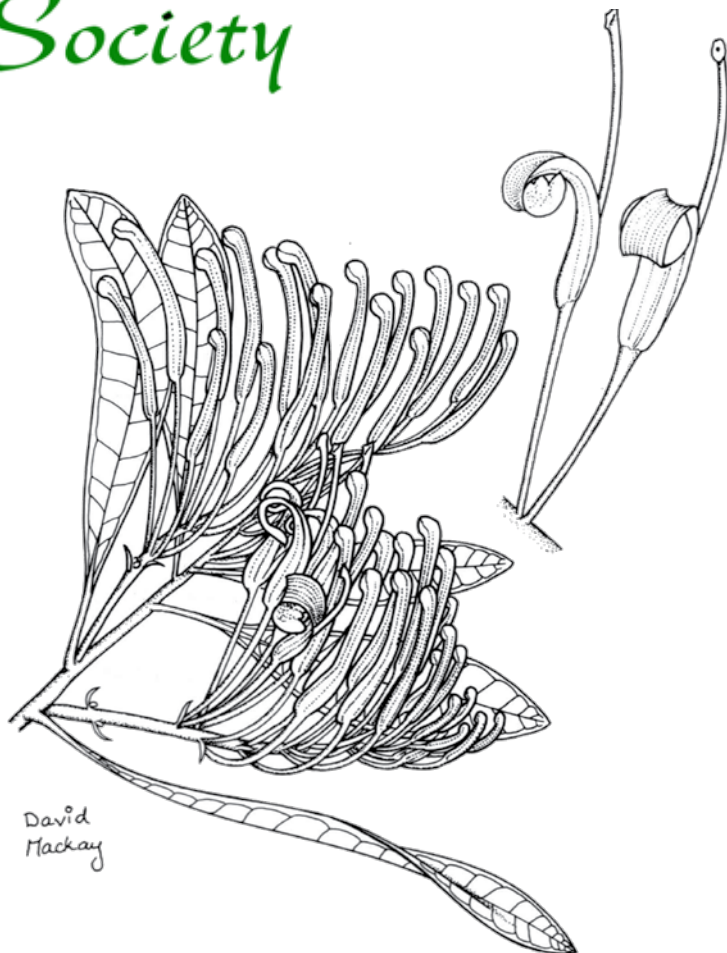


ASBS

Australian Systematic Botany Society



Newsletter

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Hansjörg Eichler Research Committee

Bill Barker
Betsy Jackes
Greg Leach
Kristina Lemson
Chris Quinn
Chair: Dale Dixon, Vice President
Grant applications close: 14 March 2011.

Cover image: *Alloxylon flammeum* (Proteaceae), reproduced with the permission of David Mackay (the artist) and RBG Sydney.

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From the President

I hope you all had a relaxing summer break and wish you a successful and enjoyable new year in 2011. It seems like hardly any time has passed since our highly successful conference in Lincoln, New Zealand last November–December. In this issue, readers will find the usual reports of ASBS business resulting from the Annual General Meeting that was held during the conference, as well as a report of the conference itself. You will also find the announcement that Council has approved the nomination of John Clarkson, a former President, Vice President, Treasurer and Council member, as a Life Member of ASBS. This is a big deal. Council does not bestow such honours lightly and John is a very deserving recipient of this award.

A common result of Annual General Meetings is a change to the membership of the management committee. While most Council members have remained, Mike Bayly has stepped down from Council and the Treasurer's position. We heartily thank Mike for the hard and excellent work that he has put in over the past two years on behalf of the Society. Frank Zich, formerly a Councillor, has stepped into the vacant Treasurer's position to be assisted by Pina Milne, the only new member of Council, who will be filling a new, informally designated position, Councillor (memberships). Tanya Scharaschkin is still a Councillor but her position has now been informally designated as Councillor (assisting the Secretary). Dale Dixon remains as Vice President and Gillian Brown as Secretary and I am still the President.

Our newest Councillor, Pina Milne, deserves a longer introduction. She is the Collections Manager at MEL and is also a bryologist with research interests in the phenology and ecology of rainforest mosses (in particular the genus *Dicranoloma*), the documentation of bryophyte species found in soil crusts, and the taxonomy of the family Pottiaceae.

By now all members should have received, either by email or post, a membership renewal form as well as a ballot paper for the vote on two special resolutions to change the rules of our Society. Please renew your membership promptly

AND cast your vote on both special resolutions. Discussion at our Armidale conference and subsequently at our most recent AGM in Lincoln suggests that both resolutions are strongly, if not unanimously supported by our members. However, these resolutions will fail if less than 75% of all financial members choose to vote, according to our present rules.

Let me briefly reiterate the arguments in favour of these resolutions. The first proposes to change the name of our society from Australian Systematic Botany Society to Australasian Systematic Botany Society. This change is a purely symbolic one because it changes neither the aims of ASBS nor any of its rules. We hope it will encourage more New Zealanders, New Caledonians, New Guineans and Fijians to join and become active members of ASBS. Anyone who participated in our recent Lincoln conference will have seen impressive evidence of the high calibre of New Zealand plant systematists and concluded that such a result would only strengthen our Society.

The second special resolution proposes to change one of the rules governing the way we amend our Society's rules and in doing so would make our constitution congruent with the legislation under which our Society is incorporated. Specifically, it would change the rule specifying the vote required to carry a special resolution from "it is approved by the vote of at least 75% of those members of the Society who are entitled to vote" to "it is approved by the vote of at least 75% of those members of the Society who, being entitled to vote, vote in person or by proxy at the meeting". According to our rules, filling in the ballot paper that you have been sent, and returning it to the Secretary, represents a proxy vote. It is very difficult to persuade 75% of the entire membership to vote on anything, especially on uncontroversial questions. The existing rule requiring 75% of all members to approve a change has ossified our constitution and we need to change it to give our Society greater flexibility to respond to changing circumstances. I repeat, if you have not already done so, please renew your membership now AND cast your vote on both special resolutions.

Peter Weston

ASBS Inc. Business

2010 Annual General Meeting of the Australian Systematic Botany Society, Inc.

AGENDA

16.00-18.00, Tuesday, 30 November 2010,
Stewart lecture room, Stewart Building, Lincoln
University, Lincoln, New Zealand

Meeting opened 4.13pm

Present: Peter Weston (President), Dale Dixon (Vice-President), Michael Bayly (Treasurer), Gillian Brown (Secretary), and 32 members, including ASBS life members Robyn Barker and John Clarkson.

1. Apologies

Brendan Lepschi, David Mabberley, Tanya Scharaschkin, Frank Zich

2. Minutes of the 2009 Annual General Meeting

Proposed that the minutes of the 31st Annual General Meeting (as published in *The Australian Systematic Botany Society Newsletter* Number 141) be accepted.

Moved Peter Weston and seconded Gillian Brown. Motion carried.

3. Business arising from minutes

Nil

4. President's Report

Presented by Peter Weston, his first President's report. Copy will be printed in the ASBS newsletter. **See Attachment 1.**

Peter thanked the research committee for assessing the Eichler application

5. Treasurer's Report

Prepared by Michael Bayly and to be printed in the ASBS newsletter. This was Michael's last report as Treasurer. He said he has enjoyed being on council and originally expected to be on council

for longer but due to change in circumstances he does not have the time to commit to the position of Treasurer. Michael thanked all members and wished council well.

Interest income was higher than last year on the research fund.

General fund is in a healthy position; the surplus was down on last year but last year was artificially inflated by the donation off the PPAA.

Income and expenditure on an annual basis are tightly coupled.

Proposed Michael Bayly, seconded by Karen Wilson. Carried. **See Attachment 2.**

6. Newsletter Report

Supplied by editors and read out by Peter Weston. Copy will be printed in the ASBS newsletter. **See Attachment 3.**

7. Web Page Report

Supplied by Murray Fagg and read out by Peter Weston. Copy will be printed in the ASBS newsletter. **See Attachment 4.**

8. Eichler Research Fund

Dale Dixon thanked the research committee, for assessing, and Gillian Brown, for logistics of the two rounds of the Eichler award in 2010.

In 2010 there were 11 applications over the two rounds, six in March and five in the September round. The successful applications for the March 2010 round were Mark Wallace and Sarah Fayed. The successful applications for the September 2010 round were Caroline Puente-Lelièvre and James Ingham. Dale thanked all award applicants and congratulated the four successful students for 2010.

Kevin Thiele asked if the special resolution to change the name of the society to the Australasian Systematic Botany Society Incorporated is successful, would students from New Zealand be able to apply? Michael Bayly responded that council were not aware of any hindrance but there may be a few problems and council are looking into this.

9. Proposals for special resolutions to change the Society's rules

Peter Weston clarified that the vote at this AGM was to vote if the proposals should go to members and also to vote on the wording of the special resolutions to go to the ballot of all financial members. Peter confirmed that the change could be effected in a couple of months, with the ballot set to close on the 1st of March 2011 and the second General Meeting, at which the vote on the special resolutions are determined, to be held on the 15th of March 2011 at the National Herbarium of New South Wales.

There was discussion around a number of points of the special resolutions.

If the name change is successful Annette Wilson (Public Officer) confirmed that, as public officer, she would register the name change with the registrar general and it would become valid on that day.

Concerns over the quorum number, presently 13, were raised and Bill Barker suggested that perhaps different quorum numbers are required for different meetings (i.e. AGM versus special resolutions). Peter Weston (President) responded that this would need to go to through a separate special resolution. All agreed that this be dealt with once the current special resolutions have been resolved.

The question of how we would define 'Australasian' was raised and Peter Weston responded there was no need to provide a definition. This is a symbolic name change as we are already affiliated with Papua New Guinea and hope to expand our affiliations in the future.

It was raised whether or not the New Zealand botanists want to join the society, which Peter Weston confirmed.

The two special resolutions were put, individually, to a vote of all members present at the AGM.

1. That the name of the association be changed from

"The Australian Systematic Botany Society Incorporated"

to

"The Australasian Systematic Botany Society Incorporated"

Proposed Peter Weston, carried unanimously.

2. That Rule 30(5)(b) be changed from

"it is approved by the vote of at least 75% of those members of the Society who are entitled to vote"

to

"it is approved by the vote of at least 75% of those members of the Society who, being entitled to vote, vote in person or by proxy at the meeting"

Proposed Peter Weston, carried unanimously.

10. Any other business

Nil

11. Election of Officers

Gillian Brown reported on the council nominations. All positions, except that of Treasurer, received applications by the due date and were elected unopposed. Council then sought to find a Treasurer. A signed nomination form for Treasurer was received from Frank Zich on the 23rd November 2010, who had originally nominated as Councillor. Gillian called for any other nominations from the floor, none were received, therefore Frank was elected unopposed as Treasurer. This created a vacancy for the Councillor in charge of memberships. On the 24th November 2010, a signed nomination form for Councillor was received from Pina Milne. Gillian called for any other nominations for Councillor from the floor, none were received, therefore Pina was elected unopposed as Councillor (assistant treasurer).

Council for 2010-2011

President: Peter Weston

Vice president: Dale Dixon

Secretary: Gillian Brown

Treasurer: Frank Zich

Councillor (assistant secretary): Tanya Scharaschkin

Councillor (assistant treasurer): Pina Milne

Meeting closed at 5.19pm

ASBS President's Report 2009–2010

Peter Weston

Conferences

ASBS conferences are the most important vehicle that our Society provides for us to communicate with one another about the subject matter of our work. It is one measure of the health of our Society that a series of well organised, well attended, intellectually lively conferences has been held under the Society's auspices in recent years. Most recently, the 2009 conference in Armidale and the 2010 conference in Lincoln, New Zealand have continued this trend, both marked by significant contributions from New Zealand participants.

The next conference being run by a committee largely composed of ASBS members is the next International Botanical Congress to be held in Melbourne from 23 to 30 July 2011. Although the IBC is much bigger than ASBS, Council has taken steps to ensure that opportunities for ASBS and its members to be involved are scheduled both within and parallel to the IBC program. Symposium 104, "Patterns and processes in the evolution and biogeography of the Australasian flora", which is being jointly organised by Maria Gandolfo and outgoing ASBS Treasurer, Mike Bayly, will be badged as an ASBS-sponsored symposium. The IBC organising committee agreed to this on condition that ASBS provide at least \$3000 in financial assistance to students attending the conference. ASBS Council had already intended to be more generous than this, having decided at last year's Council meeting in Armidale to allocate a significant proportion of funds inherited from the defunct Palynological and Palaeobotanical Association of Australasia (PPAA) towards assisting students to attend the IBC. This might allow us to sponsor an additional symposium that is relevant to the Society's interests. The IBC organisers have also agreed to Professor Michael Crisp's plenary address on "Evolution of the Australian Flora" doubling up as the Nancy Burbidge Memorial Lecture for 2012. We still need to schedule an ASBS Council meeting and AGM and plan to organise an ASBS conference dinner to happen during "IBC week".

Kevin Thiele has provisionally agreed to hosting

an ASBS conference in 2012 in Perth, at which the new premises of the State Herbarium of Western Australia will be on display. Council will also explore opportunities for jointly organising conferences with the Society of Australian Systematic Biologists in the next few years.

Newsletter

The ASBS Newsletter is the most important medium that we have for communicating Society business and for members to discuss systematics-related matters other than research results, so its regular publication is crucial for the health of our Society. Issues of the Newsletter were published in December 2009 and March and June 2010 but publication of the September 2010 issue has been delayed and will be combined with the December 2010 issue. This delay has been driven by several factors, most important of which has been the imperative for one of our Newsletter Editors, Russell Barrett, to write up his Ph.D. thesis. Another obstacle to timely publication was the resignation of Gael Campbell-Young from the editorial team in March 2010 due to her move to Perth earlier than she had expected. Gael had looked after Newsletter proofing, book reviews and distribution management and we are still looking for one of our members to join the editorial team to take on these roles. In the meantime, staff at AD kindly volunteered to look after printing and posting of June Newsletter. The recently introduced option for members to elect to receive their Newsletter electronically has resulted in about a marked reduction in the number of paper copies of the Newsletter that need to be handled and we hope that this trend continues, thus reducing the burden of these tasks on the editorial team as well as reducing the cost of Newsletter production. Our editors are always grateful for the submission of well-written articles on subjects relevant to plant systematics.

Website

The newly redesigned ASBS website went live in March 2010 and the members with whom I have spoken about it agree that the new version is both more attractive and more informative than its predecessor. Some content (e.g. the page on the Nancy Burbidge Memorial Lectures) still needs to be put in place and Council has agreed that it would be useful to insert a page advertising job

opportunities in plant systematics. Maintenance of the website has proceeded smoothly under webmaster Murray Fagg's expert eye.

Research Committee and Eichler Awards

Hansjoerg Eichler Awards to research students and other early-career plant systematists have become perhaps the most important contribution that ASBS makes to the development of our discipline. Not only do awards of up to \$2000 make a big difference to the feasibility of many student research projects in plant systematics, but Hansjoerg Eichler Awards have also proved to be useful items on the *curriculum vitae* of graduates who are on the path to careers in science. After a couple of years in which more Awards were granted than could probably be sustained in the long term, we suffered a temporary but severe loss of confidence in the stability and earning power of the Hansjoerg Eichler Research Fund during the Global Financial Crisis of 2007–2009. In response to that financial disaster, which caused significant declines in the paper value of the Fund's assets, Council drastically cut the number of awards given in 2009/2010 to just one. Such wildly fluctuating provision of research funding unfairly penalised a particular cohort of students. I think we have now returned to a stable and sustainable level of provision of Awards, at the rate of 4 (up to \$8000) per annum. Our aim is to be able to provide a predictable number of Awards each year regardless of the vagaries of the business cycle. A policy that we have adopted in recent years of having a slow but steady turnover of members of the Research Committee will continue.

ASBS Finances

Over the past few years, the General Fund has been growing slowly but steadily, augmented in 2008/09 by the once-off inheritance of funds from the Palynological and Palaeobotanical Association of Australasia. As Mike Bayly shows in his Treasurer's report, membership fees only just cover the Society's expenses (mostly the cost of publishing and distributing the ASBS Newsletter) so there is no room for financial complacency but ASBS is now in a sound financial position.

The Research Fund has been more volatile in recent years, growing quickly due to numerous generous donations by benefactors, but suffering a

slight reversal in 2007/08 due to the effects of the Global Financial Crisis on investment income.

Membership

The number of ASBS members peaked in 2007/2008 at 312 members and has been declining in ordinary, retired and student categories since then. A write off of 15 long-term unfinancial members in 2008–2009 only partly accounts for this trend. I won't speculate about whether or how one might explain this trend but I will say that it is a source of concern. We hope to attract a significant number of new members from the New Zealand Plant Radiation Network and hope that our recent moves to change the name of our society to Australasian Systematic Botany Society will help to encourage this.

