracts from the letters and journals of the Rev. William Shaw. Haum, Cape Town.

SCHAEFER, A. 2008. *Life and travels in the northwest 1850–1899*. Yoshi Publishing, Cape Town.

SCHRIJVER, I. 1689. *Journal kept by Ensign Isaq Schrijver on his inland expedition to the Inquashase Hottentots. Commenced the fourth day of January and completed upon April the tenth in the year 1689.* [1931: reprinted. Edited by E.E. Mossop. *Van Riebeeck Society* 12.]

SCLATER, W.L. 1896. A visit to Dassen Island, the home of the Jackass Penguin. *Ibis* 1896: 519–525.

SCLATER, W.L. 1904. Saldanha Bay and its bird islands. *Ibis* 4, 8th Series: 79–88.

SCOTT, J.B. (ed.) 1970. *Letter-book of Sir Rufane Shaw Donkin*. Historical Society of Port Elizabeth and Walmer. (P.E. Series 4.)

SHAW, W. 1860. *The story of my mission in south-eastern Africa*. Hamilton Adams, London.

SHEFFIELD, T. 1884. *The story of a settlement*. Grocott & Sherry, Grahamstown. [1912: edn 3.]

SHORTRIDGE, G.C. 1934. *The mammals of South West Africa*. Two volumes. Heinemann, London.

SIM, T.R. 1907. *The forests and forest flora of the Cape of Good Hope*. Taylor & Henderson, Aberdeen, Scotland.

SKEAD, C.J. 1980. *Historical mammal incidence in Cape Province*. Vol. 1. Department of Nature and Environmental Conservation of the Provincial Administration of the Cape of Good Hope, Cape Town.

SKEAD, C.J. 1987. *Historical mammal incidence in Cape Province*. Vol. 2. Cape Department of Nature Conservation, Cape Town.

SMITH, C.A. 1966. Common names of South African plants. *Memoirs of the Botanical Survey of South Africa* 35. Botanical Research Institute, Department of Agricultural Technical Services, Pretoria.

SPARRMAN, A. 1786. *A voyage to the Cape of Good Hope towards the Antarctic Polar Circle and round the world, but chiefly into the country of the Hottentots and Caffres, from the year 1772 to 1776.* Two volumes. Robinson, London.

SPOHR, O.H. (ed.) 1973. *Travel Journal of Ferdinand Krauss 1838–40*. Balkema, Cape Town.

STEEDMAN, A. 1835. *Wanderings and adventures in the interior of southern Africa*. Longmans, London. [1966: facsimile edition. Struik, Cape Town.]

STEVENSON-HAMILTON, J. 1947. *Wild life in South Africa*. Cassell, London.

STEYTLER, J.G. 1970. Reminiscences from 1832–1900. *Quarterly Bulletin of the South African Library* 25: 20–39.

STIRK, J. Unpublished. Journal of Joseph Stirk (1850, 1852). Cory Library, Rhodes University, Grahamstown.

STOCKENSTROM, A. 1887. *Autobiography of Andries Stockenstrom*. Two volumes. Edited by C.W. Hutton. Juta, Cape Town.

SYMONS, R.E. 1924. A visit to Dyer's Island. *South African Journal of Natural History* 4: 253–259.

SYMONS, R.E. 1926. Collecting birds eggs at Saldanha Bay. *South African Journal of Natural History* 6: 30–36.

THEAL, G.M. 1882. *Chronicles of Cape Commanders*. Richards, Government Printers, Cape Town.

THEAL, G.M. 1898a. *Records of South-Eastern Africa*. Volume 1.

THEAL, G.M. 1898b. *Records of South-Eastern Africa*. Volume 2.

THEAL, G.M. 1899a. *Records of South-Eastern Africa*. Volume 3.

THEAL, G.M. 1899b. *Records of South-Eastern Africa*. Volume 4

THEAL, G.M. 1900. *Records of South-Eastern Africa*. Volume 6.

THEAL, G.M. 1901a. *Records of South-Eastern Africa*. Volume 5.

THEAL, G.M. 1901b. (Dos Santos) *Records of South-Eastern Africa*. Volume 7.

THEAL, G.M. 1902. *Records of South-Eastern Africa*. Volume 8.

THEAL, G.M. 1903. *Records of South-Eastern Africa*. Volume 9. Cape Colony Government.

THEAL, G.M. 1905. *Records of the Cape Colony* 31. Cape Colony Government.

THEAL, G.M. 1909. *History and ethnography of Africa south of the Zambezi before 1795*. Volume 2.

THEAL, G.M. 1909/1910. *History and ethnography of Africa south of the Zambezi before 1795*. Volume 1.

THEAL, G.M. 1910. *History and ethnography of Africa south of the Zambezi before 1795*. Volume 3.

THOMPSON, G. 1827. *Travels and adventures in southern Africa, 1823–24*, edn 2. Two volumes. Colburn, London.

THUNBERG, C.P. 1793. *Travels in Europe, Africa and Asia performed between the years 1770 and 1779*. Vol. 1 (1770–1773). Richardson & Egerton, London. [1986: facsimile edition. *Van Riebeeck Society*, Second Series 17.]

THUNBERG, C.P. 1795. *Travels in Europe, Africa and Asia performed between the years 1770 and 1779*. Vol. 2. (1773–1775). Richardson & Egerton, London. [1986: facsimile edition. *Van Riebeeck Society*, Second Series 17.]

TINLEY, K.L. 1966. *An ecological reconnaissance of the Moremi Wild Life Reserve, Botswana*. Okavango Wild Life Society, Johannesburg.

TINLEY, K.L. 1971. *Etosha and the Kaokoveld. The case for saving Etosha*. Supplement to *African Wild Life* 25, Part 1.

VALENTYN, F. 1726. *Description of the Cape of Good Hope with the matters concerning it*. Amsterdam. [1971: Vol. 1 republished. *Van Riebeeck Society*, Second Series 2. 1973: Vol. 2 republished. *Van Riebeeck Society*, Second Series 4.]

VAN RIEBEECK, J. 1952 and 1958. *The Journal of Jan Van Riebeeck 1651–1662*. Three volumes. Edited by H.B. Thom. Balkema, Cape Town (for the Van Riebeeck Society).

VAN WYK, G.F. 1960. *The tidal waters of rivers in the Peddie district*. Annual Report of the Cape Department of Nature Conservation 17.

VARLEY, D.H. 1956. Pierre-Antonie Delalande, naturalist, and his Cape visit 1818–1820. *Quarterly Bulletin of the South African Library* 11: 6–10.

VON WINCKELMANN, F.C.P. 1948. The travels of Franz von Winckelmann 1789. *East London Centenary Brochure* 1848–1948: 43–49.

INDEX OF PLANT NAMES

Compiled by O.A. Leistner and E. du Plessis

aardroos, 13
abiquas geelhout, 76
abiquas-geelhout, 329
Abutilon sonneratianum, 226
acacia, 107, 163, 262, 266, 271, 280, 303, 318, 329
Acacia, 8, 60, 62, 73, 86, 89, 94, 106, 107, 113, 114, 164, 170, 208, 211, 212, 219, 228, 231, 239, 244, 255, 256, 257, 259, 262, 265, 266, 269, 270, 274, 275, 280, 281, 282, 284, 287, 292, 293, 300, 305, 306, 308, 312, 315, 320, 321, 325, 328, 329, 330, 331, 337, 357, 358, 359
Acacia albida, 331, 337
Acacia atomiphylla, 261, 265, 266, 278
Acacia caffra, 164 168, 226, 241, 289
Acacia capensis, 269
Acacia detinens, 93, 98, 261, 269, 270, 277, 307
Acacia elephantina, 266
Acacia elephantorhiza, 252
Acacia erioloba, 64, 88, 91, 257, 258, 259, 263, 264, 266, 267, 268, 269, 270, 271, 273, 273, 275, 278, 280, 281, 282, 301, 303, 304, 311, 313, 314, 316, 320, 324, 330, 331, 332, 333, 336, 337
Acacia galpinii, 301, 304
Acacia giraffae, 263, 264, 266, 269, 270, 311, 316, 324, 333, 336
Acacia giraffe, 91, 271, 278, 320
Acacia fleckii, 336
Acacia haematoxylon, 91, 261, 265, 266, 274, 278, 337
Acacia hebeclada, 113, 266, 269, 337
Acacia heteracantha, 262, 263, 269
Acacia horrida, 114, 133, 168, 203, 241, 278, 311
Acacia karroo, 8, 54, 55, 56, 57, 58, 59, 61, 63, 64, 66, 67, 70, 76, 78, 79, 81, 82, 84, 85, 88, 89, 91, 94, 95, 98, 99, 103, 105, 106, 108, 110, 111, 112, 113, 114, 117, 118, 119, 122, 126, 127, 133, 135, 153, 155, 158, 163, 164, 168, 172, 173, 174, 177, 180, 181, 184, 185, 186, 187, 188, 189, 190, 193, 194, 196, 197, 199, 200, 201, 203, 208, 212, 214, 219, 220, 222, 223, 224, 225, 229, 232, 233, 234, 235, 236, 240, 241, 250, 252, 258, 259, 262, 263, 266, 269, 271, 272, 274, 278, 280, 289, 290, 301, 302, 304, 311, 315, 321, 332, 336, 337
Acacia lattaku, 272
Acacia litakunensis, 269
Acacia luederitzii, 315, 316
Acacia mellifera, 87, 88, 94, 98, 257, 261, 263, 265, 266, 269, 270, 274, 277, 301, 302, 303, 304, 307, 309, 315, 316, 322, 332
Acacia mellifera subsp. *detinens*, 93, 313
Acacia multijuga, 289
Acacia nebrownii, 316
Acacia nilotica, 278, 332
Acacia reticulata, 272
Acacia robusta, 269, 273
Acacia sp., 336
Acacia spp., 241, 332
Acacia stolonifera, 266, 269
Acacia tortilis, 280, 315
Acacia tortilis subsp. *heteracantha*, 262, 263, 269, 272
Acacia tribe, 299
Acaciae, 83, 168
Acaena latebrosa, 74
Acanthaceae, 90
Acanthosicyos horridus, 329, 331, 332, 334, 336
Acanthosicyos naudinianus, 330
Acanthus, 90
Acetosa scandens, 83
Acmadenia obtusata, 124
Acokanthera oppositifolia, 59
Acorus, 11
Acorus calamus, 181
Acorus palmita, 123
Adansonia digitata, 303, 309, 311, 314, 316, 320, 323, 324, 326, 337
Adelaide spice-tree, 227
Adelia acitodon, 201
Adenadra villosa, 124
Adenandra uniflora, 124
Adenia, 249
Adenia pechuelii, 337
Adenia repanda, 265
Adenogramma diffusa, 124
Adiantum, 21
Adianthum aethiopicum, 13
Adonis capensis, 13
Adromischus mammillaris, 111
Adromischus sp., 111
Aerangis mystacidii, 241
Agapanthus praecox, 147, 163, 191
Agapanthus umbellatus, 163
Agathea parvifolia, 20
Agathosma, 24, 44, 60, 118, 144
Agathosma elegans, 124
Agathosma linifolia, 124
Agathosma pubescens, 124
Agathosma pulchella, 124
Agathosma serpyllacea, 124
Agathosma serpyllaceum, 124
Agathosma serratifolia, 124, 264
Agave, 59, 133
Agave americana, 8, 12, 16
Agelanthus prunifolius, 230
African briony, 80
African willow, 82
africaner, 15
afrikaaner, 26
agrimony, 3
Afrocarpus, 138, 145, 214, 226, 239
Afrocarpus falcatus, 177
Agrostis alba, 195
Agrostis bergiana, 195, 200
Agrostis linearis, 265
Agrostis stolonifera, 195
Angraecum bicordatum, 241
Angraecum conchiferum, 241
Angraecum saundersiae, 241
Angrecum, 206
Aitonia, 272
Aitonia capensis, 113, 272
Aizoaceae, 89
Aizoon sarmentosum, 226
Albizia adianthifolia, 249, 293
Albizia adianthifolia var. *adianthifolia*, 288
Albizzia fastigiata, 249
Albuca, 343, 345
Albuca canadensis, 33
Albuca major, 33
Albuca maxima, 33
Albuca sp., 104, 344
almond tree, 117
aloe, 24, 26, 51, 55, 59, 67, 80, 83, 106, 114, 116, 117, 120, 127, 128, 129, 130, 131, 132, 133, 157, 158, 161, 165, 166, 188, 215, 220, 234, 235, 238, 239, 247, 300, 348
Aloe, 8, 45, 80, 88, 90, 102, 134, 135, 155, 164, 170, 204, 207, 209, 210, 216, 235, 254, 258, 268, 271, 272, 282, 337
Aloe africana, 161, 190
Aloe arborescens, 76, 110, 203, 204, 241
Aloe bainesii, 241
Aloe barberae, 16, 241, 291, 292
Aloe broomii, 254
Aloe claviflora, 92, 272
Aloe dichotoma, 16, 55, 59, 61, 64, 65, 76, 88, 90, 257, 330, 337
Aloe falcata, 76
Aloe ferox, 24, 114, 115, 116, 117, 120, 121, 122, 127, 128, 129, 130, 131, 132, 133, 135, 141, 157, 164, 165, 171, 190, 198, 204, 207, 215, 234, 241
Aloe grandidentata, 254
Aloe latifolia, 241
Aloe lineata, 204
Aloe maculata, 241
Aloe microstigma subsp. *microstigma*, 55
Aloe mitriformis, 49
Aloe perfoliata, 90, 114, 116, 121, 122, 141
Aloe pluridens, 80
Aloe reclinata, 272
Aloe saponaria, 241, 268
Aloe serrata, 205
Aloe socotrina, 115
Aloe spicata, 171
Aloe striata, 45, 241
Aloe succotrina, 26, 110
Aloe tribe, 113
Alyssum, 74
Alyssum minutum, 74
Allium dregeanum, 87, 93
amabonsi, 296
amabouche, 296
amandelhout, 117
Amaranthus, 231, 318
Amaryllidaceae, 237, 252, 282
Amaryllide, 25, 50
Amaryllides, 212
amaryllis, 169
Amaryllis, 15, 37, 41, 49, 147, 198, 229, 236, 237, 252, 264, 282, 317
Amaryllis belladonna, 26, 51, 169
Amaryllis brunsvigia multiflora, 278
Amaryllis ciliaris, 14
Amaryllis disticha, 59, 61
Amaryllis lucida, 264, 265
Amaryllis toxicaria, 265, 278, 311
Amaryllis tribe, 102, 206
American aloe, 12, 133
Ammocharis coranica, 278
Anacampseros, 292
Anacampseros filamentosa, 268

