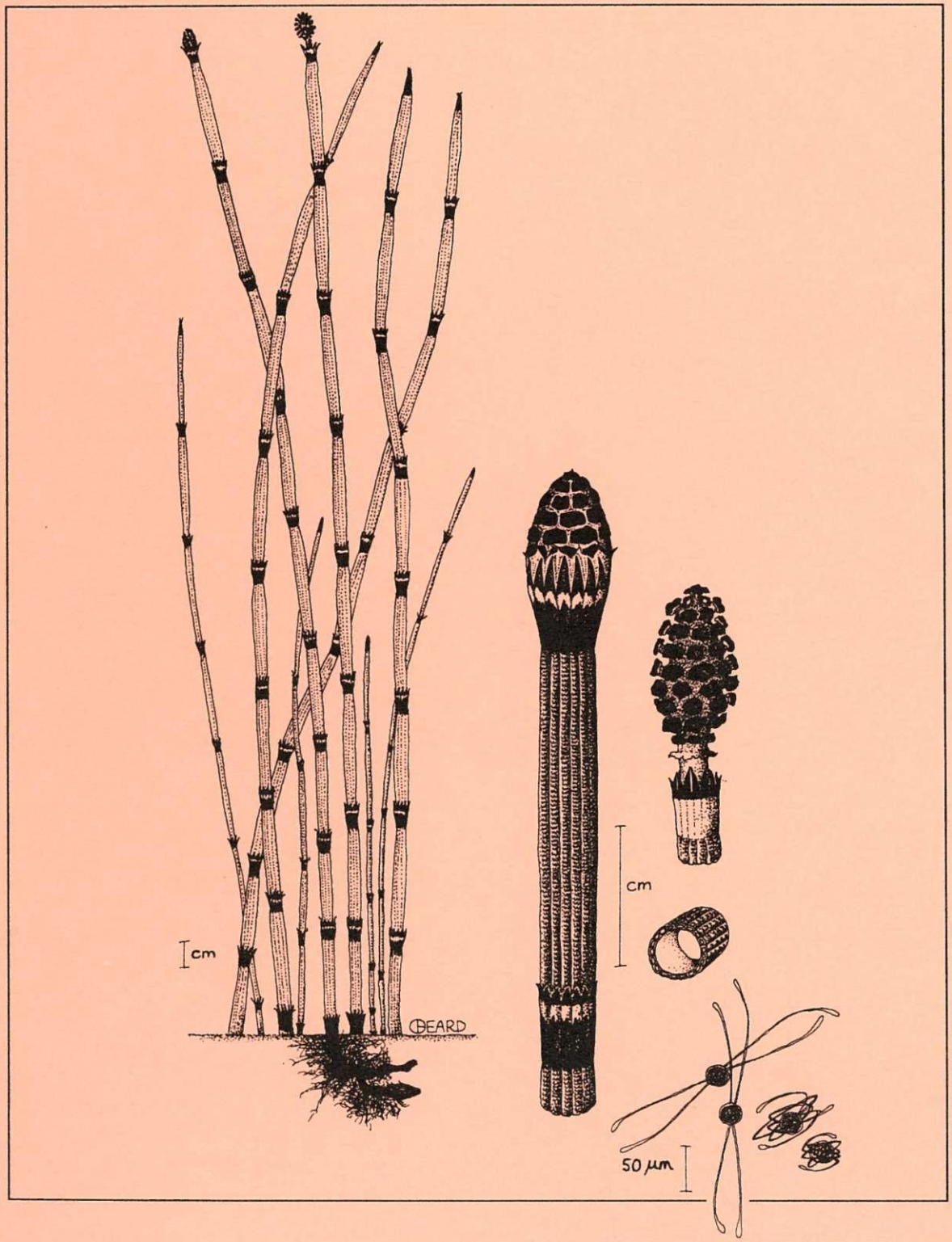
NEW ZEALAND BOTANICAL SOCIETY

NEWSLETTER

NUMBER 36 JUNE 1994



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N E W S L E T T E R
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Cover illustration

Equisetum hyemale (see article on page 10). Left - habit; centre - unripe cone; top right - mature cone (spores released); right centre - stem cross section; bottom right - spores and elaters. Illustration by **Catherine Beard**, Herbarium Keeper, University of Waikato from a plant in cultivation at the university.

New Zealand Botanical Society

President:	Dr Eric Godley
Secretary/Treasurer:	Anthony Wright
Committee:	Sarah Beadel, Colin Webb, Carol West, Beverley Clarkson, Bruce Clarkson
Address:	New Zealand Botanical Society C/- Auckland Institute & Museum Private Bag 92018 AUCKLAND

Subscriptions

The 1994 ordinary and institutional subs are $14 (reduced to $10 if paid by the due date on the subscription invoice). The 1994 student sub, available to full-time students, is $7 (reduced to $5 if paid by the due date on the subscription invoice).

Back issues of the *Newsletter* are available at $2.50 each - from Number 1 (August 1985) to Number 35 (March 1994). Since 1986 the *Newsletter* has appeared quarterly in March, June, September and December.

New subscriptions are always welcome and these, together with back issue orders, should be sent to the Secretary/Treasurer (address above).

Subscriptions are due by 28 February of each year for that calendar year. Existing subscribers are sent an invoice with the December *Newsletter* for the next year's subscription which offers a reduction if this is paid by the due date. If you are in arrears with your subscription a reminder notice comes attached to each issue of the *Newsletter*.

Deadline for next issue

The deadline for the September 1994 issue (Number 37) is 26 August 1994.

Please forward contributions to:

Bruce & Beverley Clarkson, Editors
NZ Botanical Society Newsletter
7 Lynwood Place
HAMILTON

Regional Botanical Society News

■ Auckland Botanical Society

Programme:

Evening meetings (Wednesdays) 1994
1 June - Visit to Herbarium, Auckland Museum
6 July - ABS annual Pot Luck Dinner
3 Aug - "Papua New Guinea" - Rhys Gardner
7 Sept - "Raoul Island (Kermadecs)" - Carol West
5 Oct - LUCY CRANWELL LECTURE. "1937 at the Poor Knights: the first words on shore ecology"- Professor John Morton

Field trips (Saturdays) 1994
18 June - Lake Okaihau Biological Area in Woodhill Forest, South Kaipara - Ewen Cameron
16 July - Waitakere Water Catchment (Nihotupu) - Sandra Jones & Helen Cogle
20 Aug - Motuihe Island - Peter de Lange
17 Sept - Kaukapakapa Estuary Scientific Reserve. Entry by boat from the estuary - Fran Hintz
15 Oct - William Upton Hewett Memorial Reserve, Titoki (inland from Whangarei - Joint Auckland/Waikato/Rotorua Botanical Societies field trip - Noelene Clements

For further information on field trips and evening meetings contact:

Sandra Jones, Secretary, 14 Park Road, Titirangi, Auckland 7 (ph. 09 817 6102)

■ Nelson Botanical Society

March Field Trip
20 keen botanists headed out for Mt Campbell. It was a time with many plants in fruit rather than flower, none more so than *Coprosma ciliata* which was often massed with fruit. The two leaf forms (shade and exposed) kept many people on their toes. In the shrubland it was replaced by *C.* "paludosa" with its tiny red fruit. And then near the summit it was replaced in turn by *C.* "alpina". The shrubland and red tussock grasslands contained a variety of species, none more beautiful at this season than the gentians, especially *Gentiana bellidifolia* in full flower. At other seasons the daisies, especially *Celmisia dallii*, could be quite spectacular in flower.