Council

ASBS Treasurer Mike Bayly retires from ASBS Council at this Annual General Meeting, having served in this position since September 2008. We thank Mike for the excellent job that he has done in this demanding position over the past two years and hope that he might stand for another official position in our Society before too long. In order to ease the workloads of the Treasurer and Secretary, Council has decided to designate the two Councilor positions informally as Assistant Treasurer and Assistant Secretary. The Assistant Treasurer will be responsible for handling membership-related tasks.

Special resolutions

Members should be aware by now that two special resolutions have been proposed to change the rules of our Society. Ballot papers will be posted to all members before the end of December 2010, for them to vote on whether or not to accept these proposals. The deadline for submission of postal votes is 1 March 2011.

The first proposes to change the name of the association to "The Australasian Systematic Botany Society Incorporated". Some people have asked how we would define the word "Australasian", to which my answer has been "we have not defined it so you can interpret it any way you like". If accepted, this would be a purely symbolic change that would not alter the goals of ASBS or indeed anything else about the structure

or functioning of our Society. However, we do hope that this change, if approved, will encourage more New Zealanders, New Caledonians and New Guineans to join ASBS.

The second proposed rule change would bring the rules governing how we change our rules into line with the legislation under which ASBS is incorporated, the Associations Incorporation Act, 1991, of the Australian Capital Territory. At present our constitution says that a rule change needs to be “... approved by the vote of at least 75% of those members of the Society who are entitled to vote” to succeed. In practice, getting 75% of all members to vote is difficult, although Council is quietly confident of achieving such a high turnout of voting members this time. The legislation says that a rule change needs to be approved by the vote of at least 75% of those members of the Society who, being entitled to vote, vote in person or by proxy at the meeting” and this is precisely the new wording that is proposed.

I strongly encourage all members to think hard about these special resolutions, to vote on them, and to make sure that they send in their annual subscriptions soon because only the votes of financial members can be counted.

Life Membership for John Clarkson

At this year’s Council meeting, I nominated John Richard Clarkson to become ASBS’s fourth Life Member. This nomination was carried unanimously by Council (an article on this nomination and its acceptance is published elsewhere in this issue). John has worked tirelessly on behalf of our Society for many years in various official capacities and also as a mentor to other Council members. This award is thoroughly deserved.

Science policy

Taxonomy Australia (TaxA) is an umbrella

group of professional societies and institutions whose aims include promotion of systematics. It was formed in October 2007 to collectively represent systematics to Australian governments, as an outcome of the National Taxonomy Forum organised by ABRs. I represented ASBS at the most recent meeting of TaxA, held in Brisbane on 5 May 2010. The main issues that were discussed at this meeting concerned the publication of research results in systematics and, in particular, the rankings that taxonomic journals have received as part of the Federal Government’s “Excellence in Research for Australia” initiative. This scheme has classified thousands of scientific journals into four ranks: A*, A, B, C. Systematics has generally fared poorly in this exercise, with only a handful of journals in our field, receiving A* or A ranking. Most of those that publish the results of taxonomic research have been given either B or C ranking. These rankings are expected to have considerable influence in the evaluation of scientists’ performance for decisions such as the awarding of research grants and academic promotions. Generally low rankings for plant taxonomic journals will act as a major disincentive for university-based scientists to conduct taxonomic research. A review of this scheme will commence early in 2011 and ASBS Council intends to take an active role in that process. TaxA could prove to be a useful body to represent systematists’ concerns in that review.

Acknowledgements

I am grateful to everyone who has contributed to the running of our Society in 2010, but especially to ASBS Council, our Newsletter Editors, our Webmaster, our Research Committee and our Public Officer, without any of whom our Society would be unable to function properly.

ASBS Treasurer’s Report, 2009/10

**Presented at the Society’s Annual General
Meeting in Lincoln, New Zealand, 30th Nov
2010**

1. Introduction

I am pleased to present the financial statements of the Australian Systematic Botany Society (ASBS) for the year ended 30 June 2010. The finances of the Society are run on a financial year basis. This will be my last report (for now) as Treasurer of the Society, with a new Treasurer, as yet unknown, to be elected at the current AGM.

2. Membership

At 30 September 2010 the financial members of ASBS numbered about 245, which is a decrease of about 30 members compared with the same time last year (and down about 70 financial members from 2008). The proportions of Full (61%) and Concessional members (32%) remain roughly the same as last year, and the number of Gratis memberships has decreased by one. Twenty-one unfinancial members who had not paid their dues since 2007 were written off at the end of 2009. Seventeen new individual members joined ASBS between Aug 2009 (when the last Treasurer's report was prepared) and 30 Sep 2010 (see list below).

Approximately 24% of paying members were unfinancial at the end of September, which is a little higher than usual for this time of year. One email reminder was sent in March, but I was tardy in sending a follow-up reminder (usually June); a second reminder has been sent subsequent to these figures being put together. Ordinarily, members who have not paid their subscription fees by 30 June are removed from the mailing list for newsletters, in accordance with Council policy, but some leeway has been given this year, because of delays with newsletter production and the lack of prompting from my end.

The following new members for 2009 and 2010 are welcomed to the Society:

Mr David Meagher, School of Botany, University of Melbourne, Vic.

Mrs Delwyn Windridge, James Cook University, Qld

Ms Melanie Schneemilch, University of South Australia, S.A.

Mr Matthew de Boer, Griffith University, Qld

Dr Alexander Schmidt-Lebuhn, Centre for Plant Biodiversity Research, A.C.T.

Mr Michael McCuaig, Wurtulla, Qld

Mr Matthew Pearson, Iron Knob, S.A.

Dr Katharina Schulte, Australian Tropical herbarium, Qld

Mr John O'Toole, Rous Mill, N.S.W.

Mr Ihsan Abdul Raheem, University of Adelaide, S.A.

Mr Frank Hemmings, University of New South Wales, N.S.W.

Mr Abduhl Ghafoor, University of Newcastle, N.S.W.

Mr Daniel Ohlsen, School of Botany, University of Melbourne, Vic.

Mr Martin Breed, University of Adelaide, S.A.

Ms Patricia Fuentes-Cross, University of Adelaide, S.A.

Mr Austin Brown, University of Adelaide/Royal Botanic Gardens Melbourne

Ms Kerry Gibbons, University of Sydney, N.S.W.

3. General Fund

Melinda McAllister of BHT Partners in Eltham, audited the 2009/10 books in November 2010. It is the second time this company has audited the Society's financial statements.

3.1 Income

Gross income to the General Fund returned to "normal" levels this year (\$15,364), after being substantially inflated last year (\$66,003) by some unusual transactions that passed through the General Fund accounts, relating to the Adelaide Conference, a substantial bequest, and acquisition of funds from the defunct Palynological and Palaeobotanic Association of Australia (see last Treasurer's Report).

Table 1. Membership of ASBS as of 30th September 2010 (unfinancial members in brackets)

Fee	Full	Concessional	Gratis	Total
Ordinary	141 (41)	n/a	0	141 (41)
Student	n/a	32 (17)	0	32 (17)
Retiree	n/a	42 (15)	0	42 (15)
Unemployed	n/a	4 (2)	0	4 (2)
Institutional	9(1)	n/a	14	23(1)
Life	n/a	n/a	3	3
Total	150 (42)	78 (34)	17	245 (76)

Subscription fees from members remain the steady source of income to the General Fund. The total of income from memberships (\$9,155) was c. \$1,300 lower than last year, largely as a product of late payment of fees (see 2, above).

Book sales continued at their previous rather low rate, with a net return of \$45. Stocks of most books are dwindling (see list below). For several years Council has been considering ways to write off the remaining stock of our titles and pay out the remaining amounts owing to shareholders, because the administration required is disproportionate to the amount the Society earns in sales. There was no substantial progress in this area in 2009/10, but the matter should be looked at further in the current financial year.

3.2 Expenditure

Expenditure from the General Fund (\$12,370), as with income, was substantially lower than the unusually high amount (\$43,574) reported for 2008/9 (see above under 3.1 and last year's report).

Newsletter printing and postage were, as usual, a major component of the routine expenses of the General Fund. Overall newsletter costs were lower than in 2008/9. This is largely because the current statement only reports expenses for three issues (rather than four), because of delays with newsletter production this year. There will have been further savings because 76 members (33% of those who have paid their membership fees this year) have opted to receive the *Newsletter* electronically, rather than in hardcopy. However, the full value of this saving is not yet apparent, because members have been progressively taking up this option only in the second half of the financial year (after memberships were due), when *Newsletter* production has been delayed.

Other major expenses this year included: \$2,326 associated with the Armidale conference (\$2,000 of this being paid as support to 16 students attending the conference and presenting a talk or poster); \$1,200 for redesign of the Society's website; \$1,460 for auditing of the last financial statements.

Last year's Treasurer's report highlighted that, ignoring investment income, the regular income

and expenses of the Society are tightly coupled. This remains the case, but with lower newsletter expenditure this year, the margin between the two was slightly wider. Revenue from memberships this year, even though lower than last year, was sufficient to cover all routine expenses, plus conference expenses and website design. Given the very healthy state of the General Fund (assets of \$108,501), Council doesn't feel it is necessary to increase subscription rates at this point, but subscription rates should be assessed annually to ensure the Society is covering its regular expenses.

3.3 Current Assets in the General Fund

At the end of June 2010 the Society held assets of \$108,501 (\$108,281 in cash, \$220 in books). This represents an increase of \$2,994 over the 2008/09 level.

The books that the Society fully or partially owns, held by Helen Thompson (ASBS sales) and by state chapter conveners, as at 30 June 2010 are as follows:

6 copies of *History of Systematic Botany in Australasia* (partial share)

12 copies of *Systematic Status of Large Flowering Plant Genera*

63 copies of *Evolution of the Flora and Fauna of Arid Australia* (partial share).

4. The Hansjörg Eichler Research Fund

After two years of poor performance associated with the global financial situation, Research Fund investments this year gave a healthy return of \$23,855 (compared with losses of \$517 and \$12,736 in preceding years). On top of this investment performance, the capital of the Fund was again bolstered this year by sizeable donations. Nearly 50 individual donations were received, and these contributions help the Society to support systematic research into the Australian flora. Donations ranged from \$5 upward (donations over \$2 being tax-deductible), and included: a large donation of \$20,000 from a regular donor, a further \$10,000 from the estate of Helen Hewson (on top of \$15,000 last year), \$1,100 that was raised from a sale of second hand books donated by Simone Farrer (see Fig. 1 and

ASBS Newsletter 142, p. 11), and \$1,465 donated by members in conjunction with membership payments. Through these donations, assets of the Research Fund increased during the period from \$364,464 to \$419,319.

The Council has taken a cautious approach to expenditure from the Research Fund this year. One grant of \$2000 was awarded to Kerry Gibbons in the September 2009 round. A further two grants, also of \$2000 each, were awarded to Mark Wallace and Sarah Fayed in the March 2010 round, but these expenses will appear on the financial statements for the next financial year.

For the last few years, while the market has been volatile, all new contributions to the Research Fund have been held as cash, in a Commonwealth Bank Cask Management Trust. This now represents a substantial proportion of the total capital (46%), and a more strategic investment of these funds is something that the Council needs to investigate.

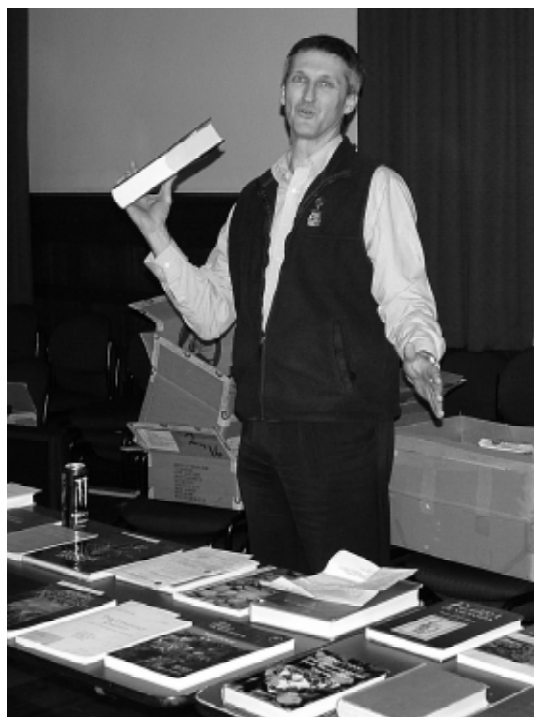


Fig. 1 Sold! Auctioneer Frank Udovicic at the fundraising sale of second hand books donated by Simone Farrer.

5. Taxation

The ASBS continues with its tax-exempt status. Organisers of conferences are reminded that ASBS is not registered as a GST gathering organisation. Planners of large conferences need to obtain an ABN and the relevant status or work through a registered institution (such as a herbarium). Smaller conferences and workshops can be run through the Society as long as no GST is charged or recovered.

6. Summary

The Society remains in a strong financial position. In 2009/10 the General Fund had an operating surplus of \$2,994 and accumulated assets of \$108,501. After two years of poor performance, investments of the Hansjörg Eichler Research Fund this year gave positive returns that, coupled with generous donations of members, saw the fund grow in value by \$54,855 to \$419,319.

I have served as Treasurer for the last two years. I vividly recall that, within about two minutes of sending an email to Marco Duretto and Anna Monro indicating I might be willing to nominate for Treasurer, I got a phone call from John Clarkson (then President) assuring me it was the “best job on council”. Having not sampled the various Council positions as extensively as John, I can’t substantiate the validity of this claim, but I can say that I have learnt a lot and have thoroughly the experience, especially the opportunity for contact with so many of the members. I’d like to thank Anna for her work in breaking me in to the role, my fellow councillors for being enjoyable to work with, and many members for positive interactions. When I initially volunteered, I envisaged I would serve a longer stint, but changing commitments have made that impractical. I wish the new Treasurer and Assistant Treasurer (Frank Zich and Pina Milne) well. I suspect I might never again examine the annual financial statements in such particular detail!

*Michael Bayly
Honorary Treasurer
November 2010*

AUSTRALIAN SYSTEMATIC BOTANY SOCIETY INCORPORATED

(An incorporated association)

FINANCIAL REPORT FOR THE YEAR ENDED

30 JUNE 2010

COUNCIL MEMBERS' REPORT

Your Council members submit the financial statement of the Australian Systematic Botany Society Incorporated for the year ended 30 June 2010.

Council Members

The names of the Council members who held office throughout the reporting period and at the date of this report are:

President	Marco Duretto	Term ended December 2009
President	Peter Weston	Appointed December 2009
Vice President	Peter Weston	Term ended December 2009
Vice President	Dale Dixon	Appointed December 2009
Secretary	Kirsten Cowley	Term ended December 2009
Secretary	Gillian Brown	Appointed December 2009
Treasurer	Michael Bayly	
Councillor	Dale Dixon	Term ended December 2009
Councillor	Frank Zich	Appointed December 2009
Councillor	Tanya Scharaschkin	
Public Officer	Kirsten Cowley	Term ended December 2009
Public Officer	Annette Wilson	Appointed December 2009

Principal Activities

The principal activities of the association during the reporting period were to promote systematic botany in Australia.

Significant Changes

No significant change in the nature of these activities occurred during the reporting period.

Operating Results

The operating results are as set out hereunder:

	Year ended June 2010	Year ended June 2009
	\$	\$
Research Fund	54,855	34,389
General Fund	2,994	22,429
Total	57,849	56,818

Signed in accordance with a resolution of the members of the Council.

Peter Weston
(President)

Michael Bayly
(Treasurer)
29 November 2010

AUSTRALIAN SYSTEMATIC BOTANY SOCIETY INCORPORATED

INCOME STATEMENT FOR THE YEAR ENDED 30 JUNE 2010

	Note	2010 \$	2009 \$
RESEARCH FUND			
Income			
Donations to Research Fund		30,000	20,000
Investment Income	2	23,855	(571)
General Fund Transfer (includes member donations and profits from fundraising book sale)		3,000	18,960
Total Income		<u>56,855</u>	<u>38,389</u>
Expenditure			
Research Grants		2,000	4,000
Total Expenditure		<u>2,000</u>	<u>4,000</u>
Surplus	3	<u>54,855</u>	<u>34,389</u>
GENERAL FUND			
Income			
Sales – Books		87	167
Less Cost of Goods Sold			
Opening stock – Books		262	455
Closing stock – Books		(220)	(262)
Cost of Goods Sold/written off		42	193
Gross Revenue from Trading		<u>45</u>	<u>(26)</u>
Advertising			50
Conferences			17,525
Investment Income	2	3,599	3,929
Subscriptions to ASBS Inc.		9,155	10,445
Donations to Eichler Fund		1,465	1,375
Bequest			15,000
Funds from Palynological and Palaeobotanic Association of Australia			17,593
Fundraising sale of second hand books		1,100	
Sundry Income			112
Total Income		<u>15,364</u>	<u>66,003</u>
Expenditure			
Transfer to Eichler: member donations (+ extra)		1,900	1,475
Transfer to Eichler: bequest & conference profits			17,485
Transfer to Eichler: profits of book sale fundraiser		1,100	
Auditors' remuneration (and associated costs)		1,460	1,100.00
Credit card charge facility		362	952
Conference expenses		2,326	17,248
Newsletter expenses		3,893	5,267
Registrar general returns		129	32
Website design		1,200	
Miscellaneous expenses (e.g. postage)			15
Total Expenditure		<u>12,370</u>	<u>43,574</u>
Surplus	3	<u>2,994</u>	<u>22,429</u>

The accompanying notes form part of these financial statements.