Anacampseros lanigera, 268
Anacardiaceae, 194
Anamania laserpitiifolia, 72
Andropogon, 260, 266, 267
Andropogon allionii, 26
Andropogon excavatus, 290
Andropogon hirtus, 26
Anemone capensis, 20, 23
anis root, 39
anise, 33
Anisodontea, 124
Anisodontea fruticosa, 124
Anisodontea scabrosa, 124
anna-boom, 331
anna-tree, 337
Annesorhiza, 69
Annesorhiza nuda, 33
Annesorrhiza macrocarpa, 33, 39
antirrhinum, 11
Antirrhinum macrocarpum, 124
Anthanasia, 227
Anthericum, 114, 124
Anthistiria, 266, 267
Antholiza, 15
antholyza, 12
Antholyza, 147
Antholyza aethiopica, 10, 20, 23
Antholyza maura, 10
Antholyza plicata, 41
Antholyza ringens, 13
Anthospermum aethiopicum, 124
Anthyllis, 116
anys wortel, 33
Apocynaceae, 260, 309, 316
Apodolirion macowanii, 163
Apodytes dimidiata, 214
Aponogeton, 104
Aponogeton distachion, 15, 33, 130, 131
Aponogeton distachyos, 15, 24, 33, 42, 130, 131
Aponogeton distachys, 24
Aponogeton distachyum, 42
Aponogeton junceus, 104
Aptosimum indivisum, 73
arbiter, 41
Arbutus unedo, 41
Arctopus echinatus, 11, 12, 24, 128
arctotides, 11
Arctotis, 11, 72, 84, 124, 254
Arctotis fastuosa, 59
Arctotis sp., 201
Arduina, 114, 121, 138, 170
Arduina bispinosa, 110, 137
Arduina spinosa, 110, 122
Arecotis, 124
Argolasia lanata, 165
aristea, 26
Aristida, 260, 266, 267
Aristida fruticans, 264
Aristida sp., 257
arum, 242
Arum colocasia, 16
arum lily, 32, 209
Arundo, 35, 289
Arundo barbata, 267
Arundo donax, 97, 125, 279
Arundo phragmites, 79, 85, 111, 267
Arundo typha, 288
Asclepiae, 169
Asclepias crispa, 13, 115
Asclepias undulata, 13, 115
ash, 117, 151, 152
Aspalatha, 41
Aspalathus, 15, 41, 42, 124
Aspalathus angustifolia, 12
Aspalathus crenata, 124
Aspalathus cymbiformis, 123
Aspalathus nivea, 123
Aspalathus sp., 124
Aspalathus thymifolia, 123
asparagus, 4, 118
Asparagus, 15, 141, 194, 241, 262, 267
Asparagus asparagoides, 90
Asparagus capensis, 12, 125, 148, 344
Asparagus cooperi, 262, 263
Asparagus rivalis, 263
Asparagus sp., 46, 226, 241
Asparagus triacanthos, 125
Aspidium coriaceum, 203
Asplenium, 346
Asplenium aethiopicum, 241
Asplenium cordatum, 241, 265
Asplenium furcatum, 241
Asplenium rutifolium, 203, 241
Asphodel tribe, 244
Asphodele, 25, 50
assagai, 238
assagay, 117, 152
assagayhout, 118
assegaaiboom, 152
assegai, 146, 226
assegaibosch, 172
aster, 11, 38, 82, 83
Aster, 72, 84, 260
Asteraceae, 15, 38, 260, 282
Asthenatherum glaucum, 258
Atragene cantharides, 116
Atragene vesicatoria, 13, 116
Atriplex, 101, 103, 104, 113
Atriplex albicans, 73, 79
Athanasia, 84, 124
Athanasia sp., 227
Athanasia trifurca, 125
Augea capensis, 124
Aulax cancellata, 17, 123
Aulax pinifolia, 17
Aulaya capensis, 24
Australian fuchsia, 238
Avicennia tomentosa, 288
avondbloem, 12
avond-bloem, 45, 93
Azima tetracantha, 226
Babiana, 12, 15, 26, 66
Babiana ambigua, 41
Babiana hypogea, 269, 337
Babiana nana, 41
Babiana rigens, 23
Babiana ringens, 13, 23, 41, 49
Babiana spp., 12, 13, 41
baboon, 12
baboon rope, 163
bamboo, 92, 218
banana, 18, 148, 300
banian, 311
baobab, 309, 311, 314, 316, 320, 321, 323, 324, 325, 326, 337
barley, 38
baroe, 77
Barosma serratifolium, 124
Barringtonia speciosa, 346
Bartsia, 64
Bartsia trixago, 64
barup, 77
basil, 267
Bauhinia, 307, 310
Bauhinia bowkeri, 241
Bauhinia esculenta, 269
Bauhinia petersiana, 317
baviaanskost, 69
baviaanstau, 158
baviaantje, 41
baviaan'touw, 163
bavianstau, 143
bay tree, 1
beesem-riet, 14
belladonna lily, 26
bella-donna lily, 51
Bellis, 13
bending willow, 223
Berchemia discolor, 312
Bergia, 82
Berkheya, 72, 260
Berkheya armata, 46
Bersama tysoniana, 249
besem-riet, 11
betony, 3
bezem-riet, 126
bilberries, 198
bitter almond, 7
bitter *Aloe*, 215
bitter bark, 249
bitter water-melon, 306
bitter-wortel, 13
black bark, 94
black-bark, 262
black-berries, 198
black ebony, 62, 91
black iron wood, 207
black ironwood, 117
black thorn, 332
blackthorn, 336
blackwood, 120
bladder-senna, 102
Blaeria, 123
Blairia, 44
Blechnum, 21, 346
Blepharis, 254
bloem bol, 234
blood flower, 234
blue water lily, 51
blue waterlily, 163
blue water-lily, 245
Bobartia indica, 6, 13
bobbejaankos, 69
boekoe, 24, 264
boerboon, 151, 153, 202
boerboontje, 133, 166, 167
Bolboschoenus maritimus, 134
Bookoo, 262
Boophane, 59
Boophane disticha, 61, 75, 241, 260, 265, 278, 311
Boophane haemanthoides, 59
Boophone disticha, 90, 162
Borassus aethiopum, 326
Borbonia, 15, 41, 42
Borbonia cordata, 11
Borbonia lanceolata, 12
Borbonia ruscifolia, 124
Boscia albitrunca, 107, 213, 264, 265, 318, 320, 321
Boscia foetida, 257
bospeper, 116
boterboom, 112
boter-boom, 113
Brabeium stellatum, 11, 24, 116, 118, 123
Brabejum stellatifolium, 7, 11, 24, 116, 117, 118, 123, 126
Brachylaena neriifolia, 118
Brachysiphon furcatus, 25
Brachystelma, 263
brak-boschje, 94
brak-bush, 64, 76, 104
bramble, 23
brandblad, 13
brandewyn-bosch, 261
brandy bush, 261
bread tree, 151
bread-tree, 151, 152
brengt aan, 107
Brehmia spinosa, 288
Briza maxima, 24, 26
Briza minor, 26
Bromus capensis, 343
Bromus pectinatus, 343
brood-boom, 152
broom reed, 126
brown stinkhout, 117

Brownleea, 241
Brownleea caerulia, 241
Brownleea coerulea, 241
Bruguiera gymnorrhiza, 288
brunia, 10, 11, 14
Brunia, 15, 26, 141, 163
Brunia abrotanoides, 122
Brunia spp., 13
brunsvigia, 163
Brunsvigia, 244, 343
Brunsvigia grandiflora, 244
Brunsvigia gregaria, 163
Brunsvigia josephinae, 51, 61, 144
Brunsvigia littoralis, 144, 158
Brunsvigia multiflora, 22, 144
Brunsvigia orientalis, 22
Brunsvigia radulosa, 252, 278
Brunsvigia toxicaria, 75
Bryonia, 124
Bryonia africana, 11, 13
Bryonia pinnatifida, 265
bryony, 265, 330
bucku, 34, 118
bucku-hout, 117
bucku-tree, 117
Buchnera aurantiaca, 262
buchu, 60, 144
Buddlea, 227
Buddlea sp., 226
Buddleia, 132
Buddleia salviifolia, 149
Buddleja saligna, 125
Buddleja sp., 226, 227
buffalo thorn, 94
buffalo-thorn, 94, 95, 262
buffeldoorn, 94
bukku, 144
buku, 24, 262, 264, 267
Bulbine, 124, 244
Bulbinella trinervis, 124
bulrush, 104, 165, 252, 282, 283
Bupleurum, 34
Bupleurum giganteum, 34
Buphane, 241
Burchellia bubalina, 231, 242
Burchellia capensis, 242
Burkea africana, 306, 322
Bushman grass, 67, 257
Bushman's poison grub, 325
bushrope, 143
bush-rope, 158
butter tree, 113
butter-tree, 112
Byssus lactea, 34
cabbage tree, 169, 246
cabbage-tree, 247
Cacalia, 114
cacativa, 60
cactus, 107, 209, 214, 246, 252, 302, 309, 360
Cactus opuntiae, 18, 45, 158
Cactus tribe, 245
Cadaba aphylla, 153, 264
Caffer bread, 165, 234
Caffer-boom, 196, 290
Caffer coffee, 199
Caffer corn, 230
Caffer chestnut, 24
Caffer-melon, 230
Caffer-plum, 228
caffra-encephalartos, 168
Caffre cafee, 187
Caffre coffee, 190
calabash, 287
Caladium, 114
calamint, 3
Calamus aromaticus, 181
Calanthe natalensis, 241
Calanthe sylvatica, 241
calendula, 11
Calendula, 84
Calodendron capense, 18, 247
Calodendron capensis, 242
Calodendrum, 116
Calodendrum capense, 116
Calophyllum, 118
calla, 23
Calla aethiopica, 10, 11, 32, 209
Calla ethiopica, 37
Callitris cupressoides, 147
camassie, 117
camassiehout, 117
camassie-hout, 116
cameeldorn, 275
cameel-dorn, 303
camel thorn, 88, 268, 313
camelthorn, 266, 268, 269, 270, 314, 331, 332, 333
camel-thorn, 263, 267, 278, 336
candelabra, 246
candelabra *Euphorbia*, 212
canelbloem, 12
canna, 78, 137, 155
Cannabinus, 139
Cannabis sativa, 14, 46, 279
canna-bosch, 111
canna-root, 77, 111
canna-shrub, 111
Cape acacia, 112, 263
Cape *Acacia*, 269
Cape aloe, 115
Cape broom, 215
Cape chestnut, 247
Cape gooseberry, 24, 149, 194, 199
Cape jessamine, 193
Cape mistletoe, 44, 226
Cape olive, 37
Cape sorrel, 5
Cape trumpet-flower, 230
Cape willow, 219
Capparis, 182
Capparis albitrunca, 265
Capparis punctata, 264
Capraria, 41
Capraria lanceolata, 41, 126
Capraria undulata, 41
Capsella bursa-pastoris, 265
caree, 87
caree-boom, 75
Carex, 35
Carissa, 114, 138, 170, 193, 198
Carissa arduina, 168
Carissa bispinosa, 110, 112, 121, 122, 137, 168, 228
Carissa grandiflora, 287, 288
Carissa haematocarpa, 110
Carissa macrocarpa, 287, 288
Caroxylon salsola, 113, 263
Carpobrotus edulis, 13, 21, 24, 43, 45, 110, 163, 190, 194, 198, 209, 214
Cassia corymbosa, 16
Cassia tomentosa, 226
Cassina capensis, 226
Cassine, 299
Cassine capensis, 44
Cassine crocea, 116, 117, 118, 239
Cassine peragua, 44, 117
Cassytha, 48
Cassytha ciliolata, 48, 147
castor oil, 33
Casuarina distyla, 342
Catophractes alexandri, 318
cat-thorn, 241
cedar, 51
Celastraceae, 148
Celastrus, 103, 267
Celastrus linearis, 97
Celastrus saxatilis, 267
Celastrus sp., 226
Celtis africana, 116, 117, 118, 287
Cenaea mucronata, 16
Centella asiatica, 21
Centropodia glauca, 258
Cephelandra quinqueloba, 231
Ceratandra atrata, 24
Ceratotheca triloba, 201
Ceropegia, 263
Ceropegia filiformis, 265
Cestrum, 90, 91
Cestrum venenatum, 59
Ceterach, 265
Cicindela, 131
Cicindela hybrida, 131
Cicuta, 46
Cineraria, 84
Cineraria polygaloides, 72
Cineraria resinifera, 72
cinnamon, 15
Cissus, 241
Citrullus amara, 65, 101
Citrullus caffer, 230
Citrullus jace, 230
Citrullus lanatus, 43, 65, 69, 101, 105, 230, 259, 306, 309, 323
Cladoraphis spinosa, 73
Clematis, 83, 131, 231, 262, 265
Clematis brachiata, 83, 131, 231, 262, 265
Cleome gynandra, 318
Cleome juncea, 153
Cleomea, 123
cliffortia, 11
Cliffortia, 15, 42
Cliffortia juniperina, 124
Cliffortia odorata, 125
Cliffortia ruscifolia, 12, 17
Cliffortia strobilifera, 26
clover, 3
clover sorrel, 4
Clutia, 41, 124, 135
Clutia alaternoides, 124
Clutia gnidioides, 124
Clutia pulchella, 124
Clutia rubricaulis, 124
Clutia tomentosa, 124
Clutya alaternoides, 124
Clutya gnidioides, 124
Clutya tomentosa, 124
Cluytia, 41, 124, 135
Cluytia alaternoides, 41
Cluytia polygonoides, 41
Cluytia pulchella, 124
Cluytia tomentosa, 41
Coccinia quinqueloba, 231
Coccinia rehmannii, 306, 330
Coccinia sp., 306
cocksfoot grass, 265
Codon royeni, 59, 74
coffee-tree, 206
Colocasia esculenta, 16
Colocasia sp., 114
Colophospermum mopane, 307, 308, 309, 310, 314, 326, 351, 352
coloquintida, 3, 69
Collema saturninum, 204
Combretum, 241, 317
Combretum erythrophyllum, 262
Combretum imberbe, 315, 317, 318, 319, 320, 321, 325, 326, 334
Commiphora africana, 316, 325, 326
common acacia, 266
common aloe, 120
common reed, 79, 84
Composita, 25, 50
Compositae, 134, 148, 169, 204
Conium, 263
Convolvuli, 214, 236, 318
Convolvulus, 235
Conyza sp., 201
coral tree, 184, 197, 226