Easter Camp: - Karamea
The first day was spent under the arches up the Oparara (and getting to them). The wet cool red and silver beech forest holds a wide variety of species from the northern *Astelia trinervia* and *Alseuosmia macrophylla* to the southern *Dracophyllum traversii* and *Quintinia serrata*. The abundance of ferns included the less common *Hymenophyllum rufescens, H. ferrugineum, H. pulcherrimum* and *H. scabrum.* But perhaps the find of the day was *Trichomanes colensoi* spotted by Lillian Turner in a cleft near the Oparara Arch.

On Saturday we first visited the remnant forests of the Kongahu Swamp. At the first stop the stand was dominated by kahikatea and rimu and frequently swept by flood. The main plants of interest were *Fuchsia* x *colensoi* (a hybrid between *F. excorticata* and *F. perscandens)* and *Lastreopsis microsora*. It was sad though, to see *Selaginella kraussiana* in some of the clearings. At the second stop trees were often perched half a metre or more above the ground. The key finds here were abundant *Hymenophyllum ferrugineum* and occasional *H. lyallii*. On the wetter forest edges *Coprosma areolata* was quite abundant and in the ditches *Potamogeton suboblongus*. Later at the Rimu walk we found *Trichomanes strictum* and an abundance of *T. colensoi*. There was also long discussion on the differences between *Anarthropteris lanceolata* and *Phymatosorus scandens*, found growing together as epiphytes.

On Monday the short walk in to the beautiful Lake Hanlon was well worthwhile. The track at first follows a cool damp face in largely seral rimu-beech forest with many filmy ferns, and then crosses the ridge to hard beech forest with quintinia, kamahi and the tall grass tree or neinei (*Dracophyllum traversii*). Near the lake shore there is a fringe of flax, rushes and the tall cutty grass, *Gahnia xanthocarpa*. Here epiphytic on the young hard beech we saw *Hymenophyllum armstrongii, H. ferrugineum* and *H. lyallii* along with much *H. revolutum*. The 40 minute walk took two and a half hours. The lunch stop was at the top of the Karamea

Bluffs and was followed by a short forest walk. Here we saw the large leaved *Hebe stricta* var. *atkinsonii*, *Coprosma colensoi*, not seen previously, and *Trichomanes strictum*. In all a trip with a diversity of filmy ferns.

April Field Trip
A group of 27 visited an ultramafic outcrop at Croisilles Harbour. Of particular interest was *Bulbophyllum pygmaeum*. But it was soon found to quite common on the faces of the rocks within easy reach. Close examination revealed flowers on many plants. Other unusual plants included *Exocarpus bidwillii*, pygmy pine *Lepidothamnus laxifolius* , yellow silver pine *L. intermedius* and hybrids between the last two. Plants of ultramafic areas included *Carex devia and Hebe urvilleana* and alpine plants here close to sea-level, including the comb sedge (*Carpha alpina*), *Anisotome filifolia*, *Celmisia* "rhizomatous", three gentians and *Pentachondra pumila*. In the rock crevices an unusual lianoid form of *Melicytus alpinus* also created interest. The adjacent forest contained southern rata (*Metrosideros umbellata*), hutu (*Ascarina lucida*) and upland species such as stinkwood (*Coprosma foetidissima*) and alpine toatoa (*Phyllocladus alpinus*) as well as lowland plants such as nikau, akeake (*Dodonaea viscosa*), and ramarama (*Lophomyrtus bullata*).

Anzac Weekend Camp - Cobb Valley
On Saturday we first traversed Mytton's nature walk sorting out the various divaricating shrubs such as *Coprosma* "taylorae", *C. propinqua*, *Aristotelia fruticosa, Melicytus alpinus* and *Pittosporum anomalum*. In the forest plants of special interest include *Pittosporum divaricatum, P. rigidum* and pokaka, (*Elaeocarpus hookerianus*). In the afternoon we wandered on towards Chaffey's Hut stopping to find *Pittosporum patulum, Olearia virgata, Coprosma paludosa*, and *C. obconica* in the many clearings.

On Sunday we visited Asbestos Cottage. The early ridge track provided many of the alpine species such as *Celmisia laricifolia, Raoulia grandiflora,* and carpet grass (*Chionochloa australis*) but as we descended to the cottage the wet flat spur contained interesting species such as mistletoe *Peraxilla tetraptera* (many protected by cages), cedar, pink pine (*Halocarpus biformis) and yellow silver pine (Lepidothamnus intermedius*). In open patches red tussock was abundant. Here *Coprosma rugosa* and an almost unrecognisable *Olearia virgata* were severely 'bonzaied' by hares. Near the cottage shrubland on the ultramafic soils dominated by kanuka and manuka. Here we saw *Carex devia* with characteristic seed stalks nearly 2 m long.

On Monday we visited Sam's Creek. The forest proved similar to that which had seen on previous days but at the river we found a diversity of ferns including *Hypolepis lactea, Trichomanes endlicherianum* and *H. atrovirens*.

May Field Trip
The Hacket always proves an interesting place with its combination of ultramafic and limestone floras. We managed to see *Scutelaria nove-zelandiae* here in one of its strongholds, tanekaha and white maire near their southern limits, *Coprosma obconica* and the special ultramafic plants *Olearia serpentina, Carex devia* and the last flowers on the local gentian. On the travertine of the Miner Falls the lush ferns and wall hangings of *Metrosideros colensoi* share space with *Anementhele lessoniana*. Always an impressive place.

Programme
19 June - Boulder Bank/Haulashore
17 July - Queens Gardens/Botanical Hill
21 August - Motueka Valley Les
18 September - Whangamoa mouth

Graeme Jane, 136 Cleveland Terrace, Nelson

■ Rotorua Botanical Society

Easter weekend trip: Mt Egmont/Taranaki
Members from Waikato, Coromandel, Bay of Plenty and Manawatu converged on North Egmont on Good Friday. A key objective was to revisit the Ahukawakawa Swamp (visited on a 1985 trip) site of the rare unnamed *Melicytus* sp. One find of particular interest was that of the hybrid *Celmisia glandulosa* and *C. gracilenta* var. (*C. major* var. *brevis*). A single plant of this was growing near a track between Holly Hut and the Ahukawakawa Swamp; with the parent plants in close proximity. An exclosure plot has been established on the margin of the Swamp and provided graphic evidence of just how much browsing the plants growing in the open have to contend with.

Gale force winds and driving rain on the mountain on Saturday afternoon and Sunday made the prospect of further botanising difficult.

Visits were made on Sunday to three sites of botanical interest.

The garden and native plant nursery of Bill Clarkson in New Plymouth contained numerous species which are not commonly seen in gardens, even in those of native plant enthusiasts, e.g., *Coprosma virescens*, *Leucopogon colensoi*, *Myosotis pottsiana*, and *Gunnera hamiltonii*. Definitely a 'must see' for New Zealand plant lovers visiting New Plymouth. Contact Bill Clarkson, 4 Camden Street, Ph (06) 753 5811 (weekends only, or by appointment).

On the outskirts of New Plymouth City visits were made to two scenic reserves. Tree ferns (*Cyathea medullaris*) of exceptional height were noted in the Ratapihipihi Scenic Reserve, along with much nikau (*Rhopalostylis sapida*) and kohekohe (*Dysoxylum spectabile*). The Meeting of the Waters Scenic Reserve is one of the few places on the Taranaki Ringplain with dense stands of lowland podocarps (*Prumnopitys taxifolia* and *Podocarpus totara*). Elsewhere the mild oceanic climate and fertile soils favour broadleaved forest dominated by tawa (*Beilschmiedia tawa*) and other species.
A talk and slideshow by Bruce Clarkson on the Sunday evening gave us a specialist perspective on the botany of the park and highlighted a number of particular features not usually apparent to the casual visitor. For example: *Hebe stricta* var. *egmontiana* is genetically different from *Hebe stricta var. stricta;* leatherwood (*Brachyglottis elaeagnifolia*) and rangiora (*B. repanda*) hybridize on Mt Egmont; and possum browsing is having a devastating effect on kamahi trees in the Kaitake Range.