AUSTRALIAN SYSTEMATIC BOTANY SOCIETY INC. BALANCE SHEET AS AT 30 JUNE 2010

	Note	2010 (\$)	2009 (\$)
ASSETS			
Current Assets			
RESEARCH FUND			
Cash at Bank		4,962	962
Investments			
Colonial Managed Investment		67,702	61,225
Cash Management Fund		192,308	159,186
Australian Bond Fund		85,971	81,328
Growth Fund		68,376	61,763
Total Current Assets Research Fund		419,319	364,464
GENERAL FUND			
Cheque Account		7,907	21,467
Savings Account		50,833	35,902
Cash Management Account		49,541	47,876
Inventories – Books		220	262
Total Current Assets General Fund		108,501	105,507
Total Current Assets		527,820	469,971
NET ASSETS		527,820	469,971
MEMBERS' FUNDS			
Accumulated surplus – opening	3	469,971	413,153
Surplus for the period	3	57,849	56,818
Total Members' Funds		527,820	469,971

The accompanying notes form part of these financial statements.

NOTES TO AND FORMING PART OF THE FINANCIAL STATEMENTS FOR THE YEAR ENDED 30 JUNE 2010

Note 1: Statement of Significant Accounting Policies

The financial report is a special purpose financial report prepared in order to satisfy the financial reporting requirements of the members. The Council has determined that the Society is not a reporting entity.

The financial report has been prepared in accordance with the requirements of Australian Accounting Standard AASB 1031: Materiality. No other applicable Accounting Standards, Australian Accounting Interpretations or other authoritative pronouncements of the Australian Accounting Standards Board have been applied.

The financial report has been prepared on a cash basis.

The following specific accounting policies, which are consistent with the previous period unless otherwise stated, have been adopted in the preparation of this financial report.

(a) Membership

Membership is recorded on a cash basis.

(b) Income Tax

Under present legislation the Society is exempt from income tax and accordingly no provision has been made in the accounts.

(c) Comparative Figures

Where required by Accounting Standards comparative figures have been adjusted to conform with the changes in presentation for the current year.

(d) Members Funds

In accordance with the rules of the Society accumulated funds are not available for distribution to its members.

	2010 \$	2009 \$
Note 2: Investment Income		
RESEARCH FUND		
Interest Received		
Cheque Account		2
Distributions ^{1*}		
Colonial First State (Diversified Fund)	6,477	(7,444)
Cash Management Trust	6,122	7,089
Australian Bond and Growth Fund	6,298	6,159
Increase/decrease in market value of investments: Bond and Growth Fund	4,958	(6,377)
Total Investment Income	<u>23,855</u>	<u>(571)</u>
GENERAL FUND		
Interest Received		
Cheque Account	3	40
Savings Account	1,931	1,471
Distributions		
Cash Management Trust	1,665	2,418
Total Investment Income	<u>3,599</u>	<u>3,929</u>

Note 3: Accumulated Funds

RESEARCH FUND		
Accumulated Surplus – Opening	363,870	329,481
Surplus for the period	54,855	34,389
Accumulated Surplus – Closing	<u>418,725</u>	<u>363,870</u>
GENERAL FUND		
Accumulated Surplus – Opening	106,101	83,672
Surplus for the period	2,994	22,429
Accumulated Surplus – Closing	<u>109,095</u>	<u>106,101</u>
Total Surplus for the period	<u>57,849</u>	<u>56,818</u>
Total Accumulated Surplus	<u>527,820</u>	<u>469,971</u>

Note 4: Research Committee

The Australian Systematic Botany Society is an approved research institute.

The approved membership of the Research Committee comprises:

Barbara Briggs	July 2003–December 2009
Rod Henderson	July 2003–August 2009
Greg Leach	Appointed August 2009
Betsy Jackes	Appointed July 2003
Kristina Lemson	Appointed Feb 2008
Bill Barker	Appointed December 2009
Chris Quinn	Appointed July 2003

AUSTRALIAN SYSTEMATIC BOTANY SOCIETY INCORPORATED

STATEMENT BY THE MEMBERS OF THE COUNCIL

The Council has determined that the Society is not a reporting entity and that this special purpose financial report should be prepared in accordance with the accounting policies outlined in Note 1 to the financial statements.

In the opinion of the Council:

1. The financial report as set out on pages 1 to 7 presents a true and fair view of the Society's financial position as at 30 June 2010 and its performance for the year ended on that date.
2. At the date of this statement, there are reasonable grounds to believe that the Society will be able to pay its debts as and when they fall due.

This statement is made in accordance with the resolution of the Council and is signed for and on behalf of the Council by:

Peter Weston

President

Michael Bayly

Treasurer

Dated this 29th day of November 2010

(Footnotes)

* Note: includes some distributions credited to accounts in early July 2010, but related to the 2009/10 financial year.

ASBS *Newsletter* Report 2010

Russell and Peter would like to particularly thank Gael Campbell-Young for her work on the *Newsletter* in the first half of 2010 before moving on to start her PhD. We would also like to thank the all the staff at the Adelaide Herbarium who coordinated the printing and distribution of the last *Newsletter* in Gael's absence.

Peter is working to organise printing and distribution from Perth, though if someone else is willing to take on this role in another city, this would also be welcome. The loss of Gael from the production team has slowed down the production (editing) of the *Newsletter* and coordination of book reviews, and if anyone is interested in taking on these roles, please contact Russell Barrett. This has combined with a number of unexpected commitments by Russell to delay the production of the third issue for the year - for which the editors apologise - and the last two issues will be combined, and compiled as soon as time permits

following the conference. We would like to thank everyone who has made contributions to the *Newsletter* during the year and encourage all the members to submit material for inclusion in future issues.

The editors

November 2010

Call for more editors!

There are positions vacant for someone or several people to assist in the efficient production of the *Newsletter*. Specifically, coordinating book reviews, editorial assistance (proofing articles etc), and printing and distribution of the *Newsletter*. If you are interested in any of these roles, we would be very happy to hear from you.

BHT PARTNERS (AUDIT) PTY LTD

22nd November, 2010

To the members of Australian Systematic Botany Society Inc.

Report on the financial report

We have audited the accompanying financial report, being a special purpose financial report, of the Australian Systematic Botany Society Inc. which comprises the balance sheet as at 30 June, 2010, and the income statement, statement of changes in equity/statement of recognised income and expenses for the year then ended, a summary of significant accounting policies, other explanatory notes and the Committee of Managements declaration.

The responsibility of the Committee of Management for the financial report

The Committee of Management of the entity are responsible for the preparation and fair presentation of the financial report and have determined that the accounting policies described in Note 1 to the financial statements which form part of the financial report are appropriate to meet the financial reporting requirements of the Incorporated Society and are appropriate to meet the needs of the members. The Committee of Management's responsibility also includes establishing and maintaining internal control relevant to the preparation and fair presentation of the financial report that is free from material misstatement, whether due to fraud or error; selecting and applying appropriate accounting policies; and making accounting estimates that are reasonable in the circumstances.

Auditor's responsibility

Our responsibility is to express an opinion on the financial report based on our audit. No opinion is expressed as to whether the accounting policies used, as described in Note 1, are appropriate to meet the needs of the members. We conducted our audit in accordance with Australian auditing standards. These auditing standards require that we comply with relevant ethical requirements relating to audit engagements and plan and perform the audit to obtain reasonable assurance whether the financial report is free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial report. The procedures selected depend on the auditor's judgement, including the assessment of the risks of material misstatement of the financial report, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial report in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by the Committee of Management, as well as evaluating the overall presentation of the financial report.



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Directors: B.J. TAYLOR CPA B.C. HOLLAND FCPA M.L. McALLISTER CPA

01/0310

Life Membership awarded to John Clarkson

At the meeting of ASBS Council held on 30 November 2010, during our conference in Lincoln, New Zealand, John Clarkson was nominated for Life Membership of our Society. This nomination was passed unanimously by Council and the decision announced during the conference dinner at the Melton Estate, Canterbury, after which John gave a passionate and entertaining speech, graciously accepting the award. The Australian Systematic Botany Society now takes great pleasure in announcing formally that John Richard Clarkson has joined Marlies Eichler, David Symon and Robyn Barker as an ASBS Life Member.

Life membership may be conferred by Council on any member who has, in the opinion of the Council, made a significant contribution to the Society, provided that the number of living life members does not exceed ten and that Life Membership not be conferred on more than two people in any one year. Such awards are not made lightly, only four having been made in the 12 years since Marlies Eichler became our first Life Member in 1998.

John Clarkson is almost a founding member of the Australian Systematic Botany Society, having just



New ASBS Life Member, John Clarkson, having a breather on the east ridge of Mt Philistine during the post-conference field trip to Arthurs Pass. Photo: Peter Weston

missed the inaugural General Meeting in Perth on 17 August 1973 but who has been actively involved in the Society's affairs ever since then. John has served our Society in the following official capacities:

President: 2005–2008

Vice President: 2002–2005

Treasurer: 1997–2000

Councillor: 1993–1996

In all, John has spent 12 years on ASBS Council, three of them in the particularly demanding role of Treasurer and three leading our Society as its President. This total period is the longest contribution that any member of our Society has served on Council and is second only to Robyn Barker's total contribution of 13 years in official and *ex officio* roles. John was a particularly diligent Treasurer, ensuring that the Society's investments, most notably the rapidly growing Hansjoerg Eichler Research Fund, earned optimal returns during his term in this position. John was also an active and enthusiastic President, who set in train a number of initiatives, some of which came to fruition during John's term, while others subsequently progressed under succeeding presidents. These included constitutional reform (re-defining the Society's Financial Year to fit in better with its calendar of activities), redevelopment of the ASBS website, moves to develop closer ties with our colleagues in New Zealand, communicating with Federal Government ministers, seeking better support for the Australian Biological Resources Study, and the formation of Taxonomy Australia, an umbrella group of societies and government bodies involved in biological systematics.

Prior to taking any official position on ASBS Council, John also led the organising committee of the highly successful ASBS Symposium held at Kuranda in July 1994, "Origin and Evolution of the Flora of the Monsoon Tropics".

Considering John's sterling contribution to our Society, I think he is an eminently deserving recipient of the award of a Life Membership of the Australian Systematic Botany Society.

Peter Weston
President

ASBS 2010 Conference Report, Lincoln, Canterbury, New Zealand

Peter Weston
President

The 2010 ASBS conference, *Systematic botany across the ditch: links between Australia and New Zealand*, was held at Lincoln, Canterbury, New Zealand, between 29 November and 3 December 2010. Lincoln is a picturesque village situated in prime agricultural land on the Canterbury Plain, 22 km south west of the centre of Christchurch. As well as the university, a number of government and industrial research institutes are located there, including Manaaki Whenua - Landcare Research, New Zealand's foremost environmental research organisation, specialising in sustainable management of land resources and home of several important biological collections, most notably the Allan Herbarium. Many of the 100 or so registered participants were conveniently accommodated in residential colleges on campus, which provided comfortable rooms only a few minutes' walk from the Stewart Lecture Theatre where all spoken presentations were scheduled. The numbers of Australian and New Zealand participants were roughly equal but the conference also attracted botanists from as far as the USA and the Netherlands.

Evidence of the trauma Canterbury had endured less than three months previously, thanks to the Darfield earthquake (7.1 on the Richter Scale), could be plainly seen on both the campus and elsewhere in Lincoln and Christchurch in the form of demolition sites and piles of rubble beside older masonry buildings. One casualty of the earthquake was the demolished Lincoln pub, prompting a hard core of participants to take the bus ride into Christchurch each evening to sample the diverse array of eateries there, while others explored the take-away options in the village and wine and dined *al fresco* in the college grounds. It is a credit to the organising committee, Lincoln University, Landcare Research, and the New Zealand Plant Radiation Network that the conference was able to go ahead as planned, without a hitch, so soon after such a major disruption.

The conference was dedicated to the late Dr Eric



Ilse Breitwieser opens the 2010 ASBS Conference in Lincoln, New Zealand. Photo: Murray Dawson

Godley (1919–2010), a former director of the Botany Division of the Department of Industrial and Scientific Research and one of the father figures of plant systematics in New Zealand. A memorial to Dr Godley, with accounts of his work and influence, was held on the morning of Monday 29 November. The conference officially opened that afternoon in convivial circumstances with a “registration mixer” in the foyer of the Stewart Building, the room where the poster presentations were later displayed. However, we really got down to business at 9.00 on the Tuesday morning, with a warm welcome from the head of the conference organising committee, Ilse Breitwieser, Research Leader of the Plant Biosystematics group at Landcare Research and Director of the Allan Herbarium.

For me, the presentations that followed over the next three days underlined several positive trends in the development of our discipline. The first that should be mentioned, following on from last year's Armidale conference as well as previous ASBS meetings, was the high quality of talks and posters, most of which were clearly and professionally presented, stayed within the time constraints, and were supported by excellent visual aids. My perception is that the younger generation of scientists feels more comfortable and is more skilful presenting the results of their research in public than my generation was at their age. I think that the much maligned Powerpoint and other graphical software packages are at least partly responsible for the improvement in



Ourisia calycina is one of the spectacular alpine plants that was seen flowering prolifically on the post-conference field trip to Arthurs Pass. Photo: Peter Weston

standards of presentation by providing easily used tools for assembling clear slide shows. No-one is forced to use any of the annoyingly distracting “bells and whistles” that Powerpoint provides (e.g. slide entry with double somersault and pike) and thankfully none of the presenters at Lincoln were tempted to do so. The other factor that I think has made scientists of my childrens’ generation better presenters of their work is the greater emphasis that has been given, over at least the past two decades, to spoken communication in the education system, from “show and tell” sessions in pre-school to increased requirements for students to present seminars as part of their undergraduate and postgraduate coursework. Competition for the PY Ladiges Award for best oral presentation by a student was intense, with Caroline Puente-Lelievre’s excellent talk entitled *Crossing the ditch? Historical biogeography of the trans-Tasman Styphelioideae* (Styphelioideae, Ericaceae) winning narrowly ahead of several other close competitors. Austin Brown showed that scientists of my generation are also capable of using the latest tools to produce polished displays of their work by winning the student’s prize for best poster, from a small but classy field, with his *Morphological comparisons in Lachnagrostis across the ditch*. ASBS is fortunate that CSIRO Publishing has agreed to provide these prizes for another four years.

Another continuing trend that was evident at Lincoln was the dramatically increased technological sophistication and diversity of both data-gathering and analytical tools now

being applied to problems in plant systematics. Analyses of DNA sequence data gathered using the “conventional” Sanger sequencing technique are now commonplace and were presented in 20 talks and a poster. However, a diverse assortment of other sources of molecular and cytological data was also on display, including chloroplast and nuclear microsatellites, amplified fragment length polymorphisms, flow cytometry for measuring genome size, fluorescent *in situ* hybridization, and “next generation” DNA sequencing.

Analytical methods have also become markedly more sophisticated in the past decade. Bayesian phylogenetic analysis has been added to our standard toolkit in that time and applications of a number of other statistical methods, including molecular dating, Bayesian clustering, bioclimatic modelling and analysis of phylogenetic associations were also presented in some talks and posters. The days when systematists could get away with appealing to their own authority to make untested or completely unjustified assertions of taxonomic relationships or species circumscriptions at conferences like this are now well behind us.

Another welcome phenomenon is the increased number of paleontological presentations that were given at the Lincoln conference. Six talks were given that presented novel paleontological evidence, in contrast to Armidale a year ago, at which there were none. These tackled a range of biogeographic and phylogenetic problems from the question of whether New Zealand had lost all of its terrestrial biota during the Oligocene marine incursion (answer: unlikely) to the assembly of the Australian rainforest flora, to that of calibrating molecular dating analyses of the Myrtaceae with the geological timescale. The cause of some of this growth might just be the conference’s location: for some time New Zealand seems to have supported paleobotanical research more handsomely than Australia has, through its universities, museums and Institute for Geological and Nuclear Research. I found all of their talks fascinating and hoped that the New Zealand paleobotanists were sufficiently impressed with this meeting to be motivated to attend future ASBS conferences.

