REFERENCES:

Boss-Walker	"Peaks & High Places" Scenery Preservation Board, Hobart, 1964.
Curtis W.	"Endemic Flora of Tasmania" Ariel Press, London.
King H.J. & Burns T.E.	"Wildflowers of Tasmania" The Jacaranda Press

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BOTANICAL FINDS DURING RECENT FIELDWORK

By: Colin Burrows and Andrew Dobson
Botany Department, University of Canterbury

ARTHURS PASS NATIONAL PARK

A botanical survey of A.P.N.P. began in the summer of 1970-71 and our parties have been collecting quantitative sample data for a description of vegetation, making a comprehensive herbarium including cryptogamic specimens and mapping the vegetation. Together with Martin Heine and Chris Ecroyd we have made some interesting botanical finds.

Alseuosmia pusilla is a small, few-branched, straggling shrub, looking much like a pepper-leaf, but having bright red berries. We found it in the mixed podocarp-Quintinia-Weinmannia forest at Kelly's Ck.

Jovellana repens: Mats of this weak-stemmed herb, with pretty little white "lady's slipper" flowers, spotted purple inside, are found on the banks of streams in the flood-plain podocarp forest dominated by Podocarpus spicatus and P.dacrydioides, between Otira and Deception rivers.

Rubus parvus: Under scrub, Taramakau riverbed (not in the Park). This is a very attractive species with large starry white flowers.

Asplenium falcatum: Large, pendant clumps of this handsome fern occur on trees (Weinmannia racemosa and others) on the slopes from the Otira Valley and Deception to the Taramakau.

Schizaea fistulosa: This little fern is an inconspicuous inhabitant of the cushion bog at Margaret's Tarn, Arthurs Pass, and another bog at Worseley Pass, but we found a new locality in a bog near Greenlaw Creek in the Waimakariri Valley.

MANAPOURI - TE ANAU AREA

In January 1970 Alan Hart and C.J.B., and then in January 1971 Dr. Neville Moar, Vaughan Miers, A.D. and C.J.B. have worked on the very extensive bog systems in this area. The interesting flora and the vegetation and its history in the area will be described at greater length elsewhere. Some of the most interesting finds included :

Dacrydium colensoi: On the margins of a raised bog near the head of the Ewe Burn, Te Anau, stands of silver pine are quite common. N.M. also found sub-fossil wood of this species further east. As far as we know this is the first record of the species east of the main divide in the South Island. The site, Dome Bog, has an interesting concentric pool system.

D. intermedium: Among the large system of pools in a vast Calorophus-Dracophyllum oliveri bog on the Kepler block, east of Manapouri, some trees of yellow-silver pine have escaped fires. Dacrydium laxifolium and D.bidwillii are also present.

Liparophyllum gunnii - the only New Zealand member of the Menyanthaceae, is present in some of the very acid bogs near the Monument, Manapouri. It is scarce east of the main divide.

Melicytus lanceolatus: One plant was seen on the lake shore at Shallow Bay, Manapouri. The species is scarce east of the main divide, but was collected recently by Mr. P. Bain, near Geraldine.

Ranunculus cheesemanii was discovered at several localities in the Manapouri - Te Anau area. Allan (1961) gives its distribution as between lat. 42° and 43° S, but states that its southern limit is not clearly known. These records shift its southern limit to at least 45½° S. The plant is considered montane by Allan. Our records are for localities between 600 and 900 ft. a.s.l. and at 1600 ft. at Lake Thomas. In this region the species is found in depressions between tussocks on fen peat, typically associated with Schoenus pauciflorus and Carex diandra.

Triglochin striatum is well-known from inland sites, but is most abundant in coastal salt marsh. Near Manapouri - Te Anau it occurs, characteristically, in association with Marchantia berteroana which forms thick mats, in mosaics with Carex secta tussocks, over liquid muck peat, which is relatively fertile. It has been found recently in similar sites near Lake Coleridge Power Station.

Corybas crypthanthus: It would be very difficult to find this species unless it is in fruit because only then do the flower stems elongate to project above the beech forest leaf litter. The species was found at Shallow Bay, near the Waiau River, Manapouri. The record extends the known distribution by 300 miles (from near Reefton).

Acianthus fornicatus var. sinclairii: This tiny orchid was found, accidentally, when collecting mosses from the base of a Carex secta plant in Dismal Swamp, east of Te Anau. Dr. Moore identified it and the Corybas.

Carex maorica is recorded by Moore and Edgar (1970) as being rare in Southland and not known from Fiordland, but it occurs widely in most of the more fertile fen-peat wetlands in the Manapouri-Te Anau area.

C.capillacea is an odd, slim little sedge. We found it in a boggy area carrying a short turf of herbs near the Garnock Burn, Hope Arm, Manapouri.