Special thanks to Bruce Clarkson for leading this Easter Trip.

Programme
Saturday 18 June - Grass ID Workshop, FRI Herbarium 1pm-4.30pm. AGM of Wohlman House. Chris Ecroyd will talk on "Plants of Western Australia", and there will also be a photo competition. Note, this programme replaces that indicated in the March 1994 issue of the *NZBS Newsletter*.
Sunday 17 July - Car Rally for Botanists; with the emphasis being on easily observable but interesting plants along or near the roads of the Rotorua area.
Sunday 21 August - "Plants for Mid-Winter". Visits to groves of several plant groups requiring warmth - Bromeliads, Cacti, Carnivorous plants.

Grant Milligan, PO Box 1168, Rotorua

■ Waikato Botanical Society

Following on from our traditional May 10th AGM and pot luck dinner, the Waikato Botanical Society has a new committee.

President:	Peter de Lange
Secretary:	Mark Thompson
Treasurer:	Catherine Beard
Committee:	Paul Champion, Cathy Jones, Eileen Reardon, Gabi Schmidt-Adam, David Stephens, Adrian Walcroft
Trip Coordinators:	David Stephens and Adrian Walcroft
Publicity Officer:	Gabi Schmidt-Adam

During the AGM a special vote of thanks was given to out going president Paul Champion for the three years service he has given the society. Paul was then re-elected to the committee proving that one cannot escape so easily. Subscriptions remain at $10.00 and are now payable to the treasurer Catherine Beard, c/o Department of Biological Sciences, University of Waikato, Private Bag 3105, Hamilton. After a hearty meal of rice and lentils and much wine, the evening talk was given by Peter de Lange on "Ecological Restoration of Northern Offshore Islands - a re-evaluation of the Three Kings, Poor Knights and Mokohinau threatened flora".

On Sunday 22 May of the committee set an eight month programme here given:

Programme
June 19th - Pukemokemoke Bush Reserve, Tauhei. Trip leaders: Paul Champion and Peter de Lange
July 23rd - Coroglen Kauri. Trip leader: David Stephens
August 13th - Te Pahu Bush Remnant - Tony and Maxine Fraser's property. Trip leader: Cathy Jones

August 20th - Motuihe Island. Combined Auckland Botanical Society/Waikato Botanical Society Trip. Trip leader: Peter de Lange
September 18th - Mangapiko Scenic Reserve - Hapuakohe Range. Trip leader: Catherine Beard
October 15-16th - Joint Auckland, Rotorua, Waikato Botanical Society Trip to William Upton Hewett Reserve, near Whangarei. Coordinator: David Stephens
November 26-27th - Tiritiri Matangi Island. Trip leader: Gabi Schmidt-Adam

Peter de Lange, Department of Conservation, Private Bag 68908, Newton, Auckland

■ **Wellington Botanical Society**

Programme: May-December 1994
Saturday 7 May: Field trip - Pencarrow Lakes. Meet at 10 a.m. at Burdan's Gate, at the end of the Eastbourne road. The 9 a.m. no. 81 Eastbourne bus from Courtenay Place will get you to the Eastbourne terminus near Burdan's Gate in time. We will explore the cushionfield communities at the mouth of the lakes, and if there is time, we might get to the karaka grove with dendroglyphs. Bring lunch and thermos and warm clothing. Leader: Mike Orchard, ph. (04)387 2799.

Monday 16 May: Evening meeting - Members' Evening. A pot-luck dinner at 6 p.m. in the Biological Sciences tea room, Room K501, followed by slides shown by members of their trips during the year.

Saturday 4 June: Field trip - Work-Bee, Te Marua Bush. This year we have rescheduled our work-bee to midwinter as we shall be helping with Wellington Regional Council's planting-out programme in the Bush as well as doing our regular maintenance there. Some tools will be supplied. As well as your lunch and a thermos, bring gardening gloves, trowel, spade if possible; loppers or secateurs will be useful.Catch the 8.05 a.m. train to Upper Hutt. Drivers please car pool at Upper Hutt Station car park, 9 a.m. Leader: Barbara Mitcalfe, ph. (04)475 7149.

Monday 20 June: Evening meeting - Glimpses of Plant Life on Raoul Island, Kermadecs. This time last year Carol West had just arrived on Raoul Island for a stay of 10 weeks. During that time a lot of the island was investigated and particular attention was paid to exotic plant species, both naturalised and remnants of earlier settlement periods. Speaker: Carol West, Science and Research, Department of Conservation.

Sunday 10 July: Field trip - Manawa Karioi Revegetation Work Bee. Meet at Tapu te Ranga marae, 44 Rhine Street, Island Bay, at 9 a.m. Work will range from potting up to planting out and track clearing. Bring morning tea, tools and native plants. Lunch and some tools will be supplied. Leader: Barbara Mitcalfe, ph. (04)475 7149.

Monday 18 July: Evening meeting - Classification of hebes. Phil Garnock-Jones has recently separated some hebes into a new genus called *Heliohebe*. He will talk about this and other progress in his systematic studies of the genus. Speaker: Phil Garnock-Jones, School of Biological Sciences, Victoria University of Wellington

Saturday 6 August: Field trip - Wallaceville Bush. Catch the 8.05 a.m. train to Wallaceville or meet at Wallaceville Station at 9 a.m. We will spend the day investigating the beech forest east of Wallaceville Research Centre. Bring lunch and a thermos. Leader: Ian Atkinson, ph. (04)528 1383 (w), (04)527 8234 (h).

Monday 15 August: Annual General Meeting - followed by *Dactylanthus* and short-tailed bats: the link between two threatened species. Recent research has shown how these two species are inextricably linked and what the pressures on *Dactylanthus* are. Chris will show video footage of visitors to *Dactylanthus* flowers. Speaker: Chris Ecroyd, Forest Research Institute, Rotorua

Saturday 3 September: Field trip - Ohariu Valley. Meet at Birdwood Street car park, opposite Appleton Park, Karori at 8.30 a.m. to pool cars. The No 12 Karori Park bus departs Lyall Bay at 7.55 , Courtenay Place 8.10, and Pastoral House ca. 8.17 a.m. We will visit (a) Huiawa Queen Elizabeth II National Trust Open Space Covenant bush - two blocks, one fenced 13 years ago, one more recently. Owned by Mr and Mrs Horrobin, 182 Takarau Gorge Road; (b) kohekohe/tawa/matai forest. Owned by Gavin Bruce, Takarau Gorge Road. Leaders: Chris Horne, ph. (04)475 7025 and Barbara Mitcalfe, ph. (04)475 7149.