A trend that I think was evident at the Lincoln conference is a movement downwards in the

taxonomic hierarchy of the scope of studies in plant systematics. 28 presentations reported the results of empirical systematic analyses and of these, none dealt with problems above the family level, two investigated relationships across whole families, four analysed relationships at the tribal or subtribal level, nine looked at interspecific relationships within genera, six focused on resolving the taxonomy of species complexes, two concentrated on infraspecific variation and five analysed relationships at a variety of levels from populations to genera. If our focus really is shifting downwards taxonomically, several motivating factors spring to mind. Resolving higher level phylogenetic relationships above generic and family levels became the new “big picture” when the tools of molecular systematics first became widely available back in the early 1990’s. Now that we have a fairly stable classification above family level in APG III and at least the results of preliminary phylogenetic analyses of intergeneric relationships within most families, attention seems now to be switching back towards the species level and from macroevolutionary to microevolutionary processes. The migration of powerful new analytical methods, such as Bayesian clustering, from population genetics into mainstream plant systematics is also an incentive to look more closely at problems around the species level.

A particularly encouraging development is the incorporation of multiple sources of evidence and

analytical procedures in what would otherwise be called “traditional” revisionary taxonomic studies. The ongoing revision of *Plantago* in New Zealand exemplifies this for me, relying as it does on the combined results of Heidi Meudt’s morphological studies, chromosome counts, phylogenetic analyses of DNA sequences and AFLP’s, and molecular dating as well as Brian Murray’s measurements of genome sizes and Charles Wong’s fluorescent *in situ* hybridizations of chromosomes. Phylogeographic studies will presumably be added to this rich array of information in due course.

Of course, one of the hazards of the acquisition of powerful new methods is their potential misuse. The introductory presentation of the conference, *Taking refuge: haplotypes and plant biogeography*, by Matt McGlone, drew attention to potential misuse of the concept of glacial refugia in phylogeographic analyses of chloroplast haplotypes. Matt showed that the kinds of patterns that have frequently been adduced as evidence of refugia, mostly in studies rooted in the northern hemisphere, can be simulated by invoking stochastic processes that have nothing to do with glacial cycles or any other kind of large-scale disturbance. He lamented that some phylogeographic studies, although armed with the latest, extraordinarily powerful molecular techniques, end up as exercises in old-fashioned story-telling.



ASBS members having lunch at a “wee tarn” on the east ridge of Mt Philistine during the post-conference field trip to Arthurs Pass. Photo: Peter Weston



Andre Messina, Jessie Prebble and Mike Bayly botanizing on the east ridge of Mt Philistine, during the post-conference field trip to Arthurs Pass, looking across the upper Otira valley towards Mt Rolleston. Photo: Peter Weston

Other talks of a general nature included the other two keynote addresses as well as a couple of talks on hybridization, one on the Global Compositae Checklist and associated online tools for daisy identification. We even had one on botanical Latin for beginners. Of these, my favourite was Phil Garnock-Jones' keynote address, entitled *How to look, again, at hebe*. Phil showed how our knowledge of the systematics of *Hebe* has improved during his career, as a result not only of new empirical work but also from methodological and conceptual advances. He finished by briefly but eloquently re-iterating arguments for phylogenetic classification, against the idea that higher level classifications should include both clades and non-monophyletic grades.

Phil's talk, and the conference in general, reminded me of just how dramatically our ability to understand the evolutionary history of plant groups has improved during my career. Thanks to a combination of modern molecular biological techniques and new methods of analysis, as well as older methods such as descriptive morphology, common garden experiments, morphometrics, developmental morphology and paleontology, plant systematists now have tools at their disposal

for reconstructing patterns of geographic and ecological variation and phylogenetic relationships that are more powerful than anything we would have dreamt of three decades ago. Perhaps the take-home message from the Lincoln conference is that we are now living in a golden age of plant systematics and we should make the most of it as long as plant diversity is still there to be studied. Readers who were unable to attend but would like a more detailed idea of the presentations can download a pdf file of the conference program and abstracts from <http://www.landcareresearch.co.nz/news/conferences/asbs2010/documents/ASBS2010Book.pdf>

The social program included a conference dinner at the Melton Estate, a restaurant/winery about a 20 minute drive north west of Lincoln, where participants were able to sample the local wines and food and enjoy good company in a relaxing environment. It was here that I announced ASBS Council's decision to award John Clarkson Life Membership of our Society (reported in more detail in a separate article in this issue), which was greeted by sustained applause. John accepted this award with a thoughtful and thought-provoking impromptu speech, which underscored the

affection and commitment that he has for ASBS.

On the Friday following the conference, a field trip was scheduled to Arthurs Pass, the high point on one of the main east-west routes that crosses the Southern Alps. A bus load of participants got out of bed at the crack of dawn and headed west across the Canterbury Plain under a grim, low, leaden sky. Australian members of the party expressed incredulity in response to their hosts' cheery optimism about the weather forecast for their destination. But as we climbed Porters Pass we emerged from the cloud to be confronted by a blue, cloudless sky and a basin rimmed with snow-capped peaks ahead. "Ooooh, aaaah" was the general reaction.

Once at Arthurs Pass we split into several groups, some heading off to Bealey Chasm to walk with David Glenny in the *Nothofagus* forest, others to look at the subalpine vegetation along the Dobson Nature Walk. An intrepid group of youngsters and old-age denialists like me, followed a mountain

goat disguised as Phil Novis up the eastern ridge of Mount Philistine to look at spectacular mountain views and alpine plants. Numerous species were in full flower, ranging from the fantastic "Mount Cook Lily", *Ranunculus lyallii*, and the equally impressive "Mountain Foxglove", *Ourisia calycina*, to the viciously spiny "Fierce Spaniards", *Aciphylla* spp., the rare and beautiful *Ranunculus sericophyllus*, the familiar looking *Caladenia lyallii*, the almost invisible but fascinating *Caltha obtusa* and a bewildering array of herbaceous and woody *Veronica* species. A tired but happy group of botanists headed back to Christchurch and Lincoln at the end of the day to say their fond farewells and head home.

The organising committee of Ilse Breitwieser, Murray Dawson, David Glenny, Peter Heenan, Phil Novis and Rob Smissen deserve our profuse thanks and congratulations for organising such a smooth-running, fascinating and enjoyable conference in such a pleasant location as Lincoln University.

Upper Otira Valley and upwards: one of the walking options for the 2010 ASBS post-conference field trip

Adele Gibbs

School of Environmental and Rural Science,
University of New England

After three days of wonderful talks about the New Zealand flora, the field trip was a great opportunity to see some of the interesting plants and the dramatic landscape.

The field trip associated with this conference was to Arthur's Pass on the South Island, and there were a number of walking tracks that showcased different habitats and allowed people to explore at their own pace. The climb towards Mt Philistine from the Upper Otira Valley footbridge was recommended as 'for the fit', and boy, were we in for a workout. Those of us that choose this route assembled in the bus drop-off, Temple Basin car park. We had our first sighting of New Zealand's wildlife with a Kea (large parrot) wandering

around the car park looking for something interesting to eat (rubber car tyres perhaps?). Our very fit leader Phil Novis, who also runs ultra-marathons, briefed us on the intended route. We would not be going to the summit of Mt Philistine, but we would see some really nice views and some interesting high altitude plants on the upper slopes. We followed the Dobson Nature Walk and up the Upper Otira Valley to the footbridge



Ranunculus sericophyllus on the upper slopes of Mt Philistine. Photo: Adele Gibbs

over the Otira River. The pace was quite brisk and didn't allow very much time to photograph and examine interesting plants along the way, but we did see lots of Mt Cook *Ranunculus* (*Ranunculus lyallii*) in full flower. Over the bridge we had a brief stop for some food and refreshment and to get the group together again. Mike Bayly used the time productively to photograph another Hebe, or should that be *Veronica subalpina* to add to his collection? There was a small patch of persistent snow nearby, and I heard later on the return bus that Dale Dixon had reached this patch to touch snow for the first time in his life.

The next section of the track was across scree slopes made up of very loose rocks, scrambling over large boulders, and making our way through large snow patches. It was very easy to spot the New Zealanders in the group; they had shorts on, while the rest of us were sensibly dressed in long trousers. Another brief stop to allow the group to reform and an opportunity to take photos also gave us a chance to see three Keas flying around the upper slopes. As we were heading upwards, Peter Weston tended to always be at the back, taking as many photos as he could, but there was no chance of us not seeing him as he was wearing a fluoro yellow balaclava as a beanie.

The lunch stop was a lovely spot by a 'wee' tarn (small lake feed from ice melt water) with views to Mt Rolleston. We were able to glimpse the three peaks that make up the mountain when the clouds briefly parted. There was a large drift of snow near the tarn, so John Clarkson, Paul Musili and Wayne Gebert set about making a snowman. This was John's first snowman since he was a small boy, as they don't get too much snow in Mareeba. And it was Paul's first ever snowman, because he too hadn't touched snow before the field trip, as he is PhD student in Australia from Kenya.



Vegetation along the Dobson Nature walk with *Ranunculus lyallii* in the foreground. Photo: Adele Gibbs



Lunch spot beside a 'wee' tarn. No-one wanted to be part of a synchronised swimming team this year. Photo: Adele Gibbs

After lunch a small group headed upwards through more snow and boulders to see some yellow-flowered *Ranunculus sericophyllus*. Further up we came to a frozen tarn that had some snow algae forming light pink patches near the centre. It was frozen enough that we could walk almost to the centre. This was the furthest point of our trip and getting late in the afternoon, so to ensure a hasty return to the lunch tarn, we used our shoes and bottoms to ski down the snow fields back to the tarn. Everyone had their own way of skiing, but the most popular method was to try and stay upright as long as possible, then drop to your bottom to continue sliding down and remember stop before getting too close to the rocks on the

perimeter.

Once down in the valley it was a brisk walk back to the main road to meet the bus. Our group was the last to meet up with the bus, and after extra running up and down the road, Phil managed to get us all safely back on the bus. There may have been a few scratches and blisters by the end of the day and some very sore legs the following day, but everyone on all the walking tracks had wonderful experience seeing the amazing landscape, interesting plants and sharing it with other botanists from both sides 'of the ditch'. On behalf of everyone that participated, I would like to thank the organisers of the field trip for a wonderful day at Arthur's Pass.

Obituaries

Ken Hill

6 August 1948 – 4 August 2010

At midday on Wednesday the 11th August 2010, family, friends and past and present staff of the Royal Botanic Gardens, Sydney gathered on the Eucalypt Lawn at Frenchs Forest Bushland Cemetery to say goodbye to Ken Hill. The botanical community lost a well respected colleague when Ken passed away at home on the 4th August after ten years of living with Multiple System Atrophy, a rare, progressively degenerative, neurological condition.

Ken was born in Armidale, NSW and grew up on Redbank farm, Guyra. He was the eldest of two children. As a child, his mother Nola described him as being a collector and classifier, a voracious reader and interested in plants from a young age. He attended Guyra Central School, Armidale High School and the University of New England where he was awarded a B.Sc. (Hons.), and completed his M.Sc., majoring in Geology. During his masters degree, his interest in plants led him to enrol in additional university courses to graduate level in botany, plant ecology and plant physiology.

Ken spent the majority of his botanical career at the Royal Botanic Gardens, Sydney beginning in 1983, after working previously as an Exploration Geologist in northern Australia and Sudan. His first position at the National Herbarium of New

South Wales (NSW) was as a Technical Officer, working with Lawrie Johnson and Don Blaxell on the revision of the eucalypts. He was also employed to write the *Flora of Australia* treatment on the Gymnosperms during this period. In 1986 Ken gained a permanent botanist position and continued to work with Lawrie Johnson on the eucalypt revision. His work on cycads continued



Ken Hill, 19 March 1993. Photo: Jaime Plaza, Royal Botanic Gardens & Domain Trust.



Ken Hill with *Dendrobium discolor* on *Cycas media* ssp. *media*, south of Proserpine. Queensland Cycad Population Study Field Trip, 3 August 2001. Photo: Leonie Stanberg

on from the flora work. From mid 1997 to mid 1998 Ken was seconded to the Royal Botanic Gardens Kew, London as the Australian Botanical Liaison Officer. It was during this period that he developed the internationally acclaimed web based 'Cycad Pages' which has maintained a reputation as the most authoritative source of information on cycads. From 1999 to 2004, Ken held the position of Senior Research Scientist.

During his relatively short botanical career, Ken demonstrated a broad range of skills, knowledge and interests which he drew upon to achieve many exceptional things. He published extensively on the systematics, ecology and biogeography of eucalypts and cycads. He was also involved in the identification, naming, description and



Ken Hill with *Cycas xipholepis*–*C. tuckeri* intergrade, south of Coen, Cape York, 7 July 1994. Photo: Leonie Stanberg

subsequent studies of the Wollemi Pine. He presented symposium papers on eucalypt, cycad and conifer taxonomy, ecology and biogeography and attended and actively participated in all of the international cycad conferences held from 1990 to 2002.

He became an internationally well respected botanist whose calibre, value and application of research work has spoken for itself, as evidenced by its acceptance and use by the botanical community at large. He played an international ambassadorial role for the Royal Botanic Gardens Sydney with his cycad work and also with his initiating role in the uptake and development of bioinformatics at RBG Sydney. Combining his well developed computing skills with an impressive ability to be original and innovative, he took the lead in delivering a number of electronic products that have greatly benefited the staff of RBG Sydney as well as the botanical and general community. Most notable among these are The Cycad Pages (later jointly developed with Dennis Stevenson of The New York Botanical Garden), NSWdata (the first specimen database for NSW), NSW FloraOnline, Type Specimen Catalogue, Eucalink, WattleWeb and Online Census of NSW (now developed into PlantNET <http://plantnet.rbgsyd.nsw.gov.au/>).



Ken Hill and Leonie Stanberg in Ken's office in his retirement, National Herbarium of NSW, Royal Botanic Garden, Sydney, 10 May 2006. Photo: Anders Lindstrom.

As the last in a continuous line of resident eucalypt specialists at NSW, Ken continued the long tradition of expertise in eucalypts that had been maintained for over a century. He travelled widely in Australia, studying eucalypts and cycads and in latter years in the botanically very poorly known Asia/Pacific region in pursuit of *Cycas*. Ken's extensive fieldwork, combined with his skill and expertise in the field, enabled the discovery of many new species, solved numerous problems of identification and nomenclature and significantly expanded our knowledge of these two groups. His collaborative work in Asia enabled local botanists there to undertake study not otherwise possible and enhanced herbarium cycad collections in Asia and worldwide. He was a long standing member of the IUCN/SSS Cycad Specialist Group and the IUCN Conifer Specialist Group. Ken played a key role in many of the IUCN Red List assessments of Asian and Australian cycads. His fieldwork and understanding of the species, their relationships and ecology was an essential prerequisite for addressing conservation issues and developing conservation strategies. Ken will be especially remembered for significantly contributing to a better understanding of the taxonomy, systematics, evolution and conservation of *Cycas*, a genus with a very long history of taxonomic and systematic confusion, and also for his work with Lawrie Johnson on the eucalypts, in particular their recognition of the new genus *Corymbia*.



Ken Hill at his desk in the herbarium at Kew Botanic Gardens during his time as ABLO 1997–1998.



Ken Hill en route to collect *Cycas bifida*, Son Duong, Vietnam, 15 January 2000.

On the 13th August 2004, after twenty one years at the National Herbarium of NSW, Ken made the difficult decision to take early retirement due to his deteriorating health. He had been living with symptoms of an undiagnosable neurological condition which had been primarily affecting his balance, co-ordination and speech since 2001. In 2005 he was given the 'diagnosis' of Multiple System Atrophy. In his retirement, Ken was an Honorary Research Associate of NSW and while his health still allowed, he continued to visit the Herbarium a few days a week. During these visits he assisted with the identification of eucalypts and cycads and the maintenance and development of PlantNET and NSW FloraOnline. Despite failing health, Ken also continued some aspects of his research work, primarily resulting in a number of publications on *Cycas*. He also continued to maintain and develop The Cycad Pages and provide advice on cycad taxonomy, ecology and conservation. The final goal of his cycad study project was to be a monograph of *Cycas*. Sadly, he did not live to see this work published.

Ken was a very practical person and had a commonsense approach to work and life. He was also a quiet and modest achiever. His expert advice and broad-ranging knowledge was greatly valued and given freely to those who sought his help. This generosity continued in his retirement. He had a friendly, approachable manner and a good sense of humour. His personality, along with his generosity of knowledge, led to an active association with professional and amateur



Ken Hill holding a cone of *Macrozamia montana*, on the Armidale to Kempsey road, Northern Tablelands, NSW, March 1995. Photo: Leonie Stanberg.

botanists, horticulturalists and collectors. He had an enquiring critical intellect, excellent memory and a great ability to make detailed observations, important traits for a systematist. His mind was still as intellectually brilliant as ever when he died and he willed his brain for research into his condition, with the hope of benefiting fellow sufferers.