coral-tree, 229
coralla tree, 197
Corallodendron, 124
Corallodendrum, 189
Coralodendrum, 199
Cordyla africana, 318
coree bosch, 171
corn, 38, 60
corn-flag, 20
cornus, 10
Corycium, 48
Corycium orobanchoides, 48
Cotula, 72
Cotula globifera, 71, 88
Cotula nudicaulis, 71
Cotula turbinata, 15, 34
cotyledon, 119, 166
Cotyledon, 21, 61, 75, 78, 80, 111, 112, 113, 241
Cotyledon orbiculata, 80, 131
Cotyledon parvula, 73
Cotyledon spp., 64
crassula, 119, 166
Crassula, 21, 78, 80, 103, 113, 155, 203
Crassula ciliata, 134
Crassula coccinea, 17, 22
Crassula obliqua, 206
Crassula perfoliata, 131
Crassula ramosa, 134
Crassula strigosa, 124
Crassula sylvatica, 124
Crassula tetragona, 151
Crassulaceae, 114, 241
cream of tartar, 314
Crinum, 236
Crinum aquaticum, 232
Crinum bulbispermum, 85, 102
Crinum campanulatum, 232
Crinum capense, 75
Crinum lugardiae, 317
Crinum macowanii, 235
Crinum riparium, 102
Crinum variabile, 49, 75
Crocosmia aurea, 231
crocus, 66
Crossyne guttata, 14
Crotalaria, 42
Crotalaria perfoliata, 13
Crotalaria sp., 330
Croton, 262
Croton gratissimum, 267
Croton gratissimus, 262, 301, 316, 322, 325
cucumber, 306, 330
Cucumber tribe, 244
Cucumis, 330
Cucumis africanus, 44, 60, 164, 258
Cucumis caffer, 306
Cucumis colocynthis, 43, 69
Cucumis muricatus, 164
Cucumis prophetarum, 44
Cucurbitaceae, 306
Cunonia capensis, 10, 43, 117, 118, 223, 226
Curtisia, 118
Curtisia dentata, 45, 117, 118, 146, 152, 154, 172, 226, 238
Curtisia faginea, 45, 117, 152, 154
Curtisia ferruginea, 238
Cussonia, 163, 246, 247
Cussonia araliacea, 169
Cussonia spicata, 39, 133, 169, 203, 233, 241, 246
Cyanella capensis, 34
Cyanella hyacinthoides, 34
Cyanella lineata, 269
Cyanella lutea, 269
Cyathea capensis, 26, 133
Cycadis, 154
Cycas, 152
Cymbopogon, 289, 352
Cymbopogon caesius, 290
Cynanchum, 10
Cynanchum obtusifolium, 124, 141
Cynararia, 237
Cynodon, 51, 66
Cynodon dactylon, 26, 265, 343
Cynosurus aereus, 26
Cyperaceae, 25, 104
Cyperus, 229, 262, 263
Cyperus fascicularis, 126
Cyperus polystachyos, 126
Cyperus textilis, 92, 110, 125, 132
Cyperus usitatus, 96, 263
cypress, 36, 55, 215, 343
Cyphia, 77, 112
Cyphia digitata, 59
cyrtanthus, 164
Cyrtanthus angustifolius, 163
Cyrtanthus clavatus, 164
Cyrtanthus macownaii, 103
Cyrtanthus obliquus, 162
Cyrtanthus rupestris, 103
Cyrtanthus smithiae, 103
Cyrtanthus spiralis, 164
Cyrtonema, 65
Cyrtorchis arcuata, 241
Cytinus sanguineus, 20
Cytisus scoparius, 215
Cythia, 112
Chaetaria, 266
Chamarea capensis, 34
chandelier, 158
chandelier aloe, 190, 198
chandelier euphorbia, 163, 164, 229
chandelier plant, 161, 252
channa, 78, 82
Chara, 274
Chasmanthe aethiopica, 10, 20, 23, 147
Cheilanthes hastata, 203
Cheilanthes hirta, 241
Cheilanthes viridis, 241
Chenopodium, 169
Chilianthus oleaceus, 125
chincherinchee, 33
chironia, 11
Chironia, 51
Chironia baccifera, 20, 132
Chlorophytum, 114, 124
Chondropetalum tectorum, 16, 34
Chrysanthemoides incana, 340
Chrysanthemoides monilifera, 340
Chrysocoma, 71
daba-heis, 329
dabby, 76, 329, 330, 331
dacha, 14, 46
Dais, 93
dakka, 279
dak-riet, 16
Damara mother, 318, 319
Damara mother-tree, 316, 317
Damara's mother, 315
Danthonia, 258
Darea rutaefolia, 203
date, 206
date palm, 245
date-palm, 311
Daubenya comosa, 101
deadly nightshade, 33
Delosperma, 84
Dianthus, 103
Diastella proteoides, 44
Dickinsonia arborescens, 346
Dichapetalum cymosum, 326
Dichapetalum venenatum, 326
Didymocarpus rexii, 147
Dierama, 235, 237
Dierama pulcherrimum, 210
Dierama sp., 228, 236
Dietes, 176
Dietes iridioides, 138, 231, 246
Dilatris viscosa, 24
Dimorphotheca, 11, 23, 254, 343
Dimorphotheca cuneata, 74, 254
Dioscorea elephantipes, 24, 83, 114, 168, 176
diosma, 11, 21
Diosma, 15, 24, 34, 42, 50, 71, 84, 118, 123, 125, 264
Diosma capitata, 44
Diosma graveolens, 124
Diosma hirsuta, 21, 124
Diosma obtusatum, 124
Diosma pectinatum, 124
Diosma serratifolia, 264
Diosmae, 148, 179
Diosmea, 25, 42, 50
Diospyros, 16, 62, 122, 124, 329
Diospyros glabra, 33, 126
Diospyros lycioides, 63, 94, 262, 329
Diospyros mespiliformis, 335
Diospyros villosa, 117
Diospyros whyteana, 94
Dipogon lignosus, 116
disa, 20
Disa, 25, 86, 146
Disa bivalvata, 12
Disa ferruginea, 22
Disa grandiflora, 22, 26
Disa longicornis, 12
Disa longicornu, 12
Disa racemosa, 146
Disa tenuifolia, 20, 22
Disa uniflora, 12, 22, 25, 26
Disperis capensis, 23
Disphyma crassifolium, 344
dock, 32
Dodonaea angustifolia, 35
Dolichos, 244
Dombeya cymosa, 236
Dombeya dregeana, 241
Dombeya tiliacea, 241
doop-grass, 265
dooring bome, 290
doorn boom, 78, 177
doornboom, 63, 64, 66, 73, 76, 94, 103, 104, 112, 113, 132, 133, 163, 203, 207, 228, 229, 231, 252, 266, 271, 274, 329, 330
doorn-boom, 229
dornboom, 113
dorn-boom, 119
dorn-hout, 117
doublejee, 195
Dovyalis caffra, 215, 224
Dracaena aletriformis, 241
Dracaena hookeriana, 241
Dracocephalum, 263
dragon tree, 337
driedoorn, 93
drie-doorn, 94
Drimia capensis, 13, 118
droogmykeel, 182
droog-my-keel, 241
drooping willow, 94
Drosera cistiflora, 49
dubbee, 63, 329
dubbeltjie, 195, 269
Dutch tulp, 284
duyn-hout, 14
dwaeep, 76
dwarf bamboo, 192
dwarf coral tree, 199
earth-rose, 13
ebony, 67, 120, 329
echia, 10
Echiostachys incanum, 125
Echium spicatum, 125
Edmondia, 10, 21

Edmondia sesamoides, 24, 123
Ehrharta calycina, 29, 54
Ehrharta longiflora, 343
Ehrharta villosa, 343
Ekebergia capensis, 117, 118, 124, 151, 152
Elegia capensis, 125
Elegia tectorum, 16, 34
Elephantorrhiza elephantina, 252, 266
elichrysia, 38
Elichrysum, 123
els, 226
else-wood, 223
Elychriae, 134
Elytropappus, 36
Elytropappus rhinocerotis, 29, 39, 40, 44, 45, 46, 47, 69, 74, 75, 97, 112, 113, 114, 119, 125, 132, 133, 151, 165, 328, 348
Emex australis, 32, 195, 200
Encephalartos, 24, 106, 168, 206, 228, 233, 234, 235
Encephalartos caffer, 151, 152, 165, 176
Encephalartos horridus, 154, 165, 204
Encephalartos longifolius, 151, 152, 165, 168
Encephalartos sp., 191
Ensatae, 17
Entada pursaetha, 291
Entada rheedii, 291
Equisetum elongatum, 274
Equisetum ramosissimum, 274
erica, 10, 11, 14
Erica, 25, 36, 41, 44, 48, 123, 131, 134, 147, 148, 179, 253
Erica acuminata, 122
Erica aspalathiflora, 248
Erica axillaris, 43
Erica banksii, 42
Erica cerinthoides, 21, 248, 253
Erica coccinea, 21, 42
Erica concinna, 25
Erica cordifolia, 25
Erica cubica, 248
Erica discolor, 134
Erica fascicularis, 43
Erica gnaphaloides, 122
Erica mammosa, 25
Erica massoni, 43
Erica massonia, 48
Erica monsoniana, 73
Erica multumbellifera, 25
Erica pedunculata, 25
Erica petiverii, 42
Erica physodes, 16
Erica pilulifera, 25
Erica plukenetii, 42, 64, 73
Erica pubescens, 44
Erica pulchella, 25, 134
Erica ramentacea, 25
Erica sebana, 21
Erica spp., 13
Erica taxifolia, 43
Erica urceolaris, 123
Erica urceolata, 123
Erica uxeolaria, 248
Erica verticillata, 26
Ericacea, 25, 50
Ericaceae, 169
Ericae, 169
Erinus serpyllaceus, 124
erinuse, 11
eriocephalus, 20
Eriocephalus, 13
Eriocephalus africanus, 20
Eriocephalus decussatus, 93
Eriocephalus racemosus, 17
Eriocephalus sp., 328
Eriospermum, 272
Erithrina corallodendron, 226
Erythrina, 197, 241, 244, 293, 346
Erythrina caffra, 124, 176, 184, 189, 192, 193, 196, 199, 209, 226, 229, 240
Erythrina cafra, 189
Erythrina corallodendrum, 176
Erythrina humeana, 199, 229, 290
Erythrina latissima, 244, 249
Erythrina sandersoni, 249
Erythrina sp., 290
Erythrophila undulata, 64, 65
Erythrophysa alata, 64, 65
esse, 152
esse-boom, 118
essenboom, 117, 151
essenhout, 117
Eucalyptus, 49
Eucalyptus sp., 297
Euclea crispa subsp. *ovata*, 261
Euclea myrtina, 269
Euclea ovata, 261
Euclea pseudebenus, 67, 91, 329
Euclea racemosa, 14
Euclea undulata, 121, 124, 151, 269
Eucomis, 125
Eucomis regia, 125
Eulophia speciosa, 146
Eulophia tabularis, 12
euphorbia, 14, 21, 60, 67, 114, 119, 132, 166, 176, 185, 205, 348
Euphorbia, 33, 60, 65, 76, 78, 83, 87, 90, 113, 120, 133, 135, 155, 157, 164, 186, 188, 189, 198, 203, 204, 205, 209, 215, 216, 220, 232, 236, 237, 246, 253, 254, 257, 260, 289, 290, 292, 325, 336
Euphorbia arborescens, 310
Euphorbia burmannii, 336
Euphorbia caerulescens, 80
Euphorbia caput-medusae, 20, 21, 83, 84
Euphorbia clandestina, 170
Euphorbia cooperi, 302, 310
Euphorbia dregeana, 65
Euphorbia erythrina, 120, 121, 152
Euphorbia genistoides, 14, 17, 44, 121, 152
Euphorbia grandidens, 163, 176, 189, 203, 229
Euphorbia grandidentata, 232, 233
Euphorbia inermis, 83, 84
Euphorbia ingens, 289, 302, 310
Euphorbia ledienii, 80, 164
Euphorbia mauritanica, 47, 69, 73, 74, 90, 112, 113
Euphorbia meloformis, 164
Euphorbia officinarum, 156
Euphorbia sp., 291
Euphorbia squarrosa, 80
Euphorbia stellata, 164
Euphorbia tenax, 73
Euphorbia tetragona, 241, 246
Euphorbia tirucalli, 69
Euphorbia triangularis, 212, 232, 233
Euphorbia tuberosa, 44
Euphorbia virosa, 87
Euphorbiae, 134, 168, 170
Euphorbium, 80, 90, 108, 186, 233
Euryops lateriflorus, 70, 72
Euryops marlothii, 72
Euryops sp., 70, 72
Euryops spp., 74
Euryops subcarnosus, 107
Euryops trifida, 72
evening flower, 15, 45
everlasting, 21, 26, 123, 132, 166, 176, 203
Evolvulus, 268
Evolvulus alsinoides, 268
eysterhout, 144
Fabaceae, 116, 187, 310
Fagara capensis, 13, 116
Fagara sp., 201
fahlblar, 45
Faidherbia alba, 311, 331
Faidherbia albida, 303, 329, 337
Felicia, 11, 72
Felicia aethiopica, 20
Felicia sp., 20
fennel, 34
Ferraria crispa, 12, 13
fescue grass, 92
Festuca ovina, 97
Ficus, 127, 245, 264, 297
Ficus bengalensis, 346
Ficus burkei, 311, 312
Ficus capensis, 118, 151
Ficus cordata, 58, 63, 66, 264, 328
Ficus indica, 249, 311, 312
Ficus ingens, 224
Ficus natalensis, 223, 249, 292
Ficus religiosa, 329, 346
Ficus sur, 118, 139, 151, 153, 223, 245
fig, 153, 264
fig marygold, 79
fig-marigold, 73, 83
fig-tree, 66, 297, 328
finger-bulb, 83
flat crown, 249
flat-thorn, 128
fleur-de-lis, 246
float-grass, 29
fluitjies riet, 87
fluitjiesriet, 79
fly-bush, 35, 69
Fockea, 35
Fockea comaru, 59
Fockea edulis, 77, 105
Fockea sp., 316
Fockea spp., 59
four o'clock flower, 13
Frankenia repens, 76
Freesia andersoniae, 254
Freylinia lanceolata, 41, 126
Fugara armata, 227
galaxia, 12
Galaxia, 19
Galenia africana, 73, 112, 123
Galium capense subsp. *garipense*, 262
Galium glabrum, 124
Galium tomentosum, 124
Galium verum, 262
ganna, 78, 336
ganna bosch, 88
ganna-bosch, 83
Garcinia livingstonei, 312, 322
Gardenia augusta, 193
Gardenia jasminoides, 193
Gardenia rothmania, 242
Gardenia rothmannia, 18, 117, 242
Gardenia ternifolia subsp. *jovis-tonantis*, 310
Gardenia thunbergia, 13, 117, 206
Gardenia thunbergii, 242
Gardinea, 206, 231
Gariepine willow, 273
Gastronema clavatum, 164
Gastronema smithiae, 103
gatagay, 33
Gauijacum afrum, 153
gazania, 20
Gazania, 254
Gazania krebsiana, 254
geel hout, 154
geele-out, 287
geele-wild-kalabasboom, 292