Monday 19 September: Evening meeting - Bits of Kiwiland on Norfolk and Lord Howe Islands. The flora and vegetation types of Norfolk (including Philip Island) and Lord Howe Islands will be compared with those of New Zealand. Speaker: Peter Johnson, Landcare Research, Dunedin

Saturday 1 October: Field trip - Kelly's Track-Pakuratahi-Mt Climie-Tunnel Gully. Meet at Wellington Station ticket offices 7.55 a.m. Catch 8.05 a.m. train to Upper Hutt then share taxi-van to Rimutaka Hill Road start of Kelly's Track. Botanise Kelly's Track - Pakuratahi Valley - spot heights 399, 857, 828, North Climie - Tunnel Gully. Return on the 4.49 p.m. train from Maymorn, or 4.30/5.30/6.30 p.m. bus from Plateau Road to Upper Hutt Station. Map: NZMS 260/S27 Lake Wairarapa. Grade: Fit 7-8 hours. Leaders: Barbara Mitcalfe, ph. (04)475 7149 and Chris Horne, ph. (04)475 7025.

Wellington Botanical Society Jubilee Award
Wellington Botanical Society now invites applications for an award of up to $1000 to encourage and assist appropriate people to further knowledge of the New Zealand indigenous flora, and to commemorate the Jubilee of the Society.

Purpose of the Award
The Award is open to anyone working in New Zealand and will be granted for:
field work; artistic endeavour; publication; research; the propagation or cultivation of New Zealand native plants for educational purposes; or other studies which promote the better understanding of the New Zealand indigenous flora and vegetation.

The interpretation of these conditions will be flexible except that the main criterion shall be the furtherance of knowledge or promotion of the intrinsic value of the New Zealand indigenous flora and vegetation. The award may be used to defray costs such as travel, accommodation, materials or publication.

Applications for the Award
Applications should be made in typescript to the Secretary of the Wellington Botanical Society, c/- 9 Mamari Street, Rongotai, Wellington 3, by 10 October 1994.

There is no prescribed application form but the following information should be provided:
the applicant's name, mailing address, telephone number, and any relevant position held;
a summary statement of the applicant's accomplishments in the field of botany (no more than one page);
the name, address, telephone number, and designation of a referee who is familiar with these accomplishments;
an outline and timetable of the proposed project for which the award is sought; and
a proposed budget for the project.

Selection
The Award will be made to one or more applicants selected by a subcommittee nominated by the general committee of the Wellington Botanical Society. An Award will be made, and applicants informed of the results in writing, by 10 November 1994. Successful applicants will be required to provide, at an agreed time, a short report on what they have achieved and an account of their expenditure of Award funds. The names of Award recipients, the value of the Award, and synopsis of the project provided by the recipients will be published in the Annual Report of the Wellington Botanical Society.

Carol West, 9 Mamari Street, Rongotai, Wellington 3

Congratulations

■ Award of New Zealand to Professor Alan Mark

All members will be pleased to note that one of New Zealand's foremost botanists was recently honoured with an Award of New Zealand for his contribution to conservation and environment. The following article appeared in the Otago Daily Times on Monday 30th May.

Editors

Award for conservation

By Pete Barnao

Otago University professor of botany Prof Alan Mark gained the award for conservation and the environment in the inaugural Awards of New Zealand announced on Saturday.

Prof Mark, also chairman of the Otago Conservation Board and the Guardians of Lakes Te Anau, Manapouri and Monowai, received the award during a televised ceremony in Auckland. It was awarded for his work in advocating conservation and environmental issues over more than 25 years.

Prof Mark said last night he was delighted to receive the award, the existence of which showed the environment had been given equal recognition to other fields for which awards were given, including business and sport.

However, he believed it was wider public support rather than the efforts of individuals like himself that achieved conservation goals.

He noted most of the environmental battles he had fought since first becoming involved in the successful

Prof Mark

fight to prevent Lake Manapouri being raised for hydro electric power production amounted to "fire fighting", or reactive campaigns.

He hoped greater public awareness could in future allow more forward thinking in environmental planning, avoiding last-gasp campaigns.

His academic background had allowed him to forward scientific arguments in favour of conservation.

However, involvement in conservation campaigns had forced him to put his academic credibility on the line on a number of occasions, as he ran the risk of being labelled a "stirrer".

"You realise that your credibility is on the line constantly. Having won the Manapouri campaign and being given the chair of the guardians was a turning point. Had we lost that campaign, it could have turned out not quite so well."

Otago Regional Council chairwoman Louise Rosson yesterday issued a statement congratulating Prof Mark on the award, which recognised his "long and diverse advocacy for conservation in Otago". The award also recognised Prof Mark's research on land management and his work documents Otago's native vegetation, she said.

Prof Mark was nominated for the award by Otago regional councillors Louise Croot and Les Cleveland and National Council of Women Dunedin branch president Sue Cathro.

■ **Miss Joan Dingley, DSc** (*honoris causa*)

Miss Joan Dingley was recently awarded an honorary Doctorate of Science from Massey University in recognition of her contributions to taxonomic mycology and to horticulture in general.

Joan Dingley was born in Auckland and educated at Auckland University completing her MSc in Botany in 1940 with a thesis on the ecology and morphology of the tree fern, *Dicksonia*. Shortly after completing her degree, in 1941, she began her 35 year career with the Plant Diseases Division of DSIR. This was during the early part of World War II and, under the stress of manpower shortages, the completely male world of Government science was being cracked open just a little to admit a very few women. The Director at the time recommended a woman because "I do not wish to appoint a man of military age and know of no other suitable to undertake the work". Miss Dingley was one of the very few who can be called the pioneers for women in New Zealand science: each was in a separate scientific organisation, and each had to fight her own battles in building a career in what was, at the time, a generally unsupportive (and occasionally antagonistic) environment. Her work impacted directly on agriculture, horticulture and horticultural science, and she is therefore one of the very first women to be a horticultural scientist in New Zealand. Just before her retirement in 1976, the then Director-General of DSIR wrote "The number of women scientists in the Department is still not large but it is increasing. In this matter you must be regarded as one of the pioneers. Your career and the quality of your work, together with that of a small number of others, has eased the way for women to assume their full place in the ranks of scientists".

During her career, Miss Dingley recorded major scientific achievements, and she has been outstandingly influential in helping to develop second-tier horticulture (the teaching of horticulture as an occupation) and third-tier horticulture (encouraging ornamental horticulture as a leisuretime activity). She is still actively working in this third area.

Miss Dingley's first research task started the pattern for her career. Methods were being urgently sought for rot-proofing canvas for use in the tropical climate of the Pacific war zone. She tested fungicidal materials and also sourced and identified fungi that were either going to be characteristic of the war zone, or which were particularly resistant to treatment. The combination of the tools of a taxonomist with the practical vision of an applied scientist was being created. The wheel completed its circle when, towards the end of her career, she became deeply involved in the preparation of lists of plant diseases found in the islands of the Southwest Pacific as part of a New Zealand contribution to the development of those nations.

After the war, Miss Dingley did not receive the opportunities offered to the returning servicemen to study for her doctorate; nor had mycology been taught as a subject during her graduate training. Basically, she had to learn her skills while on the job, from the literature, from her colleagues, but above all, from her own fund of general plant knowledge. It is therefore fitting that she specialised on a group of fungi which cause root rot and dieback in trees and shrubs, a much under-studied area at that time, despite its economic importance, and one which demanded knowledge of the plant hosts as well as the fungi that preyed on them. From this work, Miss Dingley acquired a remarkable knowledge of native and introduced plants, and of their habits and their cultivation. She concentrated her research efforts on the taxonomy of the Hypocreales, an important group of microfungi, and in sorting out some of the many puzzles of the Fungi Imperfecti, by connecting up the imperfect (vegetative) stages with the often wildly different perfect (reproductive) stages. By 1960 she was a recognised world authority in this field. She was New Zealand's first representative on the Executive of the International Mycological Association. In 1962 when G H Cunningham, the first director of Plant Diseases Division, died he left almost completed a manuscript on the Polyporaceae of Australia and New Zealand. With the permission of her then director, E E Chamberlain, Miss Dingley edited and saw the manuscript through to press. This major work gave a basis upon which to record the pathogenic wood-rotting fungi. Miss Dingley continued taxonomic work for several years after her retirement, publishing her most recent paper in 1989, at the age of 73. In all she published a total of 41 scientific papers, and at least 10 popular scientific papers. Without any question, she was and is a fungal taxonomist of international standing. This was most fittingly recognised by J M Trappe who named the eponymous fungal genus *Dingleya* "in honor of New Zealand mycologist Joan M Dingley".