Ken's interests, like his abilities, were wide and varied – plants, birds, music, movies, stamps, genealogy, technology, motorcycles, things mechanical and travel. These, along with field trips to remote and out of the way places, made for a full and interesting life. He was a talented musician and played guitar in a band in his university days. He had a great talent in things mechanical and was able to design, make, maintain and repair all manner of gadgets and machines. He had life-long love of motorcycles and riding. He also built extensions and modifications to his home in Roseville. Ken was a keen gardener, grower and collector of a diverse range of plants, including cycads, cacti, succulents, orchids, bromeliads, bulbs and sub-tropical plants. In his retirement, Ken planned to move to his property at Somersby, about 60 km north of Sydney, where he was working on drought and fire tolerant garden plantings and techniques

compatible with the Australian environment. Due to his declining health, his property was sold, with many of his plants donated to the Hunter Region Botanic Gardens.

Ken's quiet, knowledgeable and easy going presence continues to be missed by his botanical family at the Herbarium and throughout the wider botanical community. Our condolences go to his wife Lesley Greenwood, daughters Zoe Falster and Phoebe Hill, his mother Nola and brother Don.

http://www.rbgsyd.nsw.gov.au/about_us/our_people/former_staff/ken_hill

Leonie Stanberg
National Herbarium of New South Wales,
Sydney, Australia.



Pauline Fairall (Bond)

28 October 1917 – 19 June 2010

A Botanist of Two Continents

Pauline Bond was born in King William Town, South Africa on the 28th of October 1917. She obtained her Bachelour of Science from Rhodes University in 1937, and was the Solly Scholar at Kirstenbosch Herbarium in 1939, under the then Curator Robert Compton. During the same period Pauline was an athlete of international quality but an injury and the Second World War curtailed this career. Pauline was a Herbarium Assistant at Kirstenbosch from 1940 to 1945. During this time she married Arthur Fairall and they had three children, Peta, Robert and Patricia. In 1946 she gained her Honours degree from the University of South Africa. From 1950 to 1960 she worked part-time as Herbarium Assistant at Kirstenbosch.

In 1962 the family came to Western Australia when Arthur Fairall became the founding Superintendent of the Western Australian Botanic Gardens at Kings Park. Pauline became both a paid and voluntary curator of Kings Park and Botanic Garden Herbarium (KPBG), from 1962 until 1973. While at Kings Park, Arthur and Pauline collected extensively in Western Australia, especially the Western deserts in 1966. These collections are mainly in PERTH under AR Fairall (1240 collections) and in KPBG.

Pauline also provided the botanical descriptions for Arthur's landmark book on Western Australian Plants in Cultivation (Fairall 1970). This was the first book on this subject and was published after Arthur's sudden death in the same year. She also identified many plants for John Beard when he was undertaking his mapping of the State, material for a catalogue of native plants of Kings Park Bushland and prepared the second edition of the Descriptive Catalogue of Western Australian Plants (Beard 1970).

Pauline returned to South Africa and from 1973 to 1984 she worked as a Botanist at the Compton Herbarium at Kirstenbosch Botanical Gardens and helped care for an elderly aunt. During this period she co-authored under her maiden name



Pauline Fairall at Kings Park & Botanic Garden. Photo: BGPA.

(Bond) the descriptive catalogue of the Cape Flora (Bond and Goldblatt, 1984). She also revised the emblematic Asteraceae genus *Oldenburgia* (Bond, 1987). Pauline has approximately 1670 collections in NBG, from her working career in South Africa.

Pauline returned to Perth in 1984 and continued working part time and in a voluntary capacity at KPBG until 2001. Pauline was a very active member of the Western Australian Wildflower Society and participated in many field trips and the Bushland Plant Survey Program from its inception both in the field and herbarium.

When her prodigious memory began to fail her in the early 2000s she moved to Atherton to be closer to her daughter Patricia. In Atherton she continued with some volunteering with a local plants group and her church. Over these years her memory declined and she became increasingly frail and died there on the 19th June 2010.

Pauline had 2 species from South Africa, named after her by her botanical mentor Robert Compton: *Erica bondiae* and *Thoracosperma bondiae*.

For those of us who knew Pauline she was noted for her boundless energy, modesty, commitment to work, quiet but deep religious convictions and meticulous thorough approach to her botanical

work. Pauline always put assisting others before herself and in this made many often unrecognized contributions to the completion of many botanical studies.

Publications

Beard, J.S. 1970. *A Descriptive Catalogue of Western Australian Plants*, 2nd Edn, Surrey Beatty and Sons, NSW.

Bond, P. and Goldblatt, P. 1984. Plants of the Cape Flora. *Journal of South African Botany, Supplementary Volume 13*. Cape Town: Trustees of the National Botanic Gardens of South Africa.

Bond, P. 1987. A revision of *Oldenburgia*. *South African Journal of Botany* 53: 493–500.

Sources of Information

Fairall, A.R. 1970. *Western Australian Native Plants in Cultivation*. Pergamon Press, Sydney.

Gunn, M. and Codd, L.E.W. 1981. *Botanical exploration in South Africa – an illustrated history*. 400 pages (web sourced)

Web sources

www.calflora.net/southafricapplants.jstor.org/person/bm000044748

Greg and Bronwen Keighery
Department of Environment and Conservation
and Office of the Environmental Protection
Authority, WA.

Death notices

Marlies Eichler

Marlies Eichler, a well known and loved member of the society, died on 1 January 2011. Her passing was very brief and was followed by a private funeral. She was an honorary life member of the ASBS and made an enormous contribution to botany through her passionate support of the field. She will be much missed and a more detailed obituary will be published in the next edition of the *Newsletter*.

Dr John Beard

Dr John Beard, who was Director of Kings Park and Botanic Garden from 1961–1970, died peacefully on Thursday 17 February 2011. Dr Beard will be remembered for his many contributions to Kings Park and especially the establishment of the Botanic Garden that was formally opened in October 1965. Dr Beard was 95 and is survived by his wife Pamela and three children, four grandchildren and three great grandchildren.

Conference notices

IBC Student Assistance Available

ASBS is sponsoring the International Botanical Congress (IBC) in Melbourne in July 2011. Student assistance is available for this conference and ASBS student members attending the IBC are eligible to apply. The amount available is based on the early-bird student registration for the conference. To be eligible for assistance, student members of the Society must present either a talk or poster at the conference.

If you wish to apply for student assistance for the IBC please complete an application form (attached or available from the ASBS website) and submit it to the Secretary by the 31st of May 2011.

DNA Barcoding Conference in Adelaide Nov/Dec 2011

The Consortium for the Barcode of Life and the University of Adelaide have announced that the Fourth International Barcode of Life conference will be held in Adelaide, November 28 to December 3, 2011. This will be a significant event. Whatever your views on the value of DNA barcoding, it is having a impact on the practice and philosophy of systematics. A skeletal website has been set up at www.dnabarcodes2011.org. Interested persons should keep an eye on this for updates as planning progresses.



Australian Systematic Botany Society Incorporated

PAYMENT OF NEW SUBSCRIPTION

Subscriptions for ASBS membership are due on 1 January each year. The ASBS Newsletter will not be sent to unfinancial members.

Subscription rates for 2011, which include receipt of the *Australian Systematic Botany Society Newsletter*, are:

Ordinary/Institutional members (*Full fee*) Aus\$ 45.00
 Bona fide Full-time student / Retired / Unemployed members (*Concessional fee*) Aus\$ 25.00 (Fill in "Occupation" below)

Hansjörg Eichler Research Fund: In addition, your *tax-deductible* contribution to this fund would be most welcome.

Please return this form with payment. Your cheque should be made payable to *Australian Systematic Botany Society Inc.* Address corrections and/or membership correspondence can also be sent to the Councillor (Memberships) at the address below.

Title Preferred given name Initials Family name Postcode

Address

Email

Occupation

➤ 2011 subscription	\$.00
➤ Arrears (for year/s)	\$.00
➤ Voluntary donation to Eichler Research Fund	\$.00
TOTAL	\$.00

Please forward to:

Pina Milne
 Councillor (Memberships) ASBS Inc.
 Royal Botanic Gardens
 Private Bag 2000, Birdwood Avenue
 South Yarra, VIC 3141, AUSTRALIA
 Enquiries: Pina.Milne@rbg.vic.gov.au



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Australian Systematic Botany Society Incorporated

(incorporated under the Associations Incorporation Act 1991)

NOMINATION FORM ELECTION OF COUNCIL MEMBERS FOR 2011-2012

- Note:**
- For limitations on and procedures for Nomination and Election to Council refer to Rules 12 and 13 of the Rules of the Society.
 - Only financial members, or those accorded that status by the Rules, are eligible to stand for Council or to make nominations.
 - A separate nomination form or facsimile of the same is required for each candidate or, where a member is nominated for more than one position, each position.
 - No member of Council can simultaneously hold more than one of the six positions elected by members to Council (Rule 12(4)).

We, the undersigned members of the Society, nominate (Full Name)

for : **President** **Vice-President** **Secretary** **Treasurer** **Councillor**.
(Please delete the offices that do not apply to this nomination)

First Nominator	Second Nominator
Member's Name:	Member's Name:
Signature	Signature:

I hereby consent to my nomination for the position of

Signature **Date**

Nominations must be in the hands of the Secretary by Friday, 27th May 2011 at the following address:

**Dr Gillian Brown
Secretary ASBS
School of Botany
The University of Melbourne
VICTORIA 3010**

For further information contact the Secretary: Ph. (03) 8344 5040, Fax (03) 9347 5460, Email: browningk@unimelb.edu.au

Notice of Council Nominations

Nominations for 2011–2012 ASBS Council

Nominations for all positions on the 2011–2012 Council are now called.

Nomination forms have been included on page 30 this Newsletter.

Nominations must be in the hands of the Secretary by 27th May 2011.

Notice of AGM

Annual General Meeting 2011

The Annual General Meeting of the Australian Systematic Botany Society will be held in Melbourne, during the IBC Conference.

Venue: TBC, Melbourne, Australia

Time: Wednesday 27th July 2011, 1.30pm.

Hansjorg Eichler Research Fund

September 2010 Round

This round we had five applications, which showed a considerable level of skill and enthusiasm. Two successful applicants were awarded \$2,000 each for the following proposals:

James Ingham (The University of Queensland, Queensland)

Multi-locus species delimitation of the *Macrozamia plurinervia* complex (Zamiaceae)

Caroline Puente-Lelièvre (Australian Tropical Herbarium, Queensland)

Phylogenetic assessment of pollen morphology within the *Styphelia-Astroloma* clade (Stypheliaceae, Styphelioideae, Ericaceae)

ABRS Report

Staffing

We welcome the new director of ABRS, Michael Preece, who comes to us from the Department of Climate Change, having previously worked in the federal Environment portfolio for many years.

Jo Harding, Manager of the Bush Blitz project, has a new baby called Logan, and is on maternity leave until May 2011. We are recruiting her temporary replacement and hope to have someone in January.

Raelee Chapman, our Grants and Business Officer, also left us in November to take up a position in Sydney, Sam Cocks and Gail Kenmuir will share responsibility for this work until a replacement staff member is recruited.

Richard Park is our new database manager until June 2011, filling in for Robyn Lawrence who is working for the Atlas of Living Australia project.

ABRS National Taxonomy Research Student Travel Bursary Program

Are you going to the International Botanical Congress (IBC) next year? ABRS offers small grants to Honours, Masters and Ph.D. students in Australian institutions who wish to travel to national or international conferences relevant to both the student's research program in taxonomy or systematics and ABRS Research Priorities. A maximum of \$1,000 is available for an international conference and \$500 for travel within Australia. Applicants must be enrolled at an Australian institution in post-graduate studies in taxonomy or systematics.

Evidence of registration at the Conference and evidence that a poster or oral paper presentation

was submitted to the organisers of the conference must be provided to ABRS. This evidence can be provided upon submission of the application or must be provided to ABRS with submission of the final report, if it has not been provided at an earlier date.

The XVIII International Botanical Congress is being held in Melbourne in July 2011. ABRS encourages eligible students who will be attending the Congress to apply for an ABRS Student Travel Bursary.

Further information about the bursaries is available at <http://www.environment.gov.au/biodiversity/abrs/funding-and-research/bursaries/index.html>

The website for the IBC is: <http://www.abc2011.com/Default.htm>

ABRS Advisory Committee

The ABRS Advisory Committee met in Canberra from the 6th to the 8th of December, to consider applications for the Bush Blitz and National Taxonomy Research Grants. Recommendations are with the Minister for approval and successful applicants will be contacted in the New Year.

Annette Wilson
Editor, *Flora of Australia*
December 2010

Articles

Notes on *Glossocardia bidens* (Retz.) Veldkamp (Asteraceae: Coreopsideae)

A.E. Orchard
c/o Australian Biological Resources Study,
GPO Box 787, Canberra ACT 2601,
Australia

Glossocardia Cass. is a genus of 12 species occurring from Africa and tropical Asia to Australia and the Pacific. With *Trioncinia* (F.Muell.) Veldkamp and *Diodontium* F.Muell. it forms an 'Australian group' within subtribe *Chrysanthellinae*, a subtribe otherwise largely confined to central and South America (Panero 2007). It was the subject of a monograph by Veldkamp & Kreffer (1991), with an additional species added by Veldkamp (1992), and their treatment of the genus has been followed by subsequent authors. In Australia three species are recognised: *G. refracta* Veldkamp, *G. bidens* (Retz.) Veldkamp and *G. orthochaeta* (F.Muell.) Veldkamp. Until 1991 *G. bidens* and *G. orthochaeta* had been treated as species of *Glossogyne* Cass., but Veldkamp & Kreffer (1991) reduced that genus to a synonym of *Glossocardia*. There have been few detailed publications on this genus in Australia, the most recent being that by Pollock (2002) reporting the rediscovery of the rare *G. orthochaeta* in Queensland. In writing an account of these taxa for *Flora of Australia*, I found that a number of minor points concerning

G. bidens required clarification. As there is insufficient space in the *Flora* treatment to make extensive commentary, the following notes are presented here as a precursor. Note that in the description below, the narrow basal portion of the leaf, considered by some to be a petiole, is treated as part of the lamina by analogy with related taxa.

Glossocardia bidens (Retz.) Veldkamp

Perennial herb; taproot ± woody. Branches few to numerous, annual from the caudex, erect, 10–50 cm tall, often almost leafless. Leaves mainly basal, alternate, sessile, with base of leaf slightly broadened laterally; "petioles" 10–50 mm long. Lamina lanceolate to triangular, pinnatipartite, 10–80 mm long, (2–) 5–30 mm wide, green adaxially, glaucous abaxially; lobes narrow, acute, entire to pinnatipartite (rarely, bipinnatipartite), with 1 central nerve and thick densely branched lateral veins; cauline leaves few, smaller, simple to pinnatifid, subsessile. Capitula few, radiate, 5–8 mm diam. Receptacle hemispherical. Involucral bracts narrowly lanceolate, ± equal, 3–4 mm long, 1.0–1.5 mm wide, striate; paleae slightly longer and narrower than innermost involucral bracts. Ray florets female, 5–12; ligules 3-lobed, 2–4 mm long, yellow, with 7 nerves. Disc florets bisexual, 7–12, 4-lobed, yellow, 2.5–3 mm long. Achenes linear-lanceolate, straight, 5–10 mm long, 1 mm wide, glabrous, several-ribbed, dark brown; awns straight, ± erect or diverging, 1–5 mm long, retrorsely barbed.

The species has an extensive synonymy, of which the following covers only Australian applications:

Glossocardia bidens (Retz.) Veldkamp, in J.F.Veldkamp & L.A.Kreffer, *Blumea* 35: 468–469 (1991)

Zinnia bidens Retz., *Obs. Bot.* 5 (1788); *Glossogyne bidens* (Retz.) Alston, in H.Trimen, *Handb. Fl. Ceylon*, Suppl. 6, 168 (1931); *Neuractis bidens* (Retz.) Veldkamp ex Mesfin, *Kew Bull.* 45: 144 (1990). T: Bengal, India, *Koenig s.n.*; holo: LD, *n.v.*, fide J.F.Veldkamp & L.A.Kreffer, *Blumea* 35: 468 (1991).

Bidens tenuifolia Labill., *Sert. Austro-Caledon.* 44, fig. 45 (1825); *Glossogyne tenuifolia* (Labill.) Cass. ex Less., *Syn. Gen. Compos.* 212 (1832). T: New Caledonia, *Labillardiere s.n.*; holo: FI; iso: P(332971, ex herb. Webb), *n.v.*

Coreopsis tannensis Forst. ex Spreng., *Syst. Veg.* 3: 614 (1826); *Glossogyne tannensis* (Spreng.) Garn.-Jones, *Taxon* 35: 125 (1986). T: [New Hebrides]. Tanna Is., *Forster s.n.*; lecto: Nova Caledonia, *Forster s.n.*, K; isolecto: BM, *n.v.*, fide P.J.Garnock-Jones, *Taxon* 35: 125 (1986).