geelhout, 117, 118, 138, 139, 153, 159, 174, 176, 177, 192, 251
geel-hout, 116
Geissorhiza inflexa, 35
geneesblaarboom, 139
geranium, 13, 15, 19, 26, 59, 132, 162, 163, 167, 187, 193, 197, 241, 252, 282
Geranium, 35, 59, 61, 86, 96, 199
Geranium cucullatum, 11
Geranium incanum, 22
Geranium spinosum, 74, 82
gethylis, 163
Gethyllis, 11
Gethyllis afra, 11
Gethyllis ciliaris, 18
gifboom, 36
gift-appel, 44
giftbolles, 59
gift-bol, 265
gift-boom, 33
giraffe tree, 91
gladiolus, 11, 12, 17, 22, 227
Gladiolus, 15, 20, 23, 26, 41, 114, 138, 176, 236, 237, 244, 254, 292
Gladiolus alatus, 41
Gladiolus carinatus, 13
Gladiolus dalenii, 288
Gladiolus ecklonii, 244
Gladiolus edulis, 269
Gladiolus floribundus, 204
Gladiolus gracilis, 23
Gladiolus lileaceus, 15
Gladiolus monticola, 22
Gladiolus mortonius, 204
Gladiolus papillonaceus, 41
Gladiolus permeabilis subsp. *edulis*, 269
Gladiolus plicatus, 12, 13, 41
Gladiolus priorii, 15
Gladiolus psittacinus, 288
Gladiolus recurvus, 13
Gladiolus tristis, 13
Gladiolus watsonius, 15, 17, 23
Gleditsha triacantha, 16
Gleditsia triacantha, 16
Gleichenia, 274
gli, 69
Glia prolifera, 69
Glichenia, 274
gnaphalium, 10
Gnaphalium, 84, 86, 148, 176
gnidae, 38
Gnidia, 41, 42
Gnidia burchellii, 268
Gnidia cyanea, 74
Gnidia imberbus, 227
Gnidia oppositifolia, 165
Gnidia parviflora, 124
Gnidia polycephala, 93
Gnidia polygaloefolia, 124
Gnidia sp., 73
Gnidia squarrosa, 227
Gnidiae, 148
Gompholobium, 66
goose-berry, 2
goreebosch, 171
Gorteria, 38, 41, 72, 82, 83, 260
grape, 194, 310
grapple plant, 264, 273
grappler, 315
grappler thorn, 318
grenadilla, 249
Grewia flava, 88, 260, 261, 269, 278, 309
Grewia obtusifolia, 260
Grewia occidentalis, 241
Grewia robusta, 97
Grewia sp., 226
groundsel, 254
guaap, 74
Guajacum afrum, 151, 176
guarri, 151, 261, 269
guarrie bosch, 121
Guernsey lily, 51
gum, 343
gum-tree, 297
gunna, 77
gyf bol, 234
Gymnogramme cordata, 241
Gymnosporia buxifolia, 116, 117
Gymnosporia linearis, 97
Gymnosporia sp., 103
haakdoorn, 94, 315, 316, 321, 322
haak-doorn, 98, 337
haakdoring, 313
haak-doring, 332
haakedoorn, 93
haak-en-steek, 315
Habenaria arenaria, 241
Habenaria clavata, 241
hack thorn, 313
Haemanthus, 198, 234, 237, 260
Haemanthus coccineus, 13, 14, 42, 51
Haemanthus puniceus, 14
Haemanthus toxicartus, 90
Hakea rostrata, 342
Hakea ulicina, 342
hakis thorn, 332
half-mens, 257
Halleria, 231
Halleria elliptica, 41, 123, 149
Halleria lucida, 16, 123, 227
Hallesia tetrapters, 231
hard matjesgoederen, 97
hard matjes-goederen, 92
Harpagophytum procumbens, 264, 273, 315, 318, 337
Harpephyllum caffrum, 194, 198, 223, 241
harpuis bosch, 74
harpuis bush, 70
harpuisbosje, 72
Harveya, 146
Harveya bolusii, 24
Harveya capensis, 48
Harveya pauciflora, 146
Harveya purpurea, 146
hassagai, 154
hassagai-bosch, 172
hassagay-hout, 45
Haworthia, 113
heath, 14, 21, 26, 36, 38, 51, 132, 204, 248
heather, 216
Hebenstretia, 92
Hebenstretia dentata, 124
Helichrysa, 42
Helichrysum, 10, 21, 86, 123, 131, 148, 169, 176, 203
Helichrysum asperum, 201
Helichrysum aureum, 86
Helichrysum cochleariforme, 123
Helichrysum ericoides, 201
Helichrysum foetidum, 165
Helichrysum imbricatum, 123
Helichrysum proliferum, 42, 131
Helichrysum sesamoides, 24, 123
Helichrysum speciosissimum, 86
Helichrysum spp., 38
Helichrysum vestitum, 123
Heliconia alba, 124
Heliophila, 23
Hemitelia capensis, 26, 133
hemp, 14
hermannia, 11, 23
Hermannia, 112, 254, 273
Hermannia althaeoides, 124
Hermannia bryoniaefolia, 267
Hermannia bryoniifolia, 267
Hermannia candicans, 124
Hermannia cuneata, 124
Hermannia grandiflora, 93
Hermannia sp., 17
Hermas gigantea, 34
Hesperantha, 20, 45, 93, 199
Hesperantha cinnamomea, 13
Hesperantha coccinea, 242
Hesperantha falcata, 12, 13, 15
Hesperantha pilosa, 13
Hesperantha radiata, 199
Hesperantha spicata, 12, 13, 15
Hesperantha spp., 8
Hibiscus, 132, 139, 206, 308, 330
Hibiscus cannabinus, 139
Hibiscus cucurbitinus, 93
Hibiscus diversifolius, 139
Hibiscus sp., 226
Hibiscus tiliaceus, 288
holy, 3
Homeria, 20
honeysuckle, 230
honeywort-flowered heath, 253
Hoodia, 95
Hoodia gordonii, 74, 330
Hoodia pilifera, 74
hookthorn, 263, 265, 266, 269
hook-thorn, 261
Hordeum murinum, 261
horse-cotton, 165
horsetail weed, 274
Hottentot bonnet, 23
Hottentot bread, 234
Hottentot bread tree, 191
Hottentot fig, 21, 43, 45, 110, 214, 190, 209
Hottentot-fig, 252
Hottentot's bean, 176
Hottentot's bread, 233
Hottentots brood, 83
Hottentots vygen, 110
Hottentot's watermelon, 59
Hottentot's water-melon, 59
Houtniquas essen, 117
Huernia, 102, 271
Hyaenanche globosa, 33, 36, 40, 258
Hydnora africana, 60, 69
Hydrocotyle asiatica, 26
Hydrocotyle centilla, 21
Hyenanche globosa, 36
Hyobanche parasitis, 11
Hyobanche sanguinea, 11, 13
Hyparrhenia, 352
Hyparrhenia sp., 291
Hyphaene coriacea, 287, 288, 292
Hyphaene petersiana, 308, 311, 324, 326, 333, 334
Hypnum cupressiforme, 204
Hypodontium dregei, 168
Hypoxide, 25, 50
Hypoxineae, 169
Hypoxis, 41, 114
Hypoxis stellata, 15
hyster-out, 287
ibhonsi, 296
ice plant, 70
ice-plant, 79, 83, 345
ife, 308
iHlala, 287
Ilex crocea, 117, 118, 154
Ilex mitis, 124
ilozane, 295
il, o zarni, 295
imbovan, 299
Impatiens, 228, 242
Impatiens hochstetteri, 228, 242
impoomboo, 234
incagolo, 224
Indian almond, 262
Indian corn, 190, 221, 223
Indian fig, 45, 158, 346

Indigo, 219
Indigo juncea, 22
indigofera, 11
Indigofera, 26
Indigofera arborea, 111
Indigofera candicans, 219
Indigofera erecta, 124
Indigofera filifolia, 22
Indigoferae, 169
Ipomoea, 206
Ipomoea bolusiana, 306
Iridaceae, 17, 237, 254
Iride, 25, 50
Irideae, 148, 169
iris, 11, 12, 15
Iris, 15, 70, 84, 118, 138, 176, 246, 299
Iris edulis, 33, 34, 155
Iris tribe, 244
iron wood, 45, 154
ironwood, 117, 144, 287
iron-wood, 214
ivy geranium, 188
ivy-leafed geranium, 194, 199
ivy-leaved geranium, 163
Ixea, 237
ixia, 11, 12, 15, 24, 246, 247
Ixia, 41, 45, 59, 70, 72, 138, 176, 199, 254, 257, 278
Ixia bulbifera, 35
Ixia bulbocodium, 13, 72
Ixia cinnamomea, 12, 15
Ixia cinnamonia, 199
Ixia falcata, 13
Ixia latifolia var. *ramulosa*, 59
Ixia maculata, 35
Ixia minuta, 18
Ixia pilosa, 13
Ixia rosea, 72
Ixia tortuosa, 72
Ixia tribe, 231
Ixia viridiflora, 15, 35
jackal's bush, 74
jakhalskost, 69
Jamesbrittenia aurantiaca, 262
Jamesbrittenia sp., 228
jasmin, 163, 241
jasmine, 224
Jasminium, 212
Jasminium capense, 205
Jasminium flexuosum, 163
Jasminum angulare, 80, 83, 100, 132, 163, 205, 212, 224, 241
Jasminum capense, 132
Jasminum sp., 161
jessamine, 80, 161
jointed cactus, 209
Juncus serratus, 131, 133, 165, 166
Jungermannia, 346
Justicia, 90
Kaffer coffee, 188, 223
Kaffer corn, 218, 221, 223
Kafferboom, 189, 288
Kaffer's bean-tree, 176
Kaffer's bread-tree, 176
Kaffir boom, 189
Kaffir broom, 226
Kaffir orange, 297
Kaffir plum, 241
Kaffirboom, 184, 192, 197, 209, 229, 240, 293
Kaffir-boom, 193
Kaffrarian pear, 238
Kaffre-tree, 184
kala huetlwe, 320
kalkoentje, 41
kameeldoorn, 271, 273, 316, 320, 324, 330, 336
kameel-doorn, 263, 282
kameeldoring, 64
kameka, 77
kamerup, 59
kaniep, 60
kanna, 78
kanna bush, 70, 94
kannabosch, 113
kanna-bosch, 263
kannawortel, 77
kannip, 69
karee, 75, 87, 88, 91, 255, 261
kareeboom, 89
kareebosch, 88
karkai, 151
karoo mimosa, 258
karoo thorn, 95
karoobush, 216
karoothorn, 266
karree, 73, 82, 283
karreeboom, 75
karreehout, 94
karree-hout, 45, 73
karree-tree, 262
karree-wood, 73, 94
karre-hout, 69
karrodoorn, 112
karroo mimosa, 85, 91, 155
karroo thorn, 112
karro-thorn, 266
karup, 59
katdoorn, 156
katji, 209
Kedrostis, 124
Kedrostis africana, 11, 13, 80, 265
Kedrostis capensis, 65
Kedrostis sp., 216
Kei apple, 224
Kei-apple, 215
keme, 306
kengwe, 306
keur, 149
keureboom, 138
keurhout, 117
Key apple, 241
Kigelia africana, 291, 327
Kiggelaria africana, 226, 291
King of Candia, 14
kippersol, 241
klein-wild-kalabas-boom, 292
Kniphofia, 238, 242, 244
Kniphofia uvaria, 130
Knowltonia capensis, 13, 23
Knowltonia hirsuta, 23
Knowltonia vesicatoria, 13, 72, 116
kokerboom, 59, 64, 65, 76, 88, 257, 330
koker-boom, 291
kon, 77, 111
kooker boom, 61
kooker-boom, 292
kou, 35
kouboom, 257
kouw, 257
kraijebosch, 33
kray bush, 215
kreupel bosch, 249
kreupelboom, 16, 21, 26, 115, 117, 169
kreupel-boom, 14
kreupelhout, 11, 156
kreyhout, 255
kruppelholz, 156
ku, 77
Kuhnia rhinocerotis, 39, 40
kukumakranka, 11
kukumakranki(e), 18
Labiatea, 25, 50
Lacheaenalia, 20
Lachenalia, 41, 124
Lamiaceae, 90, 263
Lanaria lanata, 165
Lanaria plumosa, 165
Lantana, 265
Lantana rugosa, 265
Latania sp. 292
lataniers, 292
Laurophyllus capensis, 124
Laurus bullata, 146, 319
lavender-cotton, 102
Lebeckia carnosa, 124
Lebeckia macrantha, 261, 266
leek, 5, 29
leepelboom, 117
legume, 25, 42, 50
Leguminosae, 148, 169, 278
Leonotis leonurus, 24
Leonotis sp., 290
lepelboom, 117
Lepisorus schraderi, 241
Leptospermum, 49
leroshua, 306
Lessertia frutescens, 66, 102, 254
Lessertia microphylla, 102
Leucadendron, 49, 134
Leucadendron argenteum, 11, 13, 14, 15, 16, 17, 18, 19, 21, 22, 25, 26, 41, 42, 48
Leucadendron comosum, 42
Leucadendron conocarpodendron, 13, 14, 16, 23
Leucadendron corymbosum, 44
Leucadendron decorum, 17
Leucadendron laureolum, 17, 22
Leucadendron levisanum, 43
Leucadendron levisanus, 123
Leucadendron salignum, 41
Leucadendron spissifolium subsp. *natalensis*, 248
Leucadendron strobilinum, 41
Leucodendron, 20, 26, 49, 248
Leucodendron argenteum, 20, 23
Leucodendron decorum, 22
Leucodendron strobilinum, 20
Leucosidea sericea, 249, 250
leucospermum, 165
Leucospermum, 115
Leucospermum attenuatum, 165
Leucospermum conocarpodendron, 11, 21, 26, 49, 156
Leucospermum conocarpon, 49, 168
Leucospermum conocarpum, 21, 23, 26, 169
Leucospermum cuneiforme, 165, 168, 169
Leucospermum grandiflorum, 122
Leucospermum hypophyllocarpodendron, 33
Leucospermum innovans, 248
lichen, 22, 34, 141, 203
Lichen parellus, 122
Lichen roccela, 122
Lichtensteinia laevigata, 72
Lichtensteinia oleifolia, 91
Lichtensteinia undulata, 72
lidtjiestee, 34
lies, 6, 29
Lignum vitae, 145, 176, 318, 319
lily of the Nile, 64
Limonium, 101, 130
Limonium dregeanum, 94
Limonium kraussianum, 134
Limonium scabrum, 22
Liparia, 123
lislaala, 287
Listrostachys arcuata, 241
Lithoprina intermedia, 288
Lithops sp., 93
little onions, 254
lobelia, 20
Lobelia, 59, 228
Lobelia pinifolia, 19, 23
Lobelia tribe, 64
Lobostemon, 10
locust tree, 238