It is difficult for us now to recognise how difficult it was forty or fifty years ago to be a taxonomist in New Zealand without the advantages of air travel, personal cars, photocopiers, faxes or reliable airpostage. Some of her collecting trips were expeditions in the classical sense of the word. Miss Dingley made a major contribution to the study of mycology in this country by helping to develop the mycological holdings of the library at Mt Albert, an essential tool for any mycologist. She was also responsible for many years for the herbarium at Plant Diseases Division, and built up the collection of plant disease specimens and fungi from 4000 to 35 000 at her retirement, doing a lot to bring it to its present standing as a major international taxonomic resource. This work involved her in many collecting expeditions, often to the wildest parts of New Zealand. She also travelled widely overseas, often with very meagre support. These were not pleasure jaunts but working trips essential for her study of fungal specimens at places such as the Commonwealth Mycological Institute, Kew, the Royal Botanic Gardens, Kew and museums and herbaria at Paris, Stockholm, Strasbourg, Wageningen, Ottawa and New York. It was a special thrill for her to be able to study specimens collected during Cook's visits to New Zealand two hundred years ago.

Miss Dingley likes to call herself a plantsman, a term fully justified because she is interested in and knowledgeable about a wide range of horticultural, ornamental and native species. For almost 20 years, until Botany Division, DSIR stationed a full-time botanist in Auckland to handle the regional workload, Miss Dingley was the acknowledged local botanical authority of the State Services. She answered enquiries from the public and gave much assistance to the Department of Health and to the Police. She was also given the responsibility of training plant quarantine officers for the developing Plant Quarantine Service during much of the 1960's. This combination of knowledge about plants as well as the fungi that infected them led to the ultimate publication of a major resource for horticulturists, the (1969) 298-page book "Records of Plant Diseases in New Zealand", in which horticultural and native plants were set down alongside the pathogens reported as infecting them, and giving succinct commentary where the disorder involved economically-important crops. In turn, this list became the Bible in setting up the national quarantine regulations that are now in place. Miss Dingley made another significant contribution to agricultural science as an important member of the team which ultimately succeeded in identifying the cause of facial eczema and in developing methods for managing the problem. This remains one of the great accomplishments of biological science in New Zealand and a major contribution to our economy.

Miss Dingley has also, for more than 30 years, been one of the stalwarts of the Royal New Zealand Institute of Horticulture, helping to put in place and run the Society's horticultural training scheme, operated through the technology institutes. For over 10 years she was an examiner, and many of today's practical

horticulturists owe part of their training to her. Her many contributions to the Institute and to horticulture in general were acknowledged by her being elected a Fellow of the Institute in 1965 and then an Associate of Honour in 1969.

Auckland citizens can be particularly grateful for her role in establishing the Auckland Regional Botanic Gardens. In the 1960's, when she was in effect the only real government botanist in Auckland, it became a matter of concern and distress to her that Auckland, unlike most major cities, did not have its own Botanic Gardens, despite the strength of gardening as a leisure activity amongst Auckland's citizens. She was part of a small group which lobbied local authorities, people in the nursery industry, and the public at large. Gradually they shifted opinion of these groups from polite doubt to enthusiastic support for the adoption of plans both for the location, the shape, and the very important horticultural thrust (rather than classical plant collection orientation) of the Gardens. Once the Gardens were opened in 1982, Miss Dingley joined up with a small group to promote use of the Gardens and enthusiasm for its resources. The body soon swelled to become the Friends of the Auckland Regional Botanic Gardens, who have already funded the construction and equipping of a fine horticultural library, and who have promoted a wide range of activities, such as lectures, plant discussion groups, and garden rambles. She served for seven years on the Gardens Technical Advisory Committee, was Chairman of the Native Plant Evaluation Committee, was a member of the Friends Committee and a member of the Board of Trustees. As a lover of books, she has been particularly influential in helping develop the horticultural library. Her many contributions to the Gardens were recognised in 1987 when she was elected an Honorary Life Member of the Friends, Auckland Regional Botanic Gardens. She continues to be an active and highly knowledgeable Friend.

Miss Dingley never had the opportunity to study for a Ph.D. degree. Her body of scientific accomplishment and her many contributions to horticulture in New Zealand have now been most fittingly acknowledged by the awarding of an Honorary Doctorate of Science.

Rod Bieleski and **Ross Ferguson**, HortResearch, Private Bag 92169, Auckland (reproduced from This Week at the Mt Albert Research Centre 16/94)

Footnote (from ABS Newsletter 13(3): 6, June 1956) "Miss Joan Dingley's enthusiasm often leads her to prowl in damp and chilly woods in winter where "down from your heaven or up from your mould" develops those odd shaped plants sometimes noisome, sometimes beautiful, so dear to her mycological heart. We on our part are glad to digest in comfort some results of her observations". Joan served on Auckland Botanical Society committee from 1945 to 1957.

Notes and Reports

Plant Records

■ *Equisetum* at Massey University

In connection with the report on "A new *Equisetum* in New Zealand" by A.J. Healy in *NZBS Newsletter 35:* 7-8 (March 1994), we have had *E. hyemale* L. growing at Massey University for a number of years in a concrete tank in the Botany Department courtyard. Each year we have been careful to remove and incinerate the cones before spore shedding and to incinerate any trimmings. The source of the material was a private garden at Warkworth. The name was confirmed for us by Dr Marcus Veit of Würzburg when he visited Massey University together with Dr Hans Geiger. Dr Veit's thesis for his Doctor of Science degree was on *Equisetum*. He remarked that our plant was rather unusual in that it showed occasional branching. We used our material of *E. hyemale* during part of a study of Non-invasive Imaging of Water Flow in Plants by Nuclear Magnetic Resonance Microscopy. The results were published by Y. Xia, V. Sarafis, E.O. Campbell and P.J. Callaghan in *Protoplasma 173*: 170-176 (1993).

We also have *E. fluviatile* L. growing in a concrete tank at Massey University. The source of these plants was the Botany Department, University of Otago, who in turn had obtained plants in 1954 from the Chelsea Physic Garden, London. The material at Otago was used by B. Slade for a paper entitled "Gametophytes of *Equisetum fluviatile* in Agar Culture" (*Phytomorphology 14*: 315-319 (1964). Gametophytes have also been grown successfully at Massey University in sterile culture.

We have *E. arvense* L. growing in a container at Massey University. It came originally from land near the mouth of the Rangitikei River. During the visit of Dr Veit in 1991 some of the colony close to the banks of the Rangitikei River produced cones in autumn. This happened at the end of a hot, dry summer where the parched soil had been temporarily flooded due to heavy rain. Dr Geiger could not believe that it was

the same species as in Germany where cones only appear in spring. In other years we have found cones in New Zealand in spring. Dr Geiger took material back to Germany but I have not heard of any results of his experiments.

Since it is known that the chemistry of *E. arvense* differs in different parts of its range, it was hoped that Dr Geiger's studies might help in determining the source of the New Zealand plants, about which there has been some uncertainty. In 1986, in a preliminary report on material collected on an earlier visit to New Zealand, Dr Geiger stated that the chromatogram looked European rather than Japanese.

