COMPILING A BOTANY OF THE WAITAKERE RANGES - - - A.D.Mead

As advisor to the Centennial Park Committee of the Auckland Regional Authority, I have been authorised to collect material which may be used in future publications descriptive of the Waitakere Ranges from various aspects, among which a botany of the ranges will have a leading place. This block of land, although not large in area, is of such a distinctive nature compared with other parts of the Auckland area, that it certainly deserves its own plant list, especially as over half its area is included in protected forest reserves.

So far as I am aware there have been 3 published lists which might be taken as a starting point, though all cover a wider range than the Waitakeres. In 1871 Cheeseman published in Transactions a botanical list of flowering plants, ferns and lycopods, of an area extending from the Whau Creek to the West Coast, and from Muriwai to the Manukau Heads. The Wall & Cranwell Botany of Auckland (1936) covered the larger area from the Tasman to the Firth of Thames, and from Riverhead to the Lower Waikato; and this Society's Jubilee List (1962) presumably adopted the same boundaries. There has also been some detailed listing, not published, of certain areas in the Waitakeres.

The readiest procedure would be to start with the 1962 list, prune out species known not to occur in the Waitakeres, add later finds, and correct for name changes. There is also the factor of distribution, as some species shun the coastal strip, some are found only on the coastal strip, a few have a limited altitudinal range, and so on. Also there are some species which have been reported in the past but whose whereabouts are not known to present workers; perhaps these should be mentioned separately to stimulate further search. Then there are a few, only known to occur in private property, and it would add interest if someone were to locate them in the Park.

Of course the listing of species is only one part of the work of producing a botany of the Waitakeres, which should have a well written descriptive section, but the listing is the first and basic job, and I should like to be assured of the encouragement and assistance of this Society. A few members with whom I have discussed it personally, have commented favourably on the project, and I have already received some material, but there may be others willing to assist, and any odds and ends of information will be welcomed. For the purpose it is necessary to have a definition of the Waitakeres. On the south and west this is obviously the coastline, but along the north and east the boundary is somewhat arbitary. Provisionally I have adopted for the northern boundary, a line along the lower valley of the Waitakere Stream following the swamp, continuing eastward in the direction of Swanson, then turning southeast through Oratia, roughly along the contact between the Manukau breccias and the Waitemata sandstones; bending east again to include Titirangi,

south along the eastern margin of Atkinson Park to the Manukau Harbour, thence westward to Whatipu and up the coast to the starting point just north of Bethell's.

I shall be happy to supply a map with this boundary outlined, for the assistance of any field worker who may be searching for plants near the margin.

THE BEGINNINGS OF PTEROSTYLIS - - - E.D.H.

Pterostylis, like so many things in this part of the world, began with Captain Cook and the voyage of the Endeavour. On 8 November 1769 the 'immortal Banks and Solander' found Pt.banksii at Mercury Bay, on the banks of the Purangi River, and Solander described it briefly in the Primitiae Florae under the MS name Arethusa tetrapetala.

In May 1770, having crossed the Tasman, they collected Pt. revoluta from Botany Bay on the coast of New South Wales. (There is a B. & S. specimen sheet of revoluta in the Sydney National Herbarium). It has been supposed that they also collected Pt.acuminata, which certainly occurs at Kurnell where Cook landed. Parkinson made a drawing of revoluta showing a flowering plant with an abnormal basal rosette of leaves. Dryander (who was Banks' librarian after Solander's death) suggested that this rosette belonged to acuminata and that Parkinson had mixed the two species into his drawing. But the normal acuminata rosette surrounds the stem, while the rosette in the drawing springs from one side of the stem, and is apparently the result of a double meristem. In short I believe that this drawing of Parkinson's, while showing an unusual form of revoluta, does not prove that the expedition collected acuminata. This is borne out by Nicholls (Orch.of Austr.1951.t81) who records a specimen of revoluta having a lateral growth of large leaves at the base of the stem, and another which possessed a well-developed rosette of leaves immediately below the floral pedicel. (refer also Nicholls loc.cit.P.xii, and Rupp Orch.N.S.W.1943.p.90).

In 1792, in April, Labillardiere collected Pt.alata at Recherche Bay in Tasmania, and this was published, described and illustrated inNov.Holl.Plant.Spec.2:1806.p.59.t.210 as Disperis alata. In 1810 Swartz (Mag.Ges.Naturf.Fr.Berlin.4:1810.p.84.t.3) redescribed Labillardiere's material as Diplodium australe, and this species remained outside Pterostylis until Lindley (Gen.et Spec.Orch.1840.p.388) brought it in as Pt.praecox.

The genus Pterostylis was meanwhile described by Robert Brown (Prodr.Flor.Nov.Holl.etc. 1810.p.326) based upon the 17 species collected by him during Flinder's Investigator expedition to Australia 1802-5. The generic type is Pt.curta. Browns name was conserved against the Diplodium of Swartz (presumably to prevent confusion with Dipodium R.Br. Prodr.p.330), and from then on it was merely a matter of adding or subracting names as species were discovered, denounced or reconsidered.