Lolium temulentum, 261
Lombardiese populier, 251
Loranthaceae, 320
Loranthus, 64, 83, 195, 205, 230, 265, 272
Loranthus canescens, 95
Lotus, 310
Lucium, 90
Lyceum afrum, 79
Lycia, 125
lycium, 102, 343
Lycium, 67, 90, 91, 92, 93, 95, 102, 112, 132, 164, 168, 231, 254
Lycium afrum, 116
Lycium austrinum, 345
Lycium cinereum, 92
Lycium ferocissimum, 2, 345
Lycium kraussii, 135
Lycium oxycarpum, 79
Lyperia, 228
mabola, 312
Macromerum junceum, 264
mahatla, 309
Mahernia, 93, 254, 273
Mahernia incisa, 17
mahuru papeerie, 325
maiden-hair, 13
maize, 218
makano, 293
makouw, 326
mallapie, 318
Malva capensis, 124
Malva trydactilytes, 124
Malva virgata, 124
Malvacea paritium tiliaceum, 288
Malvaceae, 169, 288
mamosho, 312
Manochlamys albicans, 73, 79, 94
mans uijntje, 88
manulea, 11
mapani, 314, 352
March flower, 51
Marchantia, 346
marfwhae, 316
marigold, 237, 282
markwhae, 316
marsblom, 51
Marsilea, 254
Marsilea burchellii, 97
Marsilea quadrifolia, 97
Martynia, 330
marula, 293
maruru pepeerie, 326
marwhae, 316
Massonia, 41, 101, 254
Massonia depressa, 101, 254
mat rush, 281
matjesgoed, 110
mat-rush, 93, 97
matundo, 318, 319
mat-ware, 110
mawa, 312
Medeola asparagoides, 90
Melaleuca, 49
Melanthia, 72
Melhania prostrata, 267
Melianthus, 37
Melica, 260
Melilotus indica, 15
melkbos, 8
melkbosje, 60
melkhoutboom, 8
melon, 309
mengerhout, 288
Mentha, 104
Mentha longifolia, 104, 264
mesembryanthema, 25, 50, 168, 169
Mesembryanthema, 84, 114
mesembryanthemum, 11, 20, 59, 65, 83, 95, 100, 102, 103, 114, 119, 132
Mesembryanthemum, 21, 23, 41, 65, 69, 70, 76, 78, 79, 82, 84, 93, 97, 101, 102, 103, 110, 113, 163, 164, 169, 203, 214, 231, 254, 260, 268, 271, 343
Mesembryanthemum aloides, 268
Mesembryanthemum angulatum, 346
Mesembryanthemum aureum, 201
Mesembryanthemum campestre, 92
Mesembryanthemum crystallinum, 345
Mesembryanthemum edule, 13, 24, 45, 110
Mesembryanthemum emarcidum, 77, 111
Mesembryanthemum guerichianum, 79, 346
Mesembryanthemum spinosum, 71, 90
Mesembryanthemum tribe, 79, 81
Metalasia muricata, 165
Metrosideros, 45
Metrosideros angustifolia, 45, 49
metsissanni, 266
milium, 218
milk bush, 47
milk-bush, 127
milkwood, 1, 6, 127
milk-wort, 237
millet, 218, 221
Mimetes fimbriifolius, 17
Mimetes hartogii, 17
Mimetes hirta, 13
Mimetes purpurea, 44
mimosa, 61, 63, 67, 70, 71, 79, 81, 82, 84, 85, 89, 91, 98, 99, 105, 106, 107, 108, 114, 126, 127, 135, 158, 174, 177, 180, 181, 184, 185, 186, 187, 188, 189, 190, 193, 194, 195, 196, 199, 200, 201, 208, 214, 219, 222, 223, 224, 225, 232, 233, 234, 235, 236, 240, 241, 244, 250, 255, 256, 257, 259, 270, 274, 275, 280, 289, 291, 292, 293, 301, 302, 304, 308, 318, 320, 321, 337, 358, 359
Mimosa, 60, 86, 106, 269, 274, 281, 282, 284, 287, 290, 292, 311, 315, 325, 326, 328, 336, 337, 357, 358
Mimosa giraffe, 88, 257, 258, 259
Mimosa horrida, 290
Mimosa karoo, 257
Mimosa nilotica, 59, 78, 88, 110, 111, 117, 118, 119, 122, 153, 172, 173, 259
Mimosa scandens, 291
mimosa thorn, 197, 208
Mimusops zeyheri, 301, 316
Mirabilis dichotoma, 13
Mirabilis jalapa, 13
Miscanthus, 352
Miscanthus sp., 291
missletoe, 83
mistletoe, 107, 195, 231
mkanga, 149
mkhuhla, 293
mmupudu, 301
mo khononga, 322
mobola, 312
moerbossie, 292
moerwortel(tjie), 59, 69
mogonono, 310
mohaaka, 268
mohatlha, 309
mohonono, 310
mohtla, 278
mokaala, 266, 267, 268, 270, 271, 280, 281, 282
mokala, 301, 304, 358
mokala-mokwi, 269
mokononka, 322
mokuri, 306
mokwi, 269
mollopie, 321
molompi, 311
monato, 306
monkey's cord, 141
Monopsis conspicua, 64
Monopsis debilis, 64
Monopsis decipiens, 228
Monopsis lutea, 20
Monsonia, 59, 61
Monsonia crassicaule, 59, 74, 82
Montinia acris, 11
Montinia caryophyllacea, 11
moopooroo, 301
moorwortel, 69
mopaane, 314
mopane, 307, 308, 309, 310, 314, 326, 352
Moquiniella rubra, 108, 195, 205
moraea, 12
Moraea, 11, 12, 15, 20, 24, 41, 70, 118, 138, 176, 226, 231, 272
Moraea collina, 13
Moraea fugax, 2, 5, 15, 33, 34, 155
Moraea inclinata, 299
Moraea neglecta, 20
Moraea pallida, 284
Moraea papilionacea, 13
Moraea polystachya, 84, 225, 226, 231
Moraea sect. *Galaxia*, 12
Moraea section *Galaxia*, 19
Moraea section *Homeria*, 20
Moraea simulans, 272
Moraea sp., 155, 242, 257
Moraea spathacea, 13
Moraea spathulata, 84, 242
Moraea undulata, 12, 13
morala, 310
morea, 11, 23
Morea, 138, 176
Moreae, 15
moreaea, 20
moreekwo, 269
Morella, 11
Morella cordifolia, 11, 14, 24, 34, 47, 48, 110, 125, 152, 183
Morella quercifolia, 11, 14, 21, 34, 47
Morella spp., 14
moretloa, 278, 309
Moringa ovalifolia, 328
morootoonoque, 321
mosho, 312
moshu, 269
mosibe, 312
mother of morning, 312
motjeara, 315
motjeerie, 315, 318, 319, 321, 325, 326
motjihaara, 321, 322, 323
motjiharra, 319
motjurie, 315
motlope, 320
motlopi, 318, 320
motlopie, 321
motsaodi, 312
motsariri, 318
motsiara, 315
motsidi, 312
motsintsela, 312
motsintsila, 312
motsouri, 312
motswere, 319
mountain bamboo, 245
mountain squill, 13
mour-boschie, 292
mowana, 303, 309, 310, 320, 321, 324, 326
mowane, 314, 316
moyela, 312