Ella O. Campbell, Massey University, Private Bag 11222, Palmerston North

Postscript Dr Geiger has since communicated that the chemistry of the E. arvense from the Rangitikei River mouth shows that its origin is western Europe.

Comment

■ A proposal for a national list of threatened plant populations

At present plant species that are threatened with extinction, or are susceptible to extinction, are identified and compiled in national Threatened and Local Plant lists (see Cameron et al. 1993).
It is recommended that a national list be compiled and subsequently published of plant populations (as opposed to entire species) that are known to be threatened with extinction but are populations of species not registered on the most recent Threatened and Local Plant list. It is suggested that such a list could be generated from regional lists prepared by the Department of Conservation conservancy offices compiled as part of the plant conservation strategy of each conservancy.

Threatened populations of greatest priority, and those that warrant immediate listing are those populations that are of significance and meet any one of the following criteria:

* Largest or one of the largest populations of a particular taxa.
* Populations at the northern or southern distribution limits of a taxon.
* Populations unique to certain ecological regions or districts.
* Populations of species less likely to interbreed with each other.
* Populations upon which other wildlife (flora or fauna) is dependent for continued long-term persistence. This other wildlife may be nationally threatened with extinction in its own right.

Most vascular plant taxa believed to be indigenous to the New Zealand Botanic Region are not listed as threatened or susceptible to extinction. However, some populations of these taxa are threatened with extinction. In fact, *"the loss of genetically distinct populations is occurring today at a rate far and above that of the loss of entire species"* (Ehrlich & Murphy 1987). The populations identified using the above criteria constitute a valuable resource for any one of a number of reasons. For example, it is assumed that distinct populations provide genetic variability which may be necessary for species to evolve in the face of environmental change. In addition, the loss of populations eliminates potentially useful genetic stock, the value of which (in economic terms) has not been fully realised.

It may not be clear at present whether all isolated plant populations in New Zealand are genetically distinct from one-another or even if this is significant. From a precautionary standpoint these populations deserve protection if the conservation of genetic variability between populations and therefore with species is to be achieved.

A national list of threatened plant populations (for species which are not considered threatened) that meet one or more of the above criteria is valuable for several reasons.

(1) To help focus management efforts towards significant plant populations (using the above criteria) that are threatened with extinction.
(2) To help prevent more plant species reaching a stage when they require a threatened plant status.
(3) A list would serve to encourage and focus research efforts towards these populations in the same way that the Threatened and Local Plant lists have done at the species level.

It is suggested that the list identify the taxon, the ecological region/district in which the threatened population occurs, the Department of Conservation conservancy where the plant population is found, and the significance of the population (using the above criteria).
It may be that these populations are already being identified by the Department of Conservation at a conservancy level as part of their regional plant conservation programmes. For instance as one component of the Conservation Management Strategy of each conservancy. In which case the compilation of this list will be straightforward and could be undertaken by the Department of Conservation based on submissions from each conservancy. If these populations are not at present being identified then a suitable regional agency with the necessary expertise in plant conservation (such as a Department of Conservation conservancy office) could undertake the exercise of generating a regional list. To achieve this aim the valuable local knowledge and support of agencies such as botanical societies and Forest & Bird groups could be used to good effect.

This exercise should be seen as a supplement to the identification and management of threatened vascular plant taxa which should continue as top priority.

References

Cameron, E.K., de Lange, P.J., Given, D.R., Johnson, P.N., Ogle, C.C. 1993: Threatened and Local Plant Lists (1993 Revision). New Zealand Botanical Society Newsletter 32: 14-28.

Ehrilich, P.R., Murphy, D.D. 1987: Monitoring Populations on Remnants of Native Vegetation. In D.A. Saunders, G.W. Arnold, A.A. Burbidge, A.J.M Hopkins (eds) The role of remnants of Native Vegetation. Surrey, Beatty and Sons Pty Limited.

John Sawyer, Wellington Conservancy, Department of Conservation, PO Box 5086, Wellington

Biography/Bibliography

■ Biographical Notes (14): John Wood McIntyre (1850-1931)

John McIntyre was born at Dundee Scotland on 3 November, 1850, the son of Duncan McIntyre, a gardener, and his wife Ann. The family arrived in Dunedin in 1862, sailing the last leg from Hobart on the *Tamar*. At dawn on 11 November they were wrecked at the Otago Heads, and John was among the passengers carried ashore. He was to spend 68 years in his adopted land (1,2,3,4).

John was a foundation pupil at the Park School (later the High Street School); and at fifteen he went to work for George Matthews in his nursery in Moray Place. He apparently lived with the family and was known as "Mrs Matthews' boy Johnny." When Matthews transferred his nursery to Hawthorn Hill, Mornington and, about 1870, built an 11 - roomed house at the corner of Hawthorn Avenue and Kenmure Road, John continued to live with the family until his marriage to Jane Glass in 1878. During this time he became close friends with George's youngest son, Henry John Matthews, who was 9 years his junior. (5,6).

In 1884 George Matthews died, and McIntyre continued as gardener under Henry Matthews. Between them they greatly expanded the business in native plants. (7). Then in 1896 Henry joined the Department of Lands and Survey as Forester, while McIntyre continued at Hawthorn Hill as gardener to his old friend Mrs Eliza Matthews. By now he was living at 115 Kenmure Road, a few minutes away. One of Matthews' tasks was to write the manual entitled *Tree Culture in New Zealand* which was published in 1905. I suggest that McIntyre appears in at least one photograph in this book. In Plate 4 the left hand figure demonstrating "preparing seed-beds with plank" closely resembles a photograph of McIntyre made available by Mrs Molly Hanan of Dunedin, which shows him standing in the garden at Hawthorn Hill beside a young totara. Mrs Hanan states that it was taken by Matthews for a gardening book. But if it was taken for the forestry book, as I suspect (and not included), the photographer was Matthews' wife, Grace.

By 1910 we find McIntyre corresponding with Cheeseman, who wrote: "both Mr Roberts of Ranfurly and Mr McIntyre of Dunedin assure me that the pod [of *Corallospartium crassicaule]* is always indehiscent, the face of the valve slowly decaying after the fall of the pod." (8).

Henry Matthews died prematurely in 1909, and after Mrs Matthews died in 1911, Hawthorn Hill was sold (7). However McIntyre was retained as gardener by the new owner Dr Irwin Hunter (1869-1929) a specialist in genito-urinary diseases, whose brother became Sir Thomas Hunter, Principal of Victoria University College. Irwin Hunter had two great interests outside his family and work: rugby football and his garden.

He first represented Otago while still at Boys High School, and in 1888 played for South Island against Stoddart's English Team. His innovative coaching of the University team became a legend and he wrote *New Zealand Rugby Football: Some Hints and Criticisms* (9). As for his garden, it was improved and modified under the guidance of McIntyre. Flowers (for Mrs Matthews) were replaced by more natives; hebes were planted and classified by Hart and Darton with the help of McIntyre; and the original native rock-garden filled with soil brought down from Flagstaff was renewed on a much grander scale, with Dr Hunter helping with the hard work. "Mr McIntyre was gleeful when given a free hand in the garden and provided with a good helper, and he went from strength to strength. He began to take small but interested parties round the garden and give occasional talks to the Horticultural Society" (5). In fact he was elected a Life Member of the Society in 1922 (10); and in 1922 the garden was described and illustrated in the *Otago Witness* (11) which noticed "the remarkable profusion and variety of the native shrubs", and added: "to use the words of the gardener Mr J. W. McIntyre, he has nursed many of the shrubs from their infancy and so deep an affection does he cherish for them that he still tends them with as much care today as he did when they were first put into his charge." The other main feature on these 1½ acres was the native rockery, which boasted such novelties as *Stilbocarpa lyallii* from the Snares Islands, and *S. polaris* from the Auckland Islands.