Glossogyne pedunculosa DC., *Prodr.* 5: 632 (1836). T: in Novae-Hollandiae parte tropica in collibus rupestribus ad Caput Cleveland legit cl. Cunningham; holo: G, *n.v.*, probable iso: Cleveland Bay, 1819, A.Cunningham 261, BM!

Glossogyne bidentidea F.Muell., *Linnaea* 25: 402 (1852). T: In plagis sterilibus subsalsis sinum Spenceri inter et partem borealem montium Flindersii; holo: In plagis sterilioribus subsalsis inter primum Spencers Gulf & partem borealem montium Flinders ranges, Octobris [18]47, [F.Mueller s.n.] MEL2160358!

Glossogyne tenuifolia var. *divaricata* Domin, *Biblioth. Bot.* 22(89): 1236 (1930). T: Queensland: Sandsteinhügel der Dividing Range bei Jericho (*Domin* III.1910); holo: Queensland, in collibus

arenaceis Dividing Range dictis apud opp. Jericho, III[March].1910, *K.Domin s.n.*, PRC, *n.v.*

Glossocardia bidens (Retz.) Veldkamp is a pan-tropical species, found almost throughout the range of the genus, from Africa to India, E & SE Asia, New Guinea, New Caledonia & the Pacific as far E as the Philippines and Fiji. In Australia it has been variously described as native or naturalised, and is recorded from all mainland states, but predominantly in drier central and northern areas. Its Australian distribution is certainly pre-European, as it was collected by Banks & Solander on the east coast in 1770, and by Robert Brown at Sydney and in northern Australia in 1802–05. The achenes have a pappus of two erect awns, each with retrorse barbs, superbly adapted for transport in animal fur or feathers. The species is well established in New Guinea and has almost certainly been carried from there into Cape York Peninsula at various times. Its scarcity in the Kimberley region of WA suggests that it might still be spreading westwards.

Glossocardia bidens grows in grassy situations, usually in open woodland dominated by *Eucalyptus*, *Corymbia*, *Callitris*, *Eremophila*, *Brachychiton* or *Acacia*, on a wide range of soil and rock types (sand, loam, limestone, chert, granodiorite, ironstone), at altitudes from sealevel to 800 m. It is often locally common after heavy summer rains, dying back to the rootstock in drought. Flowers and fruits have been recorded in all months, but are most common from November to May.

Veldkamp & Kreffer (1991) attributed the lectotypification of *Coreopsis tannensis* Forst. to Tadesse (1990), noting the latter's statement that there was no Forster material of this taxon in GOETT. In fact the lectotypification was effected by Garnock-Jones (1986), based on a K specimen (duplicate in BM). See that paper for a discussion of the confusion in provenance of Forster's material.

Cassini, *Dict. Sc. Nat.* edn 2, 51: 475 (1827), stated that *Bidens tenuifolia* Labill. should be transferred to *Glossogyne* or *Gynactis* on account of the female ray florets, but did not make the combination(s). This was done by Lessing (1832)

and the combination *Glossogyne tenuifolia* thus dates from this publication.

Domin's *G. tenuifolia* var. *divaricata*, of which the type has not been re-examined, was described as differing from the type variety only in having divaricate awns. As the angles of the awns are naturally variable this variety hardly seems worth recognition. Other material collected in the vicinity of the type locality is standard *G. bidens*.

The illustration of “*Glossogyne bidens*” in *Flora of Victoria* (Walsh & Entwisle 1999) fig. 200c on p. 978 is of *Glossocardia refracta*. However the collections mentioned are *Glossocardia bidens*. In the *Flora of the Kimberley Region* (Wheeler *et al.* 1992) the captions for figs 286S and T on p. 935 have been reversed. Figure 935S is *Diodontium filiforme*, while fig. 935T is *Glossocardia bidens*. Figure 288E on p. 944 is *Glossocardia bidens* (as *Glossogyne bidens*).

This aromatic plant is very variable. The leaves are usually in a ±basal rosette but in robust specimens leaves are also borne at nodes in the lower part of the scape, occasionally forming short dense secondary shoots. Extreme examples have leaves extending a considerable distance up the scape. Maritime collections often have bipinnatifid leaves with broader lobes (to 4 mm wide). The barbs on the fruits vary from sparse and confined to the tip of the awns, to very dense, covering the whole awn and even the upper part of the body of the achene.

A specimen from Mt Margaret, Qld (*P.I. Forster* 6753, BRI) has only linear, entire basal leaves, and closely matches in most respects descriptions (Veldkamp & Kreffer 1991) of *G. integrifolia*, otherwise known only from its Thailand type. The Queensland plant differs mainly in having longer leaves (10 cm long; only to 5 cm in *G. integrifolia*). Only flowers and very young fruits are present in the Qld plant, and it is here included *pro tem.* as an aberrant form of *G. bidens*, pending further collections.

Acknowledgements

I thank Annette Wilson for her comments on an earlier draft.

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A Grammatical Dictionary of Botanical Latin

The first fascicles of A Grammatical Dictionary of Botanical Latin by P.M. Eckel are now online at: <http://www.mobot.org/mobot/LatinDict/search.aspx>

The Dictionary presently includes entries for Tri through Z, and additional fascicles will be added as they are finished. See the Introduction for more information.

I am acting as Web Editor, and comments, corrections, and suggested additions can be directed to myself.

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Missouri Botanical Garden

***Psylliostachys* (Plumbaginaceae) in Western Australia**

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Introduction

Seven species of Plumbaginaceae are recorded for Western Australia by Florabase and the Australian Plant Census. These comprise 3 native species (*Aegialtis annulata*, *Muellerolimon salicorniaceum* and *Plumbago zeylanica*) and 4 weeds (*Limonium campanyonis*, *L. lobatum*, *L. sinuatum* and *Psylliostachys suworowii*).

The record of *Psylliostachys* is based on a single collection in Melbourne; labelled towards Coolgardie, W.A. MacPherson, 1895 (MEL 865). The collection consists of a single flower spike with no leaves or base (figure 1 and 2). This collection became the type of *Statice macphersonii* F. Muell., described in the Chemist and Druggist Australasia X (10); p. 207 also in 1895.

Material of *Statice macphersonii* was re-determined as *Psylliostachys suworowii* in 1979 by Roshkova, who had revised the genus for the Flora of the USSR (Roshkova, 1952).

Psylliostachys suworowii is an annual/biennial herb occurring naturally in Central Asia, Iran and Afghanistan on sandy to saline soils (Rechinger and Schiman-Cezeika, (1974)). The species is a popular garden plant in the Northern Hemisphere under several common names: Pink Pokers, Russian Statice or Rats Tail Statice.

Although recorded as a casual garden escape in Britain by Clement and Foster (1994), it apparently did not establish and is now not listed as naturalised in Britain. There appear to be no other naturalised records of this species, Randall (2002).

Status of *Psylliostachys* in Western Australia

There have been no further records of *Psylliostachys* recorded from Western Australia, and it is doubtful that the original collection was from a naturalised population.



Herbarium sheet of MacPherson (MEL 865)



Material of *Psylliostachys* on that sheet.

The species should be removed from the list of naturalised plants for Western Australia.

Acknowledgments

Access to the collection of *Psylliostachys* in Melbourne was facilitated by Pina Milne.

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***Prunus* (Rosaceae or Amygdalaceae) in Western Australia**

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Introduction

Prunus L. a mainly northern temperate genus of 150–400 species contains many species and cultivars grown for their edible fruits or seeds or as ornamentals. The most important species are the Plum (*P. domestica*), Almond (*P. dulcis*), Peach and Nectarine (*P. persica*), Cherry (*P. cerasus*) and Apricot (*P. armeniaca*).

In Australia fruit trees are frequently encountered as individuals growing from discarded seeds alongside roads and tracks, where their often spectacular flowering gains notice, however, such escapes were very poorly documented until the pioneering studies by Smith (1988).

In 2006 the draft Australian Plant Census listed five taxa of *Prunus* (*P. cerasifera*, *P. dulcis*, *P. domestica*, *P. persica* var *persica* and var *nucipersica*) as naturalised in Western Australia. However, the Western Australian Herbarium and

Hussey *et al.*, (2007) only recorded *P. cerasifera* as naturalised in Western Australia. Hence in 2007 the author redetermined all *Prunus* collections in PERTH and undertook road-verge surveys through the fruit growing areas of Western Australia to document feral and naturalised *Prunus* species.

Results

The only truly naturalised *Prunus* species in Western Australia is *P. cerasifera* (Cerry Plum), which has established at least 25 local populations from Bindoon (80 km north of Perth) to Albany, both as suckering clones and from seed. Large populations are mainly along creeks. However, the majority of records of this species are single roadside or wasteland trees found throughout the fruit growing regions.

Isolated small roadside populations of *P. armeniaca* (Apricot, voucher G & B. Keighery 1070 and 1071), *P. dulcis* (Almond, voucher G & B Keighery 1056) and *P. persica* var *persica* (Peach, vouchers Tunsell 317, G & B Keighery 158) and *P. persica* var *nucipersica* (Nectarine, vouchers G. Keighery 5227 & 15347) were documented. In all these populations there are normally several (2–5) mature trees and numerous seedlings over a small area. These four taxa are best regarded as sparingly naturalised.

Table One: *Prunus* species naturalised in Australia.

Plant Taxon	State Naturalised					
	WA	Qld	NSW	Tas	Vic	SA
<i>Prunus armeniaca</i> L.	*	*	*			*
<i>Prunus avium</i> (L.)L.			*			?
<i>Prunus brachystachya</i> Kalkman		*				
<i>Prunus campanulata</i> Maxim.			*	*		
<i>Prunus cerasus</i> L.			*	*	?	
<i>Prunus cerasifera</i> Ehrh.	*		*	*	*	*
<i>Prunus domestica</i> L. subsp. <i>domestica</i>						*
<i>Prunus domestica</i> L. subsp. <i>insitita</i> (L.) C.K. Schneid.			*	*	*	*
<i>Prunus laurocerasus</i> L.				*	*	*
<i>Prunus dulcis</i> (Mill.) D.A. Webb	*					*
<i>Prunus lusitanica</i> L.			*		*	*
<i>Prunus mahaleb</i> L.			*			?
<i>Prunus munsoniana</i> W. W. Wright et Hedrich		*				
<i>Prunus persica</i> (L.) Batsch var <i>persica</i>	*	*	*		*	
<i>Prunus persica</i> var <i>nucipersica</i> (Suckow) C.K. Schneid.	*	*	*		*	*
<i>Prunus salicina</i> Lindl.						*
<i>Prunus serotina</i> Ehrh.		?	*			
<i>Prunus spinosa</i> L.				*	*	
<i>Prunus turneriana</i> (F.M. Bailey) Kalkman		*				

All other records of *Prunus* are single trees probably originating from discarded seeds. Currently there is no evidence that *P. domestica* (Plum) is naturalised in Western Australia.

At present 19 taxa of *Prunus* are recorded as naturalised in Australia (Table 1) by the Australian Plant Census (Lepschi and Monro, 2008). Changes to the census suggested here are the deletion of *P. domestica*, the addition of *P. persica* var *persica* and *P. armeniaca* as sparingly naturalised and the

change of *P. dulcis* from naturalised to sparingly naturalised for Western Australia.

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Book reviews

Moss identification made easy (well easier)

Elizabeth Brown

National Herbarium of New South Wales

California Mosses. By Bill and Nancy Malcolm, Jim Shevock, and Dan Norris. 2009. Micro-Optics Press, Nelson, New Zealand. pp. 430, c. 2200 colour photographs and 1100 drawings. Hardback, 220 x 155 mm. ISBN 0-9582224-5-2. Price US\$68.

I opened Californian Mosses expecting photographs, after all it is a Micro Press production, but there were so many that I thought I'd been sent the 'Glossary' with the wrong cover on it!

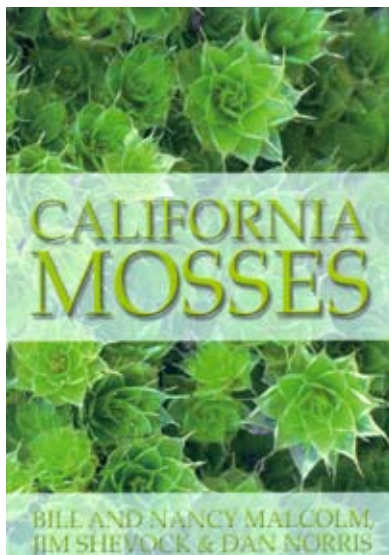
The layout was initially confronting to a traditionalist used to standard flora treatments that present an informative description (for a taxonomist; most amateurs find them daunting) and the occasional line drawing, all placed in systematic or alphabetical order. Once I had put aside my preconceptions, and read how to use the book (well lets be honest, I mostly figured it out rather than actually read a set of instructions) I quite happily worked from a leaf shape, looked through descriptions, comparing back and forth from feature to feature and photograph to photograph and identified my specimen.

Moss people insist that they are much easier to identify than liverworts but give me a liverwort in preference any time. I don't have a natural affinity with mosses and in my time I have sweated my way through keys, ending up in strange places that definitely have nothing to do with the specimen in front of me. At the end of such exercises I have the luxury of being able to check my identification in the herbarium, so I know I have got it wrong, or being able to check it against the literature in the library. Not everyone has these facilities at hand. In this book almost half the flora and all the genera are provided with a set of comparative

photographs showing the relevant features and for the other half there is a complete set of comparative leaf shapes. The guesswork is taken out of what constitutes the difference between descriptions such as broadly ovate vs oblong to lanceolate or apex mucronate vs apex acuminate to acute or rarely mucronate – the leaves I am looking at always seem to fall right on the border between such definitions! The result is a very useful regional treatment that the average person can work through and be confident

with their identification.

The book provides a number of ways of getting to information quickly and easily, featuring sections



on widespread species, species with distinctive leaf characters; lists of synonyms, species added and deleted from the Californian checklist and epithets, plus a well organised index. This is fortunate as the only ‘complaint’ I have is that the index is essential if one has a name and nothing more than a desire to see what it looks like. However, hours of fun can be had just browsing with no particular destination. Australia and California share enough species and genera for this book to be interesting and informative.

The Eponym Dictionary of Mammals

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The Eponym Dictionary of Mammals
By Bo Beolens, Michael Watkins and Michael Grayson. 2009. Johns Hopkins University Press, Baltimore. xiii+574 pp. ISBN 978-0-8018-9304-9. \$65 £34 (hardback).

We are all aware that the use of scientific nomenclature is one thing that separates taxonomy from other fields of intellectual endeavor, with only one possible name per taxonomic group (even if different group definitions imply different names). The medical people, for example, have to deal with the expressive cot death changing name to sudden infant death syndrome (without explanation of how an infant can suddenly appear or why death is a syndrome!), and the fact that the Plummer-Vinson syndrome, the Patterson-Kelly syndrome and the Waldenström-Kjellberg syndrome all refer to the same thing (in the U.S.A., the U.K. and Scandinavia, respectively) (see Firkin and Whitworth, 2002).

Closer to home, molecular biologists have been accused of using arbitrary and sometimes whimsical names for genes, leading to obscurantism and confusion (although I believe that no name will ever beat the “sonic hedgehog” gene). The common names of species are even

To be most useful this book should probably be used in conjunction with the key to Californian mosses (Norris & Shevock 2004). It is a great pity the two books weren’t combined but ‘Californian Mosses’ would no longer have been a guide so much as a weightlifters companion.

Australia next please!

Reference

Norris DH & Shevock JR 2004. Contributions toward a bryoflora of California II. A key to the mosses. *Madroño* 51: 133–269.

worse, of course. The world record for multiple common names probably belongs to the plant *Caltha palustris* (Ranunculaceae), which is reputed to have 33 common names in English, 27 in Dutch, 45 in French, 120 in German and 50 in the Scandinavian languages. This is clearly an unworkable situation, even at a local scale, and this example alone makes it clear why formal organismal nomenclature exists.

Still, even with strict codes of nomenclature there is a plethora of scientific names, and this has lead many people to wonder where they all come from. To this end, several explanatory books have appeared over the years. Given the extent of global biodiversity, they are usually restricted to a single group of organisms, such as vertebrates (Jobling, 1991; Gotch, 1995; Pande, 2010) or plants (Plowden, 1972; Gledhill, 1989; Stearn, 1992; Gordon, 1995; Pankhurst and Hyam, 1995; Schroeter and Panasiuk, 1999), and sometimes even to a single geographic location (e.g. Baines, 1981; Strahan, 1981; Sharr, 1996).