mukwi, 269
mulokha, 267
Muraltia heisteria, 12, 21
Muraltia sp., 227
Muraltia spinosa, 110
Mussinia, 72
mustard, 4
mynt, 3
Myosotis sylvatica, 103
Myrica cereifera, 11, 14
Myrica cerifera, 152
Myrica cordifolia, 14, 24, 34, 47, 48, 110, 125, 183
Myrica quercifolia, 21, 34
Myrsine africana, 124
Myrsiphyllum, 90
myrtle, 198
myrtle tribe, 49
Mystacidium capense, 205, 241
Mysticidium filicorne, 241
na-boom, 292
Nananthus aloides, 268
nara, 331, 334
naras, 332, 336
naras melon, 329
Narcissus, 212
Nasturtium officinale, 163
nasty thorn, 164
Neckera pennata, 204
Nemesia, 11
Nemesia macrocarpa, 124
nenta, 111
Nerine crispa, 51
Nerine humilis, 51
Nerine laticoma, 264, 265
Nerine sarniensis, 51
Nerine undulata, 206, 242
ngotuane, 278
Nicotiana glauca, 336
nieshout, 172, 251
niez-hout, 172
Nivenia, 248
nojeboom, 133, 203
nooiboom, 203
nooieboom, 133
nooiensboom, 233
noorsdoring, 157, 164
noorsdoringboom, 156
noorsh doring, 291
noortsche doornboom, 156
norse doorn, 164
noyen boom, 233
num'num, 112
num-num family, 257
Nux vomica, 312
nwana, 303
Nylandtia spinosa, 110
Nymania, 272
Nymania capensis, 113
Nymphaea caerulea, 163, 167
Nymphaea capensis, 163
Nymphaea nouchali, 163, 167, 245
Nymphaea nouchalii, 252
Nymphaea sp., 310
Nymphoides indica, 163
oak, 215
Ocotea bullata, 117, 141, 146, 154, 167, 207, 287, 319
Ocymum fruticulosum, 267
Odina caffra, 241
Oldenburgia arbuscula, 179, 202
Oldenburgia arbusculus, 209
Oldenburgia grandis, 209
Olea, 253
Olea capensis, 14, 45, 116, 117, 118, 144, 154, 207, 214, 226
Olea capensis subsp. *macrocarpa*, 287
Olea europaea, 117
Olea europaea subsp. *africana*, 12, 36, 44, 46, 47, 101, 106, 117, 237, 250, 253, 261, 268, 278
Olea europaea var. *verrucosa*, 44
Olea europea, 44
Olea ferruginea, 237
Olea similis, 44, 46, 261, 278
Olea undulata, 144
Olea verrucosa, 237
oleander, 16
olean-wood, 106
Oleum ricini, 33
olienhout, 106, 255
oliewenhout, 250, 251
Oligomeris dipetala, 92
olive, 47, 101, 116, 117, 253, 255, 261, 268
oliven-hout, 46
olive-shrub, 12
olyf boom, 44
olyvenhout, 117
omanbonde, 333
ombooa, 318
omborumbongo, 319, 320
ombowa, 318
omkouschjlouwane, 293
omooti onjou, 323
omuhama, 319
omumbonde, 333
omumborambonga, 319, 320
ona, 337
onaque, 337
Oncosiphon piluliferum, 71, 88
oomahaama, 319, 320, 321, 322
Opuntia, 45, 101, 103, 107, 108, 132, 214
Opuntia sp., 209, 215, 216
Opuntia spp., 158, 212, 360, 361
orach(e), 113
Orbea variegata, 26
orchall lichen, 132
orchid, 134, 148, 241
Orchis grandiflora, 12
Ornithogalum, 33, 104, 124, 132, 260
Ornithogalum altissimum, 118
Ornithogalum dubium, 132, 214
Ornithogalum parviflora, 72
Ornithogalum parviflorum, 124
Ornithogalum thyrsoides, 33
Ornithoglossum undulatum, 72
Orphium frutescens, 51
Osmites asteriscoides, 13
Osmites camphorina, 13
Osmitopsis asteriscoides, 13
Osmitopsis dentata, 13
Osteospermum, 11
othonna, 11, 15
Othonna, 71, 72, 73, 84, 114
otjintory, 337
otjipewa, 337
otjipiva, 337
otjitore, 337
oubos, 249
oude bosch, 249
ouhout, 250
ovumbapoo, 316
Oxalides, 17
oxalis, 11
Oxalis, 17, 18, 23, 25, 26, 41, 50, 59, 71, 72, 114, 124, 230, 231
Oxalis cernua, 13, 15, 343
Oxalis pes-caprae, 4, 5, 13, 15, 343, 345
Oxalis sp., 5
ox-eye daisy, 8
Ozoroa dispar, 258
paarde kapok, 165
Pachylepis, 330
Pachypodium namaquanum, 257
palm, 176, 187, 238, 246, 287, 324, 326, 333, 334
palma Christi, 37, 161, 193, 199
palmetto, 131
palmiet, 31, 32, 42, 119, 123, 125, 133, 144, 165, 166, 169, 189, 209
palmit, 131, 132, 162
palmite, 43, 128, 263
palmyra, 307, 308, 311, 326
Pancratium tenuifolium, 317
Panicum dactylon, 265
Papaver aculeatum, 94, 274
Papaver gariepina, 94
Pappea capensis, 228, 257
Papyrus, 132
Paranomus sceptrum-gustavianus, 42
Paranomus spicatus, 42
parey, 29
Parinari curatellifolia, 312
Parmelia herbacea, 204
Paschanthus, 265
Passerina, 123, 268
passerinae, 38
Pauridia minuta, 18
pavianentau, 141
Pavonia burchellii, 288
Pavonia kraussiana, 288
Pectinaria articulata, 69
pelargonia, 38, 39
Pelargonium, 19, 35, 59, 71, 74, 86, 122, 147, 193, 199, 211, 241
Pelargonium abrotanifolium, 134
Pelargonium angulatum, 113
Pelargonium crithmifolium, 74
Pelargonium cucullatum, 11, 24, 26, 131
Pelargonium fragrans, 134
Pelargonium grossularioides, 125
Pelargonium inquinans, 132, 163, 167
Pelargonium peltatum, 113, 163, 188, 194, 199
Pelargonium renifolium, 73
Pelargonium sect. *Horaea*, 13
Pelargonium sp., 227
Pelargonium spp., 162, 187, 197
Pelargonium tetragonum, 113
Pelargonium tragacanthoides, 96
Pelargonium tricolor, 132
Pelargonium triste, 13
Pellaea calomelanos, 203, 241
Pellaea hastata, 241
Penaea, 42
Penaea mucronata, 16, 22
Penaea squamosa, 23, 25, 43
pen-doorn, 97
Penea, 42
Pentzia incana, 216
pepper, 116
peppermint, 264
periploca, 10
Periploca, 83
Persicaria lapathifolia, 13
Peucedanum, 33
Peucedanum galbanum, 14
Peucedanum gummiferum, 59
p-grass, 119
Phaenocoma prolifera, 42, 131
Phalaris, 343
Phalaris canariensis, 261
Pharnaceum galioides, 124
Phoenix reclinata, 176, 187, 188, 190, 206, 223, 245, 287, 288, 289, 292, 308, 311, 326
Phragmites, 288, 289, 295
Phragmites australis, 29, 35, 57, 76, 79, 84, 85, 87, 111, 267, 274, 279
Phragmites communis, 76, 274
Phylica, 41, 123, 141
Phylica buxifolia, 17, 41
Phyllanthus, 265
phyllica, 10, 14
Physalis, 149

Physalis peruviana, 24, 194
Physalis peruvianus, 149
Physalis pubescens, 24
pig lily, 23
pig-root, 19
pine, 12, 19, 215
pinnwortel, 116
Pinus pinea, 12
Pinus sylvestris, 12
Piper capense, 13, 116
pisang, 18, 45, 148
pissgrass, 14
piss-grass, 119, 152
plaintain, 3
Platylophus trifolia, 227
Platylophus trifoliatus, 44, 117, 118, 146
Plectranthus fruticosus, 124
plum, 223
plumbago, 163
Plumbago, 241
Plumbago auriculata, 147, 163, 201, 205, 206, 207, 232, 241
Plumbago capensis, 147, 163, 201, 205, 206, 207, 232
Poa, 93, 260, 267
Poa annua, 343
Podaliria, 41
Podaliria buxifolia, 123
podalyria, 19
Podalyria, 26, 41
Podalyria calyptrata, 19
Podalyria myrtillifolia, 123
Podocarpus, 138, 139, 145, 146, 159, 176, 199, 207, 214, 226, 239, 287, 290, 298
Podocarpus elongata, 146, 164
Podocarpus elongatus, 123, 124, 146, 147, 154
Podocarpus latifolius, 2, 146, 147, 154, 164, 177, 249
Podocarpus sp., 96
Podostemonea, 288
Podranea ricasoliana, 248
poison tree, 33
poison-apple, 44
poison-bulb, 265
polygala, 11, 14
Polygala, 15, 25, 41, 50, 135
Polygala fruticosa, 124
Polygala hamosa, 124
Polygala heisteria, 12
Polygala myrtifolia, 201
Polygala oppositifolia, 123
Polygala virgata, 123
Polygonum barbatum, 13
Polygonum aviculare, 261, 263
Polypodium, 124, 346
Polypodium lineare, 241
Polypogon monspeliensis, 26
Polystachya, 206
Polystachya otteniana, 241
Polystachya pubescens, 241
poppy, 94, 274, 282
populier, 251
Populus deltoides, 251
Populus nigra var. *italica*, 251
Portulaca oleracea, 340
Portulacaria, 212
Portulacaria afra, 82, 97, 100, 113, 133, 158, 166, 167, 188, 202, 205, 207, 209, 215, 216, 238
Potamides decollatum, 288
Potamogeton marinum, 134
Potamogeton pectinatus, 134
potato sisinyane, 311
Potentilla, 263
Potentilla supina, 263
prei, 29
Prenia pallens, 344
prickle-thorn, 315
prickly pear, 214
prickly-pear, 108, 209, 212, 215, 216, 360, 361
Prionium serratum, 11, 31, 32, 42, 43, 119, 123, 125, 128, 131, 132, 133, 144, 162, 165, 166, 169, 209
Protaea corymbosa, 44
protea, 10, 11, 26, 37, 51, 148, 162, 188, 227
Protea, 17, 25, 39, 41, 51, 131, 134, 141, 150, 204, 209, 235, 248, 284, 299, 300, 346
Protea acaulos, 73
Protea acerosa, 42
Protea argentata, 25, 42
Protea argentea, 11, 13, 15, 18, 41
Protea caffra, 237, 246, 249, 284
Protea comosa, 42
Protea compacta, 248
Protea conifera, 41
Protea conocarpa, 13, 14, 156
Protea cordata, 43
Protea cynaroides, 25, 26, 126, 133, 207
Protea erosa, 122
Protea glaucophylla, 73
Protea grandiflora, 13, 14, 22, 69, 113, 117, 126, 134, 141, 166, 237, 249
Protea helvola, 42
Protea hirta, 13, 248, 249
Protea hypophylla, 33
Protea imbricata, 41
Protea incurva, 43
Protea lagopus, 42
Protea lepidocarpodendron, 22, 23, 48
Protea lepidocarpon, 23, 165
Protea levisanus, 43, 123
Protea longiflora, 133
Protea melaleuca, 22, 23, 48
Protea mellifera, 13, 14, 19, 22, 23, 24, 26, 36, 41, 48, 49, 127, 132, 165
Protea nana, 35, 43, 73
Protea neriifolia, 165
Protea nitida, 1, 6, 13, 14, 22, 51, 69, 113, 117, 126, 134, 141, 157, 159, 160, 162, 166
Protea pinifolia, 123
Protea pinnata, 42
Protea prolifera, 42
Protea racemosa, 42
Protea repens, 6, 13, 14, 18, 19, 22, 23, 24, 26, 36, 41, 46, 48, 49, 73, 127, 132, 165
Protea roupelliae, 249
Protea rouppeliae, 246, 248
Protea saligna, 41
Protea sceptrum, 42
Protea scolymocephala, 22, 41, 44, 48
Protea scolymus, 22, 41, 44, 48
Protea simplex, 248
Protea speciosa, 13, 14, 43, 117
Protea spp., 6
Protea strobolina, 41
Protea subvestita, 209
Protea welwitschii, 248, 249
Protea witzenbergiana, 73
Proteaceae, 23, 169
proteaceous tribe, 179
Proteae, 12
pruim, 228
Prunus africana, 238
Pseudoschoenus inanis, 92, 93, 97
Psilocaulon, 169
Psoralea aphylla, 21, 130
Psoralea pinnata, 26, 116
Psoralea sp., 111
Ptaeroxylon obliquum, 172, 199, 216, 226, 239, 298
Pteris calomelanos, 203
Pteris hastata, 203
Pterogonium gracile, 204
Pterogonium smithii, 204
Pteronia, 69, 71
Pterygodium atratum, 24
pumpkin, 230
purslane, 265, 340
Putterlickia saxatilis, 267
Pyrus africana, 238
Quaqua incarnata, 35
Quaqua pruinosa, 66
queen flower, 213, 233, 235
quiver-plant, 90
quiver tree, 61
quiver-tree, 291
raapuintjie, 34
raapuyntje, 34
Radyera urens, 93
Rafnia, 123
Rafnia amplexicaulis, 13
Rafnia triflora, 11
ragwort, 254
Rapanea melanophloeos, 117
Raphionacme, 263
raspberries, 198
red alder, 44, 117
red banian, 311
red ebony, 91
red-hot pokers, 238
red leaf, 262
red-leaf, 262
red pear, 117, 214
red raspberry, 194
red-star flower, 158
reed-mace, 165
Relhania, 72, 124
Relhania sp., 227
renoster bush, 328
renosterbos, 348
resin bush, 74
Restiaceae, 21, 25, 147, 169
restiaceous tribe, 179
Restio, 20, 43, 126, 165, 204
Restio dichotomus, 11, 14
Restio tectorum, 16, 34
Restio verticillatus, 125
Restionaceae, 6, 9, 21
Restiones, 43
Retzia capensis, 43, 122
Retzia spicata, 43, 122
Rhamnus, 273
rhenoster bush, 151
Rhigozum, 102, 263, 273
Rhigozum brevispinosum, 278
Rhigozum obovatum, 102, 107, 273, 278
Rhigozum trichotomum, 90, 93, 94, 273
rhinoceros bush, 47, 69, 74, 97, 112, 119, 125, 133, 165
rhinoceros-bush, 29, 36, 113, 132
rhinocerous-bush, 44
rhinocerus bush, 45, 46
rhinoster bosch, 125, 133
rhinoster bosje, 114
rhinosterbos, 75
rhinosterbosje, 40
Rhipsalis, 245
Rhipsalis baccifera, 245
Rhizophora mucronata, 288
Rhoicissus, 198
Rhoicissus digitata, 12
Rhoicissus tomentosa, 139, 194
Rhoicissus tridentata subsp. *cuneifolia*, 241
Rhus, 26, 39, 65, 69, 75, 79, 83, 89, 91, 96, 101, 102, 110, 122, 126, 135, 148, 155, 164, 168, 170, 253, 255, 261, 266, 273, 329
Rhus angustifolia, 45
Rhus erosa, 96