Close friends of Irwin Hunter and John McIntyre were William Alexander Thomson, the dentist, commemorated in *Celmisia thomsonii* and *Olearia thomsonii*, and his younger brother, John Scott Thomson, the industrial chemist, commemorated in *Thomsoniella* and *Aciphylla scott-thomsonii*. On his way to work from Waikari, Jack Thomson would call at Hawthorn Hill to chat with McIntyre and give Hunter a lift to town (5). Bill Thomson distributed material of a novel araliad cultivated at Hawthorn Hill. It was described by Cheeseman before his death in October, 1923, and published as *Nothopanax Macintyrei* (sic.) in the *Manual of the New Zealand Flora* (1925). Cheeseman wrote: "I have much pleasure in associating with it the name of Mr Macintyre [sic.] formerly chief gardener to the late Mr H.J. Matthews, and for many years a most successful cultivator of New Zealand plants"; and he added: "Described from specimens taken from a young tree cultivated in Dr. Hunter's garden at Dunedin, and originally collected by the late Mr H.J. Matthews in some locality in the south of Westland". Wardle (12) has shown that this locality is in all probability wrong and too far south. Petrie also received material, and his paper describing *Nothopanax McIntyrei (sic.)* was received by the editor on 28 November, 1924. Petrie died in September, 1925, and the paper was issued separately on 6 March, 1926 (13). It gave the additional information that the pieces seen all belonged to a female plant and that it had been in the garden 19 years. It was "said to have come from Westland".

In 1925 Dr J. P. Lotsy from Holland toured New Zealand lecturing about hybridisation and evolution. At Otago University he spoke on Thursday, Friday and Monday, 23, 24, 27 April (14). In the weekend he was taken to the top of Maungatua. A group photograph on this occasion, deposited by Mr Tom Bennett in the Otago Early Settlers Association collection, shows 8 people with 7 named as follows: J. McIntyre, G. Simpson, Dr Hunter, Dr Holloway, Dr Lotsy , J.S. Thomson, W. Martin. The unnamed figure is clearly G.M.Thomson, who proposed the vote of thanks at Lotsy's second lecture. Other photos in this collection show McIntyre as an old man, either alone or with Dr Hunter (10,15).

Irwin Hunter died on 21 December, 1929 (9) and when the house was sold, McIntyre never went back (5). He was devoted to the Matthews and Hunter families, and they to him. He died on 14 September 1931, survived by his wife and 5 children, and is buried in the North Cemetery, Dunedin (3). Today, at Hawthorn Hill, the house is in 2 flats, and subdivisions crowd it in. A few 5-fingers survive. Of McIntyre's *Nothopanax* (now *Pseudopanax*), there is no sign. For many years it was considered a hybrid, *N. arboreus* x *N. simplex* and in the *Flora of New Zealand* (1961) it survived only as a footnote. But in 1968 Wardle (12) reported that the chromosome number was tetraploid (and not triploid as expected in a hybrid); and further that *Pseudopanax macintyrei* had a coherent geographical distribution and ecological preference. It occurred on calcareous sites in Nelson and North Westland and was a good species.

For help with this note I am particularly grateful to Mrs Molly Hanan (Dunedin), daughter of Dr Hunter, and to Ross Elder (Christchurch), his nephew. Also to Robin Bagley (Dunedin), Helen Southen (Christchurch) and Peter Heenan (Christchurch).

(1) International Genealogical Index; (2) Death Certificate (3) Obit., ODT. 26 Sept., 1931; (4) C.W.N. Ingram & O. Wheatley *New Zealand Shipwrecks* 1795-1960; (5) letter from Mrs Molly Hanan; (6) R. P. Hargreaves *The top of the Hill, A short history of Mornington and its buildings*, 1983; (7) E. J. Godley *NZBS Newsletter* Sept., 1991; (8) T.F. Cheeseman *TNZI* 43, 1911; (9) Obit. *Otago Witness* 31 Dec. 1929; (10) pers. comm. Mrs Robin Bagley; (11) Private gardens in Dunedin and suburbs. Dr Hunter's garden at Mornington *Otago*

Witness 25 April, 1922. (12) *NZJB* 6, 1968; (13) *TNZI* 56, 1926; (14) *ODT* reports (15) pers. comm. Peter Heenan.

E. J. Godley, Research Associate, Manaaki Whenua - Landcare Research, P O Box 69, Lincoln

Publications

■ Journals received

The New Zealand Native Orchid Group Journal No. 49
Contains some 27 separate items including original papers on:
Iwitahi Native Orchid Reserve: proposed heritage park by Trevor Nicholls; The annual Taranaki *Corybas* crawl by Audrey Eagle; More about that cantankerous *Corybas* - a diary by Margaret Menzies.

The New Zealand Native Orchid Group Journal No. 50
Contains some 28 separate items including original papers on:
A *Pterostylis* from Taranaki in 1866 by Ian St George and Edwin Hatch; Synonyms by Edwin Hatch; George Forster's print of *Earina autumnalis*; *Pterostylis micromega* and other wetland plants near Waverley by Colin Ogle.

Editors

■ New names or combinations from the journals

Planchonella has been sunk into *Pouteria*, by T. D. Pennington: The genera of Sapotaceae (Royal Botanic Gardens, Kew and New York Botanical Garden, New York, 1991). This reinstates the name *Pouteria costata* (Endl.) Baehni for New Zealand's tawapou.

New name for *Myoporum debile* by R. J. Chinnock: *Eremophila debilis* (Andr.) Chinnock. *J. Adelaide Bot. Gard. 15(1)*: 75-79 (1992).

Freycinetia banksii; K.-L. Huynh states many differences between the New Zealand and Norfolk Island kiekie, supporting their separation at species level. *Candollea 48(2)*: 501-510 (1993).

New combination for New Zealand's sea rush by S. Snogerup: *Juncus kraussii* Hochst. var. *australiensis* (Buchenau) Snogerup. *Willdenowia 23(1/2)*: 61 (1993).

Heliohebe, a new genus segregated from *Hebe* by P. J. Garnock-Jones, *NZ Jl of Botany 31*: 323-339 (1993). Five species are recognised, all confined to NE of South Island. The best known one is *H. hulkeana*. The justification for the new genus is cladistic.

Hebe adamsii has been reinstated by P. J. Garnock-Jones and B. D. Clarkson, *NZ Jl of Botany 32*: 11-16 (1994). This Cheeseman taxon was treated as a hybrid by Allan and more recently as an unnamed species *H.* "Unuwhao".

Pterostylis plumosa has been redefined as endemic to SE Australia by D. L. Jones: *Muelleria 8(2)*: 177-192 (1994). Jones has described a new species, *P. tasmanica* D. L. Jones, from southern Victoria, Tasmania and New Zealand (previously included with *P. plumosa*).

New combination for the Australasian mangrove by J. Everett: *Avicennia marina* subsp. *australasica* (Walp.) J. Everett. Native to eastern and southern Australia and New Zealand. *Telopea 5(4)*: 627-629 (1994).

Oxalis thompsoniae Conn & Richards is described as a new species in *Oxalis* section *Corniculatae* by B. J. Conn & P. G. Richards: *Aust. Sys. Bot. 7(2)*: 171-181 (1994). It is recorded from Papua New Guinea, eastern Australia, Lord Howe Id and New Zealand. It is unclear whether it is native or introduced.