Eleocharis sphacelata: The long stems of this sedge form characteristic bands in the water round the margins of many of the small lakes and tarns in the Manapouri - Te Anau district. It is most luxuriant where the water is reasonably fertile. The species is otherwise scarce east of the main divide.

Leptocarpus similis is well known as a plant forming characteristic stands round the shores of Lake Manapouri. We found an extensive swamp dominated by the species in the upper Garnock Burn, well away from the lake. As far as we know this is a unique setting for the species.

BIRDLINGS FLAT:

On every visit we pay to the area we find something we have not seen before. Other than Helichrysum glomeratum and, on the shore of Lake Forsyth, Plagianthus divaricatus, Muehlenbeckia australis (the fourth Muehlenbeckia species in the area), and a number of common, adventive species, the most interesting find recently was Alternanthera denticulata. This species is an adventive from Australia, recorded by Mr. Healy in the "Natural History of Canterbury" as being very rare in Canterbury. The locality is not far from the original find in gravel pits at Birdlings Flat. On the shore of Lake Forsyth it grows amongst docks, thistles, black nightshade and willow-weed. We also found large patches of Eryngium vesiculosum in this area and it is good to know that the species still thrives there.

EDITORIAL WANDERINGS

Two of the contributors to this Journal seek assistance from its readers. Dr. Colin Burrows invites readers to assist him with the botanical field work in connection with the Botany of Castle Hill Basin.

Dr. Burrow's work is important, topical, and should be most interesting. Please notify him direct if you are willing to help.

Dr. David R. Given hopes that his article will stimulate people to let him know of records of both rare and common fern species occuring on Banks Peninsula. You might like to spend your spare time this season pleasantly and usefully in searching the Peninsula for ferns.

Hypoxis hookeri:

Plants of the charming Hypoxis hookeri have been seen this Autumn showing their tiny yellow flowers in two situations on the Port Hills.

The first location is near to the Sign of the Kiwi. Follow the Summit Road towards Kennedy's Bush but stop at the cleared parking place some 300 yards from the Sign of the Kiwi. Numerous plants of Hypoxis grow on the hillside above this parking area. They flower both in Spring and Autumn.

The second locality can be found by following the road from Evans Pass to the Lighthouse. Stop where the road runs by the second saddle. The Hypoxis can be seen near the area where a small dam has been excavated. A few flowers were blooming in June this year.

Four plants of Hypoxis grown indoors in a pot set seeds but only one plant opened its tepals.

Ophioglossum coriaceum:

This attractive little fern does not appear to be common on the Port Hills. Only in three situations has it heen known to me.

The easiest locality can be found by following the directions as for the first Hypoxis area mentioned above.

Ophioglossum grows to the left of the Hypoxis at the base of a large rock. Don't expect to find it in Summer - its usual growing time in the mountains. The fertile fronds are just coming through to salute the Queen on her birthday. It waits until the Autumn rains commence before starting into growth.

Ophioglossum has been seen growing happily a few yards from the waters edge at Diamond Harbour and also at an altitude of 5170 feet on Roy's Peak; fruiting at Diamond Harbour in July and on Roy's Peak in February.

It is a most adaptable and widespread fern. If it is planted in a pot it will multiply and continue fruiting for years.

Stuartina muelleri:

Near to the Hypoxis and Ophioglossum but a little higher up the hill on the right I found a plant unknown to me.

This was the Stuartina muelleri, a visitor from Australia - an annual, some 6 inches high with leaves and stems covered with greyish tomentum. Its flowers remind one of a Gnaphalium and can be seen in June.

Orchids:

If you are interested in Orchids I would recommend a walk to you which should be undertaken at the end of October or early November. Follow the red route labels from Kaituna Valley and climb up the spur towards the Youth Hostel formerly known as the Sign of the Packhorse.

On the final grass slope commencing a few yards above the bush line you may see scores of Pterostylis. These include Pterostylis areolata, P. graminea var. rubricaulis and P. montana.

Near the stream, in the bush, you may find - if you are as lucky as we were - a specimen of that most delightful pink orchid Caladenia carnea.

A LOWLAND STATION FOR UTRICULARIA MONANTHOS IN CANTERBURY

By: Ruth Mason
Botany Division, Department of Scientific and Industrial Research,
Christchurch.

The only place where I have ever found the bladderwort Utricularia monanthos growing on the Plains is between the Rakaia Mouth and Taumutu, near the Lee Stream and McIlraiths Outfall, about three quarters of a mile westward of Coopers Lagoon. There in November 1965 it occurred only on a damp hummock that was about a yard in diameter and clothed in the rush Juncus articulatus, but in that small area it was abundant. The hummock has not been there since at least March 1968 and was presumably washed away in a flood.

This is, of course, some miles from Lake Ellesmere, where as Dr. Burrows mentions in Bulletin No. 2 Wall recorded U.monanthos, but in primitive days it may in times of flood been part of the outflow waters