A further restriction is to eponyms — that is, where the name includes the name of a person; and this is what we are dealing with in this review. Beolens and Watkins (2003) have previously published a worldwide compendium of eponyms for bird species, and now Beolens, Watkins and Grayson have provided one for mammals. They are apparently also preparing a comparable book for reptiles, to appear in the near future. I think that they are to be congratulated for the effort that they have put into these books, and for the apparent scrupulousness with which they have pursued their goals.

The Eponym Dictionary of Mammals is basically a collection of biographies, covering all people who have provided eponymous common names or binomials, based on the list of mammals of Duff and Lawson (2004). According to the Introduction, there are 2,351 entries covering 1,388 people and 2,310 species. The compilers have also tried to clear up misconceptions concerning names that appear to be eponyms but are not, some of which seem to have taken a lot of research on their part.

This is not only a book for reference, but also for dipping into in moments of quiet contemplation, because there is a wealth of information here. The biographies vary dramatically in length and thus detail. They also vary from amusing anecdotes to boring lists of technical achievements, presumably depending on the available information. Some of the entries read like they were copied directly from a standard self-penned potted biography, but most are much more readable than that. The information appears to be several years old, which affects a few of the entries for extant persons (e.g. recent retirements).

The detail from the original publication concerning the origin of the name also fluctuates. These origins range from dull to unexpected, so that there are gems waiting to be found by the casual browser. Sadly, many of the quotations make it clear just how much politics (often right-wing) pervaded 19th century science writing. Even more unfortunately, the politics of the compilers seems to creep into some of their presentations, which detracts from the otherwise enjoyable and objective tone of the book.

The compilers have been very scrupulous about titles, even putting the founder of biological nomenclature under the correct entry von Linné rather than the more usual Linnaeus, which few native English speakers ever seem to manage. However, I noticed that one major consequence

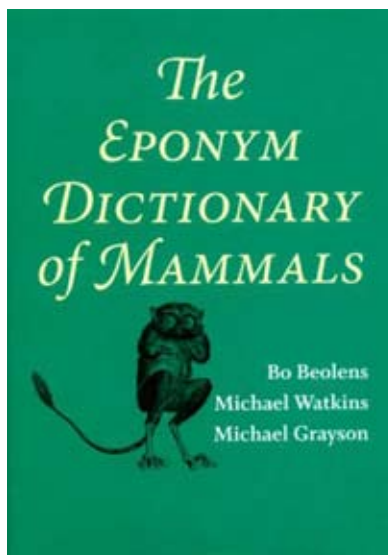
of using titles is that it emphasizes just how many military people were involved in specimen collecting while on their so-called explorations of non-European lands. The indigenous peoples who assisted with this work (voluntarily or not) have rarely been acknowledged, although I am pleased to note that there are several such entries in this book.

Rather more amusingly, alphabetical order is strictly observed by species name. This means that Count Branicki is listed under C, Father Basilio is under F, Lady Burton is under L, Miss Riley and Mrs Gray are under M, Père David is under P along with Prince Bernhard, and Queen Charlotte is under Q. There are two appendices equating the vernacular and scientific names but no index; so if you don't know that Branicki was a count then you will have difficulty finding his entry in this book.

Eponyms are usually treated as being honorifics, commemorating the discoverers or collectors of the species, the mentors of the describer, or those who in some other way earned the namer's affection.

That is, they reveal the human face of science. The words "dry" and "dusty" seem to be the most common epithets applied to taxonomy by the media, although it has been pointed out to them many times that dust is actually a major enemy of specimen preservation. Nevertheless, we all know that nomenclature can be a fun place if you only know where to look. To some extent, this book does try to enhance the human reputation of taxonomists, although not nearly enough.

For example, it is well known that eponyms are a good attention-getting device, provided that you pick the "right" person for the eponym. Traditionally, it has been allegedly important people who have dominated these eponyms (e.g. politicians and the nobility), although the book has an intriguingly large number of unexplained (i.e. untraceable) female first-names populating 19th



and early 20th century binomials. In the modern world, on the other hand, alternative aspects of the namer's milieu have come into play. It is likely that the most unexpected names appearing in this particular compendium are *Avahi cleesei* (a lemur) and *Crocidura attila* (a shrew). If we move into the fictional world, in addition to the usual mythological and biblical suspects (45 of them) there are also *Pudu mephistophiles* (a deer), *Synconycteris hobbit* (a bat) and *Thylamys cinderella* (an opossum).

However, it turns out that mammals are the least likely place to look for unusual names (see http://en.wikipedia.org/wiki/List_of_animals_named_after_celebrities), and so a more wide-ranging book would possibly be more interesting. For example, within the arachnids we have *Calponia harrisonfordi*, *Draculoides bramstokeri*, *Heteropoda davidbowie*, *Myrmekiaphila neilyoungi* and *Pachygnatha zappa*. Within the insects there are *Agathidium bushi*, *Agra katewinsletae*, *Agra schwarzeneggeri*, *Anophthalmus hitleri*, *Serratoterga larsoni*, *Strigiphilus garylsoni* and *Pheidole harrisonfordi*. The molluscs have *Bufonaria borisbeckeri* and *Crikey steveirwini*, while the cnidarians have *Phialella zappai* and the crustaceans have *Leucothoe tolkienii*. Returning to the vertebrates, there is a fish called *Zappa confluentus* and an amphibian called *Hyla stingi*. Why Frank Zappa appears so often in this list is yet to be explained.

The plants should not be ignored, with *Maxillaria gorbatchesii*, and nor should the lichens, with the recently described *Caloplaca obamae*, although these are far more straight-laced than some of the zoological ones. Fossils probably have the greatest number of truly quirky names, including those of singers, actors, movies, commercial companies, comedy groups, and fictional characters and places, along with some excruciating puns (see <http://www.CuriousTaxonomy.net>). Greg Edgecombe and Neal Evenhuis seem to be particular culprits here.

Of course, an eponym is not always an honorific. Obvious insults are officially discouraged (e.g. the current ICZN Code of Ethics states: “4. No author should propose a name that, to his or her knowledge or reasonable belief, would be likely

to give offence on any grounds.”), so that names like that of *Khrushchevia ridicula*, *Mosasaurus copeanus* and *Phycomyces blakesleeianus* are a bit near the knuckle. However, stories abound of particularly small, ugly or otherwise unsavory species being named after intellectual opponents. The published explanation for the naming of *Shillingsworthia shillingsworthi* is probably the most blatant example ever produced (although the author seems to have invalidated the name in the process).

Whimsical nomenclature extends well beyond eponyms, of course, as there is a long tradition of sly wordplay in taxonomy. I've always enjoyed the wasp name *Preseucoila imallshookupis*; and the origin of the spider genus name *Losdolobus* is as obscure as puns are likely to get, since the pun is not in either Latin or English. My favorite for ingenuity, however, is the tineid moth genus with the formal zoological name: *Petula* Clark, 1971.

Perhaps the most commercially successful example of biological naming is that of *Callicebus aureipalatii*, a Bolivian monkey. GoldenPalace.com, a Canadian web-based casino, reportedly paid \$US650,000 for the publicity when the naming right was auctioned. The money earned from this capital was stated to be used by the Bolivian Wildlife Conservation Society to maintain Madidi National Park.

I'm not suggesting that all books on biological nomenclature should read like Ripley's “Believe It Or Not”, but it cannot do any harm to make it clear to the world that taxonomists are human beings. It has never hurt the physical scientists to be seen to have a human face with a sense of humor behind it; and it will be no different for us.

I will close with one direct comparative example between physics and biology. Albert Szent-Gyorgyi tells the story of trying to call a new molecule “ignose” because he did not know its structure but was convinced that it was a sugar (resembling glucose and fructose). The editor rejected this idea, so in his revised manuscript Szent-Gyorgyi called it “godnose”. Similarly, Norman Platnick created the segregate genera *Notnops*, *Taintnops* and *Tisentnops* for some Chilean spiders that were originally placed in the genus *Nops*. Scratch any scientist and you will find a real person underneath.

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Beyond Cladistics?

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Section for Parasitology (SWEPAR)

Beyond Cladistics: The Branching of a Paradigm. Edited by David M. Williams and Sandra Knapp. 2010. University of California Press, Berkeley. ISBN 978-0-520-26772-5, xiv+330 pp, £44.95 \$65 (hardback). ISBN 978-0-520-94799-3 \$52 (e-book).

In 1977 the rock band Slade released an album called “Whatever Happened to Slade?” This title was a reference to the fact that between 1971 and 1974 they had had 12 consecutive singles in the top four in the U.K. singles chart (an unparalleled feat), but by 1977 they had returned to the obscurity from whence they had once come. In spite of this, the band did continue with the same personnel until the end of 1991 and, indeed, they had six more top-30 hits during their comeback in the 1980s. The band still officially exists today, with two of the four original members.

This seems like a very good metaphor for the history of cladistics, although being half a decade later. That is, it came out of relative obscurity, dominated phylogenetics by the end of the 70s and especially during the early 80s, and then seemed

to disappear again, to be replaced by a somewhat different phylogenetic paradigm. Nevertheless, it does continue to exist today, with a subset of the original proponents plus some younger blood.

This metaphor should not be pushed too far, of course. Slade’s slide from the top of the pile coincided with the emergence of punk rock, which put paid to both glam rock and disco music. (This is a pity, because the uniting theme of early 70s music was that music could be fun, an idea that slipped into relative obscurity during the 80s and 90s.) Cladistics’ fall from grace, on the other hand, seems to be much more self-generated; and it also seems that a widespread comeback, however brief, is unlikely.

This new book, *Beyond Cladistics* edited by David Williams and Sandra Knapp, is a compilation of papers by some of the old guard and some of the young guns of cladistics. It covers the gamut of topics in which cladistics has had (or tried to have) a major influence: phylogenetics, classification, biogeography and conservation. There are few backward-looking articles, but instead the book “represents an attempt to document the nature and anticipate the future of cladistics” [p. xi].

Clearly, I am somewhat sceptical about the second of these stated aims. It seems to me that cladistics faded away for a reason that is clearly stated in Chapter 9 of the book. This is actually

a quotation from an unpublished manuscript by Colin Patterson:

“As I understand it, cladistics is theoretically neutral so far as evolution is concerned — it has nothing to say about evolution, and no knowledge of evolution or belief in it is necessary to do cladistic analysis. All cladistics demands is that groups have characters and that groups are non-overlapping” [p. 153].

This emphasizes the distinction, long made by cladists, between a cladogram and a tree. This claim seems to me to have two important problems, which have combined to marginalize cladistics. The relevance of cladistics to phylogenetics was thereby obscured, and then ultimately ignored by the majority of practitioners.

(I should emphasize that I see myself as the messenger here, rather than necessarily a supporter of either message. Indeed, Colin Patterson is quoted in the book as believing that the cladistics revolution “was virtually complete by the eighties”, while Gary Nelson contends that it is suffering “arrested development”. Both of these provide alternative explanations for the apparent lack of current interest in cladistics.)

The first problem is that phylogenetic analysis makes no sense whatsoever without a belief in evolution. The separation of pattern and process, emphasized by so many cladists, was not an entirely successful one because most systematists are not interested in it. Cladistic methodology can, indeed, be applied to any data set, and if there is a hierarchical pattern in the data then cladistics will find it. However, the objective of analyzing taxa, and the interpretation of the resulting cladogram, is predicated on the existence of a phylogenetic history. A cladistic analysis of taxa is quite different from a cladistic analysis of, say, pasta (an exemplar provided in the book by Olivier Rieppel).

My point here is that systematists are, at heart, phylogeneticists. For example, there is the persistent claim that a taxonomic hierarchy should reflect phylogeny rather than reflecting some other form of hierarchical pattern. So, phylogeneticists have simply asked: if cladistics is not an explicit method for phylogenetic analysis then what relevance does it have? They

then moved on to using forms of analysis that are overtly phylogenetic, in the sense that they model the supposed evolutionary process(es) as part of the analysis. These analyses were, and still are, based on mathematical likelihood, either as maximum likelihood or integrated likelihood (i.e. bayesian analysis).

Note that the point I have made here actually refers to an apparent split among groups of cladists, as not all cladists agree with Patterson’s characterization of cladistics. Gradists, pattern cladists, transformed cladists and numerical cladists have all used the same analysis methods, but they differ in the way they interpret their results. The obvious differences in interpretation has, I think, obscured to casual observers the commonality inherent in the methods.

The second problem is that cladistic methods will always retrieve a hierarchy, even for non-hierarchical data sets involving different types of pasta. What is worse, they will also retrieve a hierarchy from data formed by an anastomosing plexus, such as the history of plants and prokaryotes. This limitation was noted in the late-1970s by Kåre Bremer & Hans-Erik Wanntorp and by Peter Sneath, respectively. It was never satisfactorily resolved in cladistics, in spite of a series of early papers by Vicki Funk, Chris Humphries, Gary Nelson, Warren Wagner and Wanntorp, and later ones by Lucinda McDade and Skála & Zrzavy. Indeed, it is usually presented as the principal argument against the use of cladistics in the study of cultural evolution (e.g. archaeology, linguistics). Of course, this issue is still a thorn in the side of likelihood-based methods, but the issue is at least being directly addressed within that paradigm.

The mention of Chris Humphries in that paragraph is appropriate, because *Beyond Cladistics* is actually a festschrift for him (the editors do not call it that but most of the contributors do), loosely based on a symposium held in October 2008. Chris was one of the prime international movers, along with Kåre Bremer, bringing cladistics to botanical systematics. (Sadly, Roger Carolin and Trevor Whiffin, who were contemporaneously introducing cladistics into Australian botany, are rarely mentioned in any history of cladistics.)

My first encounter with Chris was at the Hennig IX meeting in Canberra in 1990 (along with the associated ASBS meeting). The image that my mind has retained is of Steve Farris sitting in an armchair with a group of acolytes sitting at his feet (literally!). Chris's place was made quite clear — he was also sitting in a chair but slightly to one side. Steve and Chris were both smoking cigars, which even at that time was becoming a no-no indoors in public. This looked very much like a deliberately and unnecessarily aggressive performance by the pair of them — a point was being made and it was not a welcoming one.

I mention this because it is another possible reason for the slip of cladistics from the public consciousness — its overt association with far too many hostile and contentious personalities. Not everyone thinks that a revolution needs to be bloody (although I suspect that they are being rather naïve). Indeed, Joe Felsenstein has re-written the history of phylogenetics to virtually dismiss cladistics, explicitly expressing his personal distress over many of the events surrounding its rise to prominence. The early cladists are no longer angry young men (the few women seemed to be much less angry in the first place), but the young guns still seem to find it a necessary image. My most recent encounter with hard-core cladists was at the Hennig XXVI meeting in New Orleans in 2007, and there was definitely the same undercurrent of aggression and deliberate rudeness. It all seemed very unnecessary at this late stage.

Fortunately, Chris Humphries was prepared to be contentious but he was not necessarily hostile, as several of my readers will attest. Indeed, I believe that I still owe him a beer from our meeting in London later in 1990, although being deceased he is no longer in a position to collect it. He never received the beer at the time because of the ridiculous English custom of suddenly closing the pubs in the middle of the afternoon, something that

no civilized culture would tolerate. (Incidentally, the photo of Chris chosen for the book shows him sitting in a pub, looking rather pleased to be there.)

This brings us back to the book that I am supposed to be reviewing. I doubt that the editors and authors of the book would necessarily agree with too much of what I have said so far. I suspect that they see cladistics as thriving, or at least moving along very nicely. There is plenty left to discuss, plenty left to clarify, and plenty to improve upon. Indeed, the editors note that “Our original

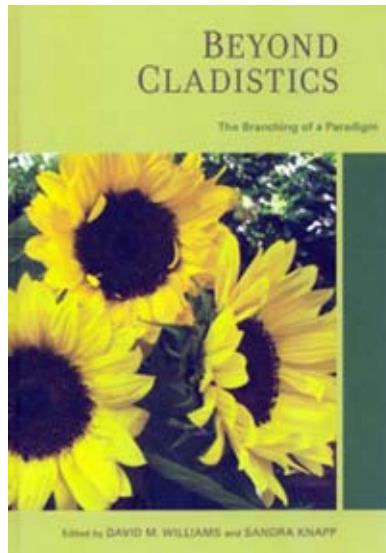
intention was to explore the possibilities that lie beyond cladistics, regarding cladistics as the single dominating methodology of systematics” [p. xi].

The theme of the book is thus, using my original metaphor, that cladistics is alive and well and still producing worthwhile music, although some of the band members have retired and others have gone the way of all old rock musicians. The book is intended to tell fans (and potential fans) about the new music. This is no longer glam rock, and is no longer recorded for a major label.

What we have here is an indie

band, although I am at a loss to describe the new musical style. Some of the original band members make their appearance as chapter authors (e.g. Kåre Bremer, Gary Nelson), while others make guest appearances on the back cover as endorsers (Norman Platnick, Vicki Funk). Although there are 26 authors, three of them each appear on two of the 15 chapters (David Williams, Sandra Knapp, Malte Ebach).