Rhus laevigata var. *villosa*, 44, 125
Rhus lancea, 67, 73, 85, 87, 88, 94, 262, 330, 337
Rhus lucida, 116
Rhus lucidum, 116
Rhus pyroides, 261, 273
Rhus serraefolium, 96
Rhus sp., 75, 82, 87, 88, 283
Rhus tridactyla, 263, 266
Rhus undulata, 65
Rhus villosum, 44, 125
Rhus viminale, 73
Rhus viminalis, 45, 85, 227
ribwort, 3
rice, 38
Richardia aethiopica, 242
Ricinus, 37
Ricinus communis, 33, 37, 161, 193, 199
Roccella tinctoria, 132
Roepera, 23, 41, 122, 125
Roepera morgsana, 110
Rogeria longiflora, 330
Romulea, 19, 26
Romulea flava, 13
Romulea macowanii, 101
Romulea rosea, 13
Romulea spp., 23, 72
rood elze, 44
roode els, 117
roode-else, 118
roode peer, 117
roodeblat, 262
rooi boekenhout, 117
Roridula dentata, 35, 69
Rorippa nasturtium-aquaticum, 4
rosewood-tree, 301
rosijntjes boom, 88
rosin tree, 72
Rothmannia capensis, 18, 117
row-bush, 33
Royena, 121, 122, 124, 329
Royena decidua, 94
Royena deciduas, 63
Royena glabra, 126
Royena lucida, 94
Royena pubescens, 16
Royena villosa, 117
rozyntje, 65, 330
Rubus, 194
Ruellia, 90
Rumex, 32
Rumex scandens, 83
Rumohra adiantiformis, 203
Ruschia campestris, 92
Ruschia spinosa, 71, 73, 90, 92
Ruschia subgen. *Spinosa*, 271
Saccharum, 263
saffraan, 239
sage, 74, 254
sagt matjes-goederen, 92
Salacia kraussii, 296
Salicornia, 65, 113, 217
Salicornia fruticosa, 13
Salix, 208, 212, 241
Salix babylonica, 85, 88, 106, 107, 195, 208
Salix gariepina, 94, 102, 113, 131
Salix ghariepina, 228
Salix mucronata, 54, 63, 76, 79, 82, 87, 88, 94, 95, 96, 97, 99, 102, 113, 131, 155, 164, 195, 219, 223, 228, 272, 273, 305
Salix mucronata subsp. *mucronata*, 67, 257, 262
Salsola, 78, 83, 155
Salsola aphylla, 64, 70, 76, 78, 82, 88, 113, 137, 155, 169, 263, 336
Salsola caffra, 111
Saltera sarcocolla, 23, 25, 43
salt-wort, 78, 113
Salvia, 74, 90, 96, 139, 254
Salvia africana, 44, 278
Salvia africana-lutea, 44
Salvia disermas, 278
Salvia verbenaca, 254
Samolus, 130
Samolus campanuloides, 134
Samolus porosus, 134
Samolus valerandi, 134
sandal wood, 322
sandalwood, 249, 318, 325
sandal-wood, 301
Sansevieria angolensis, 308
Sansevieria cylindrica, 308
Sansevieria hyacinthoides, 163, 241
Sansiveria thyrsifolia, 241
sansiviera, 163
Santolina chamaecyparissus, 102
Sarcocaulon, 59
Sarcocaulon crassicaule, 59, 7482
Sarcocaulon sp., 61
Sarcophyllum carnosum, 124
Sarcostemma, 132
Sarcostemma viminale, 132
satinwood, 120
Satyrium, 48, 228
Satyrium hallackii, 228
Scabiosa sp., 201
scabious, 3
Scadoxus puniceus, 14, 234
scarlet blood-flower, 51
Sceletium emarcidum, 77, 111
Sceletium sp., 78
Schinziophyton rautanenii, 312
Schizocarphus nervosus, 228
Schizostylis coccinea, 242
Schotia, 170
Schotia afra, 133, 135, 151, 153, 156, 166, 167, 176, 202, 241
Schotia speciosa, 133, 156, 167, 176, 241
Schotia tamarindifolia, 135
Scilla maritima, 13
Scilla peruviana, 228
Scirpoides dioecus, 98
Scirpus maritimus, 134
Sclerocarya birrea, 335
Sclerocarya birrea subsp. *caffra*, 293
Scleroxylon, 124
Scolopia mundii, 117, 214
Scrophulariaceae, 41
Scutia indica, 241
Scutia myrtina, 118, 182
sea-coral, 13
sea-lavender, 22
sea-spinach, 346
Sebaea, 227
Sebaea ambigua, 22
Sebea aurea, 227
Secale africanum, 70
Secale strictum subsp. *africanum*, 70, 71
Secamone alpini, 124, 143, 158, 163, 141
secamouny, 141
Selagineae, 169
selago, 11
Selago, 112
semica, 60
Sempervivum tectorum, 1
Senecio, 84, 114, 237, 254
Senecio juniperinus, 149
Senecio pterophorus, 149
Senecio sp., 201
Senecio venusta, 201
Septulina glauca, 95
Serapias melaleuca, 12
Serapias tabularis, 12
seringa, 300, 322
Seriphium, 14, 36
Serruria elongata, 42
Setaria verticillata, 322, 338
sewejaartjies, 176
shadak, 336
shallot, 87
sheep's fescue-grass, 97
shittin, 278
Sida sonneratiana, 226
Sideroxylon, 58, 154
Sideroxylon inerme, 1, 6, 8, 127
Sideroxylon toxiferum, 33
siki, 266
Silene bellidioides, 124
Silene ornata, 124
silver tree, 11, 16, 17, 18, 26
silver-tree, 14, 19, 20, 21, 22, 25, 48
Sisyndite spartea, 65, 330
Sium filifolium, 39
slange-bosch, 14
sneeze, 226
sneezewood, 172, 216, 239, 240, 298
sneeze-wood, 199
solanum, 149
Solanum, 139, 224
Solanum giganteum, 139
Solanum linnaeanum, 45
Solanum nigrum, 33
Solanum sodomeum, 45
Solanum tomentosum, 17
Sonchus oleraceus, 33
Sophora, 14, 138, 346
Sophora capensis, 10, 115, 117, 138
sorell, 3
Sorghum, 218, 221
Sorocephalus imbricatus, 41
sorrel, 3, 4, 83
sour-berry, 228
sow-thistle, 33
Spaansche riet, 125
Spanish broom, 215, 330
Spanish reed, 97, 125
Sparaxis, 228, 235, 236, 237
Sparaxis grandiflora subsp. *grandiflora*, 35
Sparaxis pendula, 210
Spartium cuspidosum, 261, 266
Spatalla, 43
Spatalla incurva, 43
Spatalla prolifera, 42
Spatalla racemosa, 42
specboom, 209
spec-boom, 238
speckboem, 216
speckboom, 46, 47, 158, 202, 212
speck-boom, 100, 207, 215
spekboom, 82, 97, 108, 133, 158, 166, 167, 205
spek-boom, 113, 188
Sphaerothylax algaeformis, 288
Sphaerothylax algiformis, 288
Spiloxene, 41, 114
Spiloxene capensis, 15
spinage, 3
Spirostachys africana, 249
Spondias dulcis, 228
staart-pepper, 116
Staavia, 125
Staavia radiata, 125
Staminibys monadelpha, 10
stapelia, 119, 163
Stapelia, 95, 103, 113, 271
Stapelia articulata repens, 69
Stapelia gordonii, 330
Stapelia grandiflora, 102, 163
Stapelia hirta, 102
Stapelia incarnata, 35
Stapelia pedunculata, 64
Stapelia pilifera, 74
Stapelia tribe, 66

Stapelia variegata, 26
Stapeliae, 83, 260
Stapelieae, 309
star flower, 15
star of Bethlehem, 214
Statice, 22, 94, 101, 130, 134, 263
Statice kraussiana, 134
Statice reticulata, 22
Stavia, 125
Stenoglottis fimbriata, 241
stertpeper, 116
St. Helena yam, 16
stickgrass, 65
stick-grass, 330
Sticta crocata, 22
Sticta fuliginosa, 204
Sticta limbata, 204
stilbe, 11
Stilbe albiflora, 124
Stilbe cernua, 124
stinck-gras, 289
stinck-out, 287
stinkholz, 141
stinkhout, 117, 118, 141, 167, 174
stink-hout, 116
stinkwood, 120, 146, 154, 174, 207, 287, 318
Stipagrostis namaquensis, 65, 264, 330
Stipagrostis obtusa, 62, 92
Stipagrostis spp., 67, 68, 257
Stoebe, 35, 69, 119
Stoebe plumosa, 14
Stoebe rhinocerotis, 114, 133
stop a bit, 119
stop a little, 182
Stopelium, 260
strelitzia, 137
Strelitzia, 18, 45, 148, 154, 198, 212, 213, 221, 235
Strelitzia alba, 124, 139, 141, 146, 147
Strelitzia augusta, 16, 146, 147, 206, 288
Strelitzia juncea, 154, 167, 176
Strelitzia nicolai, 16, 206, 220, 221, 287, 288, 292
Strelitzia regina, 189, 206, 210, 226, 233, 241
Strelitzia reginae, 137, 141, 176, 189, 190, 192, 198, 199, 206, 210, 212, 213, 226, 233, 235, 241
Strelitzia teretifolia, 176
Streptocarpus, 242
Streptocarpus meyeri, 103
Streptocarpus rexii, 103, 147, 228, 231
Strumaria spiralis, 18
Struthiola, 41, 123
Struthiola ciliata, 21
Struthiola dodecandra, 21
Struthiola erecta, 21
Strychnos, 291
Strychnos decussata, 291, 292
Strychnos madagascariensis, 287
Strychnos sp. 297, 312
Strychnos spinosa, 287, 288, 290
Strychnos spinosus, 291
sugar bush, 18
sugarbush, 46, 127, 235, 246, 247, 299, 300
sugar-bush, 132, 248, 249
sugar cane, 300
sugar-tree, 36
suikerbosch, 18
sumach, 101
Sutherlandia, 102, 254
Sutherlandia frutescens, 66, 102
Sutherlandia microphylla, 102
sweet gumtree, 321
sweet thorn, 321
sweet-scented flag, 181
sweet-thorn, 189, 220
Sympieza, 123
Syncarpha, 10, 21, 86, 176
Syncarpha speciosissima, 86
Syncarpha vestita, 123
Syngenesia, 38
Syrrhopodon perichaetialis, 168
Systrepha filiforme, 265
Tabernaemontana, 16
Tacsonia, 249
Tahitian-apple, 228
tail pepper, 116
Talinum caffrum, 320
tamarisk, 63, 67, 328, 329, 336
Tamarisk usneoides, 67
Tamarix, 330
Tamarix chinensis, 329
Tamarix orientalis, 329
Tamarix usneoides, 63, 76, 328, 329, 331, 336
tambookie grass, 239, 352
tambouki grass, 291
Tanacetum, 84
Tapinanthus, 83
Tapinanthus oleifolius, 64, 91, 94, 265, 272
Tarchonanthus, 263, 266, 267, 268, 275, 277, 278, 349
Tarchonanthus arboreus, 118
Tarchonanthus camphorates, 22, 94, 118, 201, 260, 266, 309
Tarchonanthus littoralis, 22, 118
Taxus, 123
Taxus elongatus, 154
tecoma, 249
Tecoma, 241
Tecoma capensis, 204, 206, 207, 226, 230, 231, 232, 241
Tecoma family, 248
Tenaea formosa, 122
Tephrosia macropoda, 294, 295
Terminalia, 317
Terminalia catappa, 262
Terminalia erythrophylla, 262
Terminalia prunioides, 315, 316, 317, 319, 320, 321, 322, 323
Terminalia sericea, 310
Testudinaria elephantipes, 24, 114, 168
Tetragonia, 3, 41
Tetragonia fruticosa, 13
Tetragonia hirtsuta, 45
Tetragonia nigrescens, 45
Tetragonia sp., 4
Teucrium sp., 201
Thalictrum, 101, 262
Thalictrum minus, 101, 262
Thamnocalamus tessellatus, 92, 192, 245
Thamnochortus fruticosus, 11, 14
Themeda triandra, 266
Theodora speciosa, 202
thesia, 11
Thesia, 41
Thesium, 11, 41
thistle, 3, 281
thorntree, 55, 56, 57, 78, 112, 172, 358
thorn-tree, 28, 54, 60
Thymelaeaceae, 148
Thymelea, 25, 50
Thymeleae, 169
tintirintie, 33
Titanopsis calcarea, 271
t'Kams, 62
tky, 263
T'nau, 69
Todea africana, 20, 22
tokwi, 268
Trachyandra spp., 244
Transkeian cork tree, 249
tree-fern, 238
Tribulus, 274
Tribulus sp., 200, 269
Tribulus terrestris, 32, 195
Tribulus zeyheri, 274
Trichilia emetica, 293
trichonema, 23
Trichonema, 19, 26
Tridactyle bicaudata, 241
Tridentea parvipuncta, 103
Trifolium melilotos, 15
Tripinnaria tenacium, 291
tri-thorn, 90
Tritoma, 130, 244
Tritonia sp., 228
Tromotriche pedunculata, 64
Tromotriche pruinosa, 66
tsamma, 259
Tulbaghia, 153
Tulbaghia acutiloba, 263
Tulbaghia alliacea, 5, 12, 29, 33, 263
Tulbaghia capensis, 5, 29
Tulbaghia cernua, 263
tulip, 231, 249
tulp, 225, 231
Tumus elephantiopus, 176
Turk fig, 209, 360
Turkish corn, 218
Turkish fig, 132
turpentine grass, 289
'twa, 68
two-penny pieces, 269
Tylecodon, 111
Tylecodon paniculatus, 46, 47, 61, 75, 112, 113
Tylecodon reticulatus, 73
Tylosema esculenta, 337
Tylosema esculentum, 269, 306
Typha capensis, 134, 283
Typha latifolia, 134, 165
Ulex rigidus, 124
uluzi, 224
umbrella-*Acacia*, 293
umkhululwana, 293
umQokolo, 224
umsenga, 233
umsenge, 241
umSintsi, 184
umtombe, 249
umtomboti, 249
Uncaria procumbens, 264, 273
underbosch, 336
unna, 331
Urelytrum agropyroides, 268
Urtica urens, 261
Usnea, 141
Usnea florida, 203
Usnea plicata, 203
Usnea sp., 287
Usneae, 290
uyentje, 254, 263
uyntie, 118
uyntjis, 15
vaak um bechi, 313
vaalblaar, 45
vaalblaaraalwyn, 45
Vaccinium, 124
vaderlands riet, 29
Vahlia, 263
valerian, 35
Valeriana phu, 35
Vangueria infausta, 87, 88, 267, 269, 323
Vangueria sp., 323
Vepris undulata, 207
Veronica, 263
Veronica anagallis, 261
Veronica anagallis-aquatica, 263
Veronica scutellata, 263
vieruurs bloem, 13
Vigna frutescens, 337
Villarsia capensis, 24