E. K. Cameron, Auckland Institute and Museum, Private Bag 92018, Auckland

Desiderata

■ Request for information about *Rhamnus alaternus:*

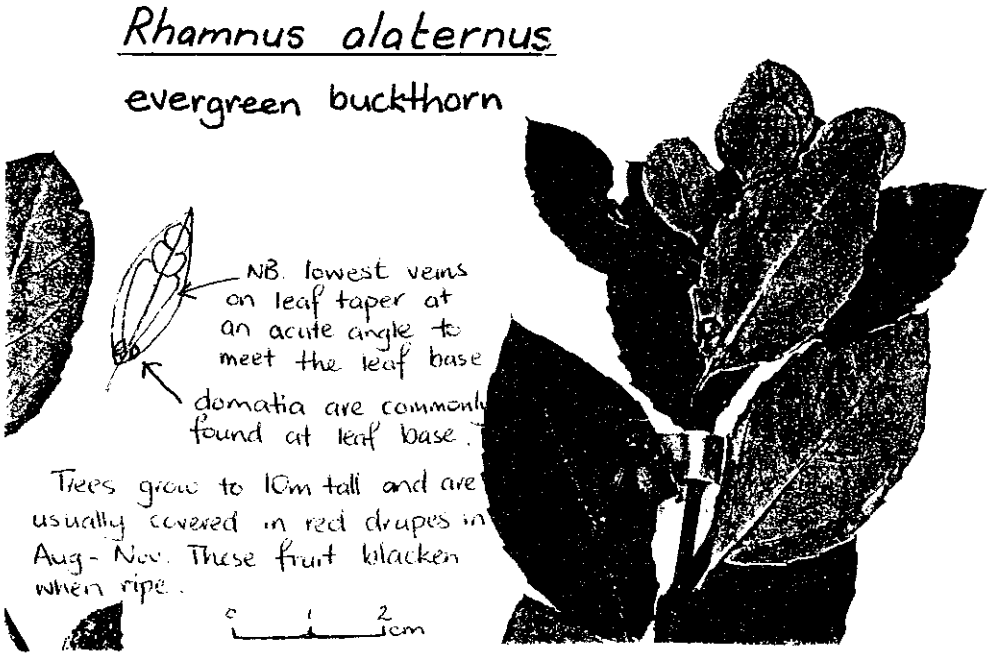
I am an MSc student at Auckland University, and would appreciate any references to the exotic tree, *Rhamnus alaternus* (evergreen buckthorn) that Botanical Society members may have recorded.

R. alaternus (see illustration below) grows in two forms; a natural species, the leaves of which are dark green all over, or a cultivar ('Argentovariegatus') which is variegated.

I am studying the invasiveness of *Rhamnus alaternus* as an environmental weed and would like to determine the status of the plant nationally. Any information of sightings of the species, whether cultivated or wild anywhere in New Zealand would be appreciated.

If you can help please send your records, with a map reference, and site description to:

Ms Mairie Fromont, School of Biological Sciences, University of Auckland, Private Bag 92019, Auckland.

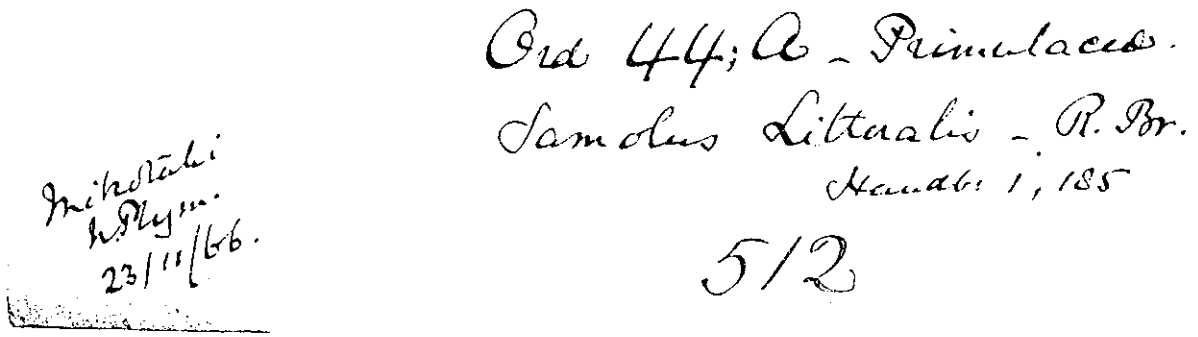


■ Identification of herbaria collectors

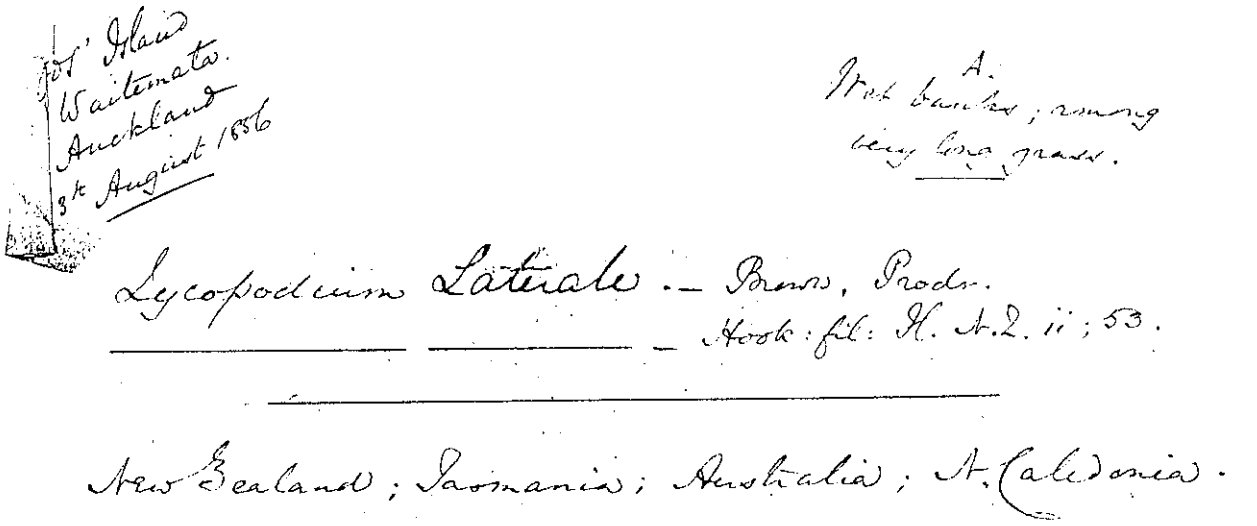
Kate Pinkham of Wanganui Regional Museum seeks identification of collectors of three herbaria held by the museum. She states the three herbaria "seem to have some real significance, in that they are clearly annotated, identified, dated and given locations. They are of New Zealand specimens and date from the middle of last century".

Samples of the handwriting from each herbaria are illustrated:

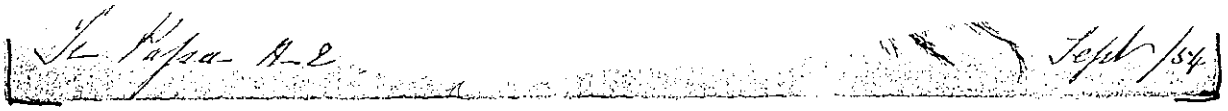
1. The first from an album inscribed "J.L." and is initialled "J.L." on many of the pages.



2. The second is from