The chapters are grouped into four sections, the first one being centered on Chris Humphries, followed by sections on Botany, Cladistics, and Biogeography. In common with all such books, there is very little uniting the chapters other than their common core in cladistics. The subject matter ranges from general theory to specific empirical studies of particular organisms and locations. The



topics include ontogeny, descriptive taxonomy, species richness, monophyly, species concepts, the tree of life, and (yes!) phenetics.

The word “cladistics” is variously interpreted by the authors. Indeed, in some cases it is treated as being synonymous with “phylogenetic analysis”, of whatever sort, and in other chapters the discussion is about the uses of phylogenies, so that the word cladistics is not necessarily even used. This diversity is best expressed by Peter Forey:

“The title of this volume, *Beyond Cladistics*, is somewhat enigmatic as it may imply preference for systematic methodologies that are outside the traditional practices of cladistics, such as maximum likelihood or Bayesian analysis. It may also imply that there are deep methodological issues within the cladistic realm that remain to be resolved, and this may be true since cladistics is an evolving discipline ... But ... I prefer to live in the past and believe that cladistics in its current form is alive and well” [p. 243].

The three ‘Biogeography’ chapters provide the only original phylogenetic analyses in the book, each either implicitly or explicitly using parsimony analyses (i.e. strict cladistics). The phylogenies are put to different uses, however, one chapter examining the current distribution of eucalypts (Chapter 14), one examining the rates of taxic and morphological evolution within teleost fishes (Chapter 13), and one defining major biogeographical areas of the Indo-Pacific (Chapter 15). Phylogenetics does indeed reach its tentacles into most areas of biology.

Oddly, two of the four chapters in the section labelled ‘Cladistics’ do not actually contain much cladistics. Indeed, in one of them (Chapter 12) the only diagram looks like neither a cladogram nor even a phylogenetic tree, as it is drawn unrooted, although the author does treat it as rooted on the central polychotomy, thus delimiting a series of monophyletic groups. Chapter 11 does not have a tree of any sort. Neither of these papers was presented at the 2008 symposium. (There were also 10 of the presentations that do not appear in the book, including one by Chris.) The other two chapters in the ‘Cladistics’ section (Chapter 9 on monophyly, and 10 on phenetics) leave me somewhat mystified, as I am not quite sure what

points are being made by the authors.

Only one of the three chapters in the ‘Botany’ section contains any reference to cladistics (Chapter 7) covering the contribution that cladistic analyses have made to knowledge of the Macaronesian flora. The other two chapters cover topics that exist independently of anything to do with cladistics: the likely effect of climate change on the diversity of island floras (Chapter 6), and the extent to which pre-Linnean botanists knew about the Macaronesian flora (Chapter 8).

The fourth section, labelled ‘On Chris’, covers an eclectic series of topics that directly interested Chris Humphries: ontogeny, conservation and taxonomy. The most interesting of the chapters is the one by Richard Vane-Wright (Chapter 3), which is written as a personal account of the attempts to introduce phylogenetic information into conservation evaluation. It is the only chapter that directly addresses cladistics in any detail.

Molecular data are mentioned throughout the book, but the focus of most of the authors is phenotypic data, particularly morphology. I suspect that this reflects another limitation of cladistics. Many neophytes do not see beyond the original tie-in to comparative morphology, classification and systematics, which are unknown territories to many (if not most) molecular geneticists. In this sense, after the 1980s cladistics was seen by many as “the past” while likelihood was “the future”. This suggestion has been emphasized by both Joe Felsenstein and David Hillis, who noted that the focus of phylogenetics shifted dramatically away from systematics with the molecular revolution. Austin Hughes is even quoted as referring to an “era of morphological systematics”, after which “the availability of molecular data ... made many old controversies obsolete” [p. 171].

When we read, as we do in Chapter 2, that “the Heliantheae, considered to hold a relatively basal position within the family in 1975, are now known to be among the most derived groups” [p. 36], then we weep, as we realize just how little impact cladistics has had on some aspects of phylogenetics. Chris Humphries may be resting uneasily, if this is his legacy. Cladistics has taught us that only characters can be ancestral or derived, not taxa (all taxa have both ancestral and derived

states, no matter where they are on the tree), and neither side of a tree is more basal than the other (being less speciose does not make a lineage more basal). A phylogenetic tree is not a pine tree, with a central stem and various side-branches emerging, but is more like a mallee, with all lineages leading equally to the base.

The production editing of the book betrays its American publication (e.g. American spelling; U.S. locations do not have their country specified but all others do) and anglophile leanings (e.g. UK institutions do not have their country specified but others do; only Britishers are given their formal titles). The references are quite current: there are even some from 2010.

I have given you rather a lot of quotations so far, so I will end with another one (from Chapter 1) as a suitable summary of the book:

“In spite of times moving on — and rapidly backwards, if some of the more recent contributions to *Taxon* are anything to go by — ... it is of greater importance to recognize that the sweep of systematics, the last two centuries of endeavor, ... captures the essence of cladistics, a project — or research program — that seems to slip off the tracks every now and then” [p. 29]. This is a very good metaphor for the book itself.

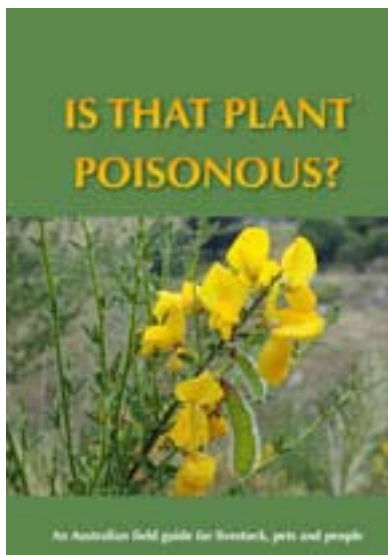
Book Notices

‘Is that plant poisonous?

An Australian field guide for livestock, pets and people’ by R.C.H.

Shepherd, published by R.G. and F.J. Richardson, PO Box 42, Meredith, Victoria 3333, Australia, in 2010; gatefold cover, 264 pages, full colour, ISBN 9780980388527.

The book covers the large number of plants found on farms and bush blocks, along roadsides, in waste places and as weeds in gardens. The book includes hundreds of colour photographs to aid identification



and information about who the plant is poisonous to (cattle, sheep, goats, horses, domestic pets, humans), which parts of the plant are poisonous and the toxins likely to be encountered, as well as symptoms of poisoning. Symptoms are also listed according to plant species and animal in a comprehensive appendix.

Supported by: Council of Australasian Weed Societies, Weed Society of Victoria, The Weed Society of New South Wales and The Weed Society of Western Australia.

Medicinal Plants in Australia volume one: Bush Pharmacy by Cheryll Williams.

Rosenberg Publishing 2010. Large octavo, laminated boards, 285 x 210 mm, 304 pp, 377 colour plates. ISBN 9781877058790, AU\$69.95.

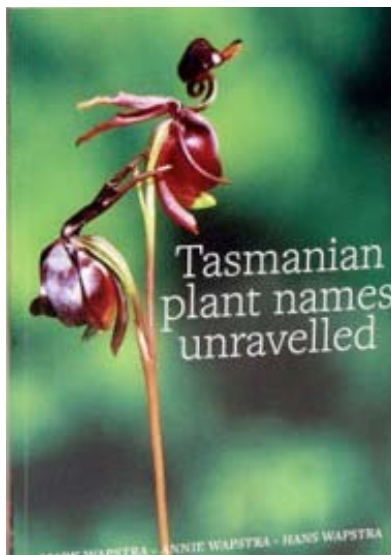
Medicinal plants in Australia, volume two: gums, resins, tannin and essential

oils. by Cheryll Williams. Rosenberg Publishing 2010. Large octavo, laminated boards, 344 pp., colour illustrations and photographs. ISBN 9781877058943, AU\$70.00.

‘Tasmanian plant names unravelled’ by

Mark, Annie & Hans Wapstra, published by Fullers Bookshop, 93 St John St, Launceston, Tasmania 7250, Australia, in 2010; Octavo, paperback, 472 pages, colour photographs, ISBN 9780980472028.

The long-awaited book *Tasmanian plant names unravelled* by Mark, Annie & Hans Wapstra is now out. It gives the origin and meaning of scientific and common names for all Tasmanian native and naturalised species. Each name tells a story: where the plant occurs, its habitat, what it looks like, who discovered it, its uses in food, medicine or witchcraft, and more.



It has been extensively researched with reference to the original plant descriptions, clarifying some long-held etymological errors

A comprehensive species by species guide to the origin and meaning of the scientific and common names of the 2,750 vascular plants native and naturalised in Tasmania. This includes over 1,950 Tasmanian natives, including 500 endemics but also some 800 introduced species that have escaped from gardens and agriculture.

Lavishly illustrated with nearly 900 photographs, this book will appeal to Tasmanian botanists, naturalists and gardeners. It will be equally useful in southeastern mainland state, which share much of the Tasmanian flora.

Books for review

CSIRO Publishing has kindly made the following titles available to the society for review. If you would like to review one of these titles, please contact Russell Barrett.

Floodplain Wetland Biota in the Murray-Darling Basin. Water and Habitat Requirements. Edited by: Kerry Lee Rogers and Timothy J Ralph. Line Art, Colour photographs. 360 pages, 245 x 170 mm. Publisher: CSIRO PUBLISHING. November 2010. Paperback - ISBN: 9780643096288 - AU \$ 99.95.

Coastal Plants. A Guide to the Identification and Restoration of Plants of the Perth Region by Kingsley Dixon. Colour photographs. 288 pages, 215 x 148 mm. Publisher: CSIRO PUBLISHING. February 2011. Paperback - ISBN: 9780643100473 - AU \$ 39.95.

Coastal Plants provides a definitive guide to the Mistletoes of Southern Australia. By David M Watson. Colour Paintings, Colour photographs. 200 pages, 245 x 170 mm. Publisher: CSIRO PUBLISHING. February 2011. Paperback. ISBN: 9780643095939 - AU \$ 49.95.

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ASBS Publications

History of Systematic Botany in Australia

Edited by P.S. Short. A4, case bound, 326 pp. ASBS, 1990. \$10; plus \$10 postage & packing.

For all those people interested in the 1988 ASBS symposium in Melbourne, here are the proceedings. It is a well presented volume, containing 36 papers on: the botanical exploration of our region; the role of horticulturalists, collectors and artists in the early documentation of the flora; the renowned (Mueller, Cunningham), and those whose contribution is sometimes overlooked (Buchanan, Wilhelmi).

Only a few copies left!—available only from the Treasurer.

Systematic Status of Large Flowering Plant Genera

Austral.Syst.Bot.Soc.Newsllett. 53, edited by Helen Hewson. 1987. \$5 + \$1.75 postage.

This *Newsletter* issue includes the reports from the February 1986 Boden Conference on the “Systematic Status of Large Flowering Plant Genera”. The reports cover: the genus concept; the role of cladistics in generic delimitation; geographic range and the genus concepts; the value of chemical characters, pollination syndromes, and breeding systems as generic determinants; and generic concepts in the Asteraceae, Chenopodiaceae, Epacridaceae, *Cassia*, *Acacia* and *Eucalyptus*.

Australian Systematic Botany Society Newsletter

Back issues of the *Newsletter* are available from Number 27 (May 1981) onwards, excluding Numbers 29, 31, 60–62, 66, 84, 89, 90, 99, 100 and 103. Here is the chance to complete your set. Cover prices are \$3.50 (Numbers 27–59, excluding Number 53) and \$5.00 (Number 53 and 60 onwards). Postage \$1.10 per issue, apart from \$1.75 for the Large Genera issue (Number 53).

Evolution of the Flora and Fauna of Arid Australia

Edited by W.R. Barker & P.J.M. Greenslade. Peacock Publications, ASBS & ANZAAS, 1982. \$20 + \$8.50 postage.

This collection of more than 40 papers will interest all people concerned with Australia’s dry inland, or the evolutionary history of its flora and fauna. It is of value to those studying both arid lands and evolution in general. Six sections cover: ecological and historical background; ecological and reproductive adaptations in plants; vertebrate animals; invertebrate animals; individual plant groups; and concluding remarks.

Also available from Peacock Publications, 38 Sydenham Road, Norwood, SA 5069, Australia. To obtain this discounted price, post a photocopy of this page with remittance.

Ecology of the Southern Conifers (Now out of print)

Edited by Neal Enright and Robert Hill. ASBS members: \$60 plus \$12 p. & p. non-members \$79.95. Proceedings of a symposium at the ASBS conference in Hobart in 1993. Twenty-eight scholars from across the hemisphere examine the history and ecology of the southern conifers, and emphasise their importance in understanding the evolution and ecological dynamics of southern vegetation.

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AUSTRALIAN SYSTEMATIC BOTANY SOCIETY INCORPORATED

The Society

The Australian Systematic Botany Society is an incorporated association of over 300 people with professional or amateur interest in botany. The aim of the Society is to promote the study of plant systematics.

Membership

Membership is open to all those interested in plant systematics. Membership entitles the member to attend general meetings and chapter meetings, and to receive the *Newsletter*. Any person may apply for membership by filling in a “*Membership Application*” form, available on the Society website, and forwarding it, with the appropriate subscription, to the Treasurer. Subscriptions become due on 1 January each year.

The ASBS *annual membership subscription* is AU\$45; full-time students \$25. Payment may be by credit card or by cheques made out to *Australian Systematic Botany Society Inc.*, and remitted to the Treasurer. All changes of address should be sent directly to the Treasurer as well.

The Newsletter

The *Newsletter* is sent quarterly to members and appears simultaneously on the ASBS Website. It keeps members informed of Society events and news, and provides a vehicle for debate and discussion. In addition, original articles, notes and letters (not exceeding ten published pages in length) will be considered. *Citation:* abbreviate as *Austral. Syst. Bot. Soc. Newslett.*

Contributions

Send copy to Russell Barrett and Peter Jobson at the addresses given below. They *preferably* should be submitted as: (1) an MS-DOS file in the form of a text file (.txt extension), (2) an MS-Word.doc file, (3) a Rich-text-format or .rtf file in an email message or attachment or on an MS-DOS disk or CD-ROM. *Non-preferred media* such as handwritten or typescripts by letter or fax are acceptable, but may cause delay in publication in view of the extra workload involved.

Formatting of submitted copy. Please use Word in formatting indents, bullets, etc. in paragraphs and for tables. Do not format primitively with tabs, which change with the Normal style sheet. If embedding tables or references or other Objects from other software (Excel, bibliographic software, etc.) ensure that these are converted to Word tables or paragraphs. Letters in abbreviations of Australian States (SA, WA etc., but Vic.) and organisations (e.g. ASBS, ABRS) should not be separated by full-stops, but initials should be (e.g. W.R. Smith, not WR Smith).

Images: their inclusion may depend on space being available. Improve scanned resolution if printing your image is pixellated at a width of at least 7 cm (up to a 15 cm full page). Contact the Editors for further clarification.

The *deadline* for contributions is the last day of February, May, August and November. All items incorporated in the *Newsletter* will be duly acknowledged. Any unsigned articles are attributable to the Editors.

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Flyers may be approved for inclusion in the envelope for products or services of interest to ASBS members. The current fee is \$100 per flyer, plus the cost of inserting them (usually roughly \$25–30). Flyers are not part of the *Newsletter* and do not appear with the *Newsletter* on the ASBS Website.

A 20% discount applies for second and subsequent entries of the same advertisement. Advertisements from ASBS members are usually exempt from fees but not the insertion costs in the case of a flyer. Contact the *Newsletter* Editors for further information.

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Contents

Australian Systematic Botany Society Newsletter 144–5 (September–December 2010)

From the President	1
ASBS Inc. Business	
ASBS 2010 AGM Minutes	2
President's report 2009–2010	4
Treasurer's report 2009–2010	6
<i>Newsletter</i> report	14
Auditor's report	15
Life Membership awarded to John Clarkson	16
ASBS Conference report, Lincoln, New Zealand, 2010	17
ASBS Conference fieldtrip report	21
Obituaries	
Ken Hill	23
Pauline Fairall (Bond)	27
Death notices	
Marlies Eichler	28
John Beard	28
Conference notices	
IBC Student Assistance Available	28
DNA Barcoding Conference in Adelaide	28
ASBS Inc. Business	
Membership renewal form	29
ASBS Council nomination form	30
Nominations for 2011–2012 ASBS Council	31
Annual General Meeting for 2011	31
Hansjörg Eichler Research Fund	31
ABRS Report	31
Articles	
Notes on <i>Glossocardia bidens</i>	32
<i>Psylliostachys</i> in Australia	35
<i>Prunus</i> in Australia	36
Book reviews	
Californian mosses	37
Eponym dictionary of mammals	38
Beyond cladistics	41
Book notices	45
Book for review	46