Villarsia indica, 163
Villarsia ovata, 24
vine of Africa, 139
Virgilia, 138
Virgilia capensis, 163
Virgilia divaricata, 117
Virgilia oroboides, 10, 14, 115, 117, 138, 149, 163
Viscum, 10, 83, 231
Viscum aethiopicum, 34
Viscum capense, 34, 44, 65, 110, 226
Viscum rotundifolium, 65, 107
Viscum sp., 320
Vitaceae, 310
Vitis cuneifolia, 241
Vitis vitigenea, 12
vlachdorn, 46, 128
vlaktedisseldoring, 46
Volkameria sp., 201
vrouwehaar, 13
vuurhoutjie, 251
vyacht um bige, 274
vygebosch, 110
vygebosje, 89
vyndoorn, 316
waageboom, 69, 117
wach en beetgen, 46
wag en bitje, 148
wageboom, 113, 127, 157, 159, 160, 179
wagenboom, 106, 126, 134, 166, 209, 249
wag-'n-bietjie, 182, 274, 313
wagt een beetje, 87
wagt-een-beetje, 141, 315, 316, 337
wagt-een-betje, 98
wagt een bitje, 270
wagteen bitye, 182
wait-a-bit, 141, 270, 274, 275, 277, 283, 301, 303, 304, 307, 309
wakt en beetje, 12
wakt-een-beetje, 119
Warmben campanulata, 125
water lily, 33, 167, 252
water melon, 259, 323
water-melon, 105, 230, 306, 309
water uyentje, 131
water-uyentje, 42
water uyntje, 15
water uyntjie, 33
watercress, 163
waterroot, 105
watsonia, 20, 26
Watsonia borbonica, 20
Watsonia iridifolia, 227
Watsonia meriana, 23, 48, 227
Watsonia pillansii, 191, 227
Watsonia tabularis, 23
wattle, 300
wax berry, 47
wax-berry, 183
waxberry-bush, 47
wax plant, 14
wax-shrub, 14, 110
weeping willow, 88, 106, 208
Weinmannia sp., 227
Weinmannia trifoliata, 44
weld-calebasses-boom, 290
Welsh corn, 218
Welwitschia mirabilis, 336
wheat, 38
white alder, 44
white ash, 117
white ebony, 62
white els, 146
white iron wood, 207
white lily, 235
white pear, 214
white stinkhout, 117
white-stem, 265
white thorn, 112, 332
whitethorn, 208
white-thorned acacia, 133
Widdringtonia cedarbergensis, 36, 51
Widdringtonia juniperoides, 36
Widdringtonia nodiflora, 147, 207
wild apricot, 87, 88
wild asparagus, 156
wild banana, 148, 220, 287, 292
wild calabash-tree, 290
wild cedar, 207
wild chestnut, 11, 18, 116, 118, 242
wild chili, 216
wild coffee, 176
wild cucumber, 60, 258
wild date, 311, 326, 308
wild-date palm, 187
wild-dattle-boom, 292
wild fig, 118, 139, 194, 198, 223, 292, 297
wild folum, 321
wild garlic, 12, 33
wild garlick, 263
wild grape, 139
wild hemp, 46, 279, 290
wild medlar, 323
wild oats, 29, 54
wild olive, 36, 120, 237, 241, 278
wild onion, 87
wild pineapple tree, 6
wild pisang, 141
wild plum, 194, 198
wild quinine, 249
wild rye, 70, 71
wild syringa, 322
wild tobacco, 336
wild vetch, 187
wild vine, 12, 198, 241
wilde cardamom, 13
wilde castanien, 11, 118
wilde castanje, 18
wilde catjepiring, 117
wilde drijven, 12
wilde knofflock, 33
wilde knoflook, 12, 263
wilde rog, 70
wilde syring, 13
wilde vygeboom, 118
wild-kalabas-boom, 292
wilgen-boom, 94
wilgenhout, 54
willow, 63, 67, 71, 76, 79, 85, 87, 91, 94, 95, 96, 97, 99, 106, 107, 155, 164, 208, 212, 215, 238, 256, 257, 262, 269, 272, 305
willow of Babylon, 85, 195, 200, 219
wire-grass, 265, 266
wit-gat boom, 265
Witsenia maura, 10
witte boekenhout, 117
witte elze, 44
witte essen, 117
witte gaat boom, 213
witteboom, 17, 18, 21
witte-boom, 19
wittedoorn, 112, 133
witte-else, 118
wittegatboom, 107
wolfsbane, 40
wolf's-milk, 90
wolwe-gift, 36
wonder boom, 107
Wurmbea spp., 72
Xanthoxylum davyi, 227
Xeranthemum, 176
Xeranthemum fulgidum, 86
Ximenia caffra, 312
Xysmalobium gomphocarpoides, 115
yellow wood, 116, 154, 225
yellowwood, 2, 96, 117, 138, 139, 145, 146, 147, 159, 176, 183, 191, 192, 199, 205, 207, 226, 231, 239, 249, 287, 290, 298
yellow-wood, 174, 188, 214, 232
yew, 177
ysterhout, 251
yzer hout, 154
yzerhout, 45
Zaluzianskya, 11
Zaluzianskya sp., 124
zamia, 106, 165, 233, 234, 235
Zamia, 24, 154, 168, 206, 228, 233, 234
Zamia caffra, 151
Zamia cycadis, 176
Zamia horrida, 165, 166, 204
Zamiae, 168
zand-olyve, 35
Zantedeschia aethiopica, 10, 11, 19, 23, 32, 37, 64, 114, 209, 242, 253
Zanthoxylum, 201
Zanthoxylum capense, 13, 116
zee koral, 13
zee-bontje, 291
ziekte-troost, 12
Ziziphus mucronata, 91, 94, 95, 241, 262, 273, 301, 302
Zizyphys, 241
Zostera, 217
zuur-bezy, 228
zuykerbosch, 127
zwart-bast, 117
zwarte bast, 94
zwarte baste, 94
zwarte yzerhout, 117
zwart-hout, 14
Zygia fastigiata, 249, 288
Zygophyllum, 23, 41, 91, 122, 125, 271
Zygophyllum herbaceum repens, 111
Zygophyllum morgsana, 110
Zygophyllum sessilifolium, 111

STRELITZIA

1. Botanical diversity in southern Africa. 1994. B.J. Huntley (ed.). ISBN 1-874907-25-0.
2. Cyperaceae in Natal. 1995. K.D. Gordon-Gray. ISBN 1-874907-04-8.
3. Cederberg vegetation and flora. 1996. H.C. Taylor. ISBN 1-874907-28-5.
4. Red Data List of southern African plants. 1996. Craig Hilton-Taylor. ISBN 1-874907-29-3.
5. Taxonomic literature of southern African plants. 1997. N.L. Meyer, M. Mössmer & G.F. Smith (eds). ISBN 1-874907-35-8.
6. Plants of the northern provinces of South Africa: keys and diagnostic characters. 1997. E. Retief & P.P.J. Herman. ISBN 1-874907-30-7.
7. Preparing herbarium specimens. 1999. Lyn Fish. ISBN 1-919795-38-3.
8. *Bulbinella* in South Africa. 1999. Pauline L. Perry. ISBN 1-919795-46-4. OUT OF PRINT.
9. Cape plants. A conspectus of the Cape flora of South Africa. 2000. P. Goldblatt & J.C. Manning. ISBN 0-620-26236-2.
10. Seed plants of southern Africa: families and genera. 2000. O.A. Leistner (ed.). ISBN 1-919795-51-0.
11. The Cape genus *Lachnaea* (Thymelaeaceae): a monograph. 2001. J.B.P. Beyers. ISBN 1-919795-52-9.
12. The Global Taxonomy Initiative: documenting the biodiversity of Africa/L'Initiative Taxonomique Mondiale: documenter la biodiversité en Afrique. R.R. Klopper, G.F. Smith & A.C. Chikuni (eds). 2001. ISBN 1-919795-63-4. OUT OF PRINT.
13. Medicinal and magical plants of southern Africa: an annotated checklist. 2002. T.H. Arnold, C.A. Prentice, L.C. Hawker, E.E. Snyman, M. Tomalin, N.R. Crouch & C. Pottas-Bircher. ISBN 1-919795-62-6.
14. Plants of southern Africa: an annotated checklist. 2003. G. Germishuizen & N.L. Meyer (eds). ISBN 1-919795-99-5.
15. Heyday of the gymnosperms: systematics and biodiversity of the Late Triassic Molteno fructifications. 2003. J.M. Anderson & H.M. Anderson. ISBN 1-919795-98-7.
16. Common names of Karoo plants. 2004. Les Powrie. ISBN 1-874907-16-1.
17. National Spatial Biodiversity Assessment 2004: priorities for biodiversity conservation in South Africa. 2005. A. Driver, K. Maze, M. Rouget, A.T. Lombard, J. Nel, J.K. Turpie, R.M. Cowling, P. Desmet, P. Goodman, J. Harris, Z. Jonas, B. Reyers, K. Sink & T. Strauss. ISBN 1-919976-20-5.
18. A revision of the southern African genus *Babiana*, Iridaceae: Crocoideae. 2007. P. Goldblatt & J.C. Manning. ISBN-10: 1-919976-32-9. ISBN-13: 978-1-919976-32-7.
19. The vegetation of South Africa, Lesotho and Swaziland. 2006. L. Mucina & M.C. Rutherford (eds). ISBN-10: 1-919976-21-3. ISBN-13: 978-1-919976-21-1.
20. Brief history of the gymnosperms: classification, biodiversity, phytogeography and ecology. 2007. J.M. Anderson, H.M. Anderson & C.J. Cleal. ISBN 978-1-919976-39-6.
21. Molteno ferns: Late Triassic biodiversity in southern Africa. 2008. H.M. Anderson & J.M. Anderson. ISBN 978-1-919976-36-5.
22. Plants of Angola / Plantas de Angola. 2008. E. Figueiredo & G.F. Smith. ISBN 978-1-919976-45-7.
23. Synopsis of the Lycopodiophyta and Pteridophyta of Africa, Madagascar and neighbouring islands. 2009. J.P. Roux. ISBN 978-1-919976-48-8.
24. Historical plant incidence in southern Africa. 2009. C.J. Skead. ISBN 978-1-919976-53-2.

MEMOIRS OF THE BOTANICAL SURVEY OF SOUTH AFRICA

(discontinued after No. 63)

Still available:

2. Botanical survey of Natal and Zululand. 1921. R.D. Aitken & G.W. Gale.
17. The vegetation of the Divisions of Albany and Bathurst. 1937. R.A. Dyer.
29. The wheel-point method of survey and measurement of semi-open grasslands and karoo vegetation in South Africa. 1955. C.E.M. Tidmarsh & C.M. Havenga.
31. Studies of the vegetation of parts of the Bloemfontein and Brandfort Districts. 1958. J.W.C. Mostert.
33. The vegetation of the Districts of East London and King William's Town, Cape Province. 1962. D.M. Comins.
39. Flora of Natal. 1973. J.H. Ross. ISBN 0-621-00327-1.
41. The biostratigraphy of the Permian and Triassic. Part 3. A review of Gondwana Permian palynology with particular reference to the northern Karoo Basin, South Africa. 1977. J.M. Anderson. ISBN 0-621-03834-2.
42. Vegetation of Westfalia Estate on the north-eastern Transvaal escarpment. 1977. J.C. Scheepers. ISBN 0-621-03844-X.
43. The bryophytes of southern Africa. An annotated checklist. 1979. R.E. Magill & E.A. Schelpe. ISBN 0-621-04718-X.
45. The plant ecology of the Isipingo Beach area, Natal, South Africa. 1980. C.J. Ward. ISBN 0-621-05307-4.
46. A phytosociological study of the Upper Orange River Valley. 1980. M.J.A. Werger. ISBN 0-621-05308-2.
47. A catalogue of South African green, brown and red algae. 1984. S.C. Seagrief. ISBN 0-621-07971-5.
49. Pattern analysis in savanna-woodlands at Nylsvley, South Africa. 1984. R.H. Whittaker, J.W. Morris & D. Goodman. ISBN 0-621-08265-1.
50. A classification of the mountain vegetation of the Fynbos Biome. 1985. B.M. Campbell. ISBN 0-621-08862-5.
52. A plant ecological bibliography and thesaurus for southern Africa up to 1975. 1986. A.P. Backer, D.J.B. Killick & D. Edwards. ISBN 0-621-08871-4.
53. A catalogue of problem plants in southern Africa, incorporating the National Weed List of South Africa. 1986. M.J. Wells, A.A. Balsinhas, H. Joffe, V.M. Engelbrecht, G. Harding & C.H. Stirton. ISBN 0-621-09688-1.
55. Barrier plants of southern Africa. 1987. L. Henderson. ISBN 0-621-10338-1.
57. Veld types of South Africa 3rd edn. 1988. J.P.H. Acocks. With separate wall map. ISBN 0-621-11394-8.
59. Tannin-like substances in grass leaves. 1990. R.P. Ellis. ISBN 0-620-15151-X.
60. Atlas of the leaf anatomy in *Pentaschistis* (Arundineae: Poaceae). 1992. R.P. Ellis & H.P. Linder. ISBN 0-9583205-1-9.
61. The marine red algae of Natal, South Africa: Order Gelidiales (Rhodophyta). 1992. Richard E. Norris. ISBN 1-874907-01-3.
63. Biomes of southern Africa: an objective categorization. 2nd edn. 1994. M.C. Rutherford & R.H. Westfall. ISBN 1-874907-24-2.

ENQUIRIES:

Bookshop, South African National Biodiversity Institute, Private Bag X101, Pretoria, 0001 South Africa.
Tel. +27 12 843-5000 Fax +27 12 804-3211 E-mail bookshop@sanbi.org http://www.sanbi.org

The purpose of this collection of observations by early southern African travellers was to present a picture of the vegetation as they saw it, painted by the pens of the earliest European visitors to the Cape and by those who, coming after, penetrated the subcontinent. This review covers South Africa, with additional notes on the neighbouring states of Namibia, Botswana, Lesotho and Zimbabwe. The earliest plant explorations in the South African section were made in the Western and Eastern Cape, with some 200 years separating the earliest Cape records from those to the north.

The extracts were taken from many diverse works, as and when they came to hand: they were not sought deliberately within a planned project. The authors were seldom botanists per se but many were interested in plants for one reason or another. Missionaries numbered among those who recorded their impressions, often with remarkable accuracy. Being well educated, they were able to produce highly articulate reports on the plants they saw and even collected. Professional plant collectors also contributed markedly when searching for specimens needed by European herbaria and universities. They were either sent out specifically for that purpose, as by the Royal Botanic Gardens at Kew in London and similar institutions, or were paid an amount for each specimen collected.

The partial picture given here should go some way towards helping ecologists and botanists to visualise early conditions and, at the same time, save themselves the chore of searching through many volumes for what might be no more than a minor item. The book will be of significant use to plant taxonomists, geographers, ecologists, environmental historians and students of climate change.





SOUTH AFRICAN
national
biodiversity
institute
S A N B I

ELANDSBERG
NATURE RESERVE

ISBN 978-1-919976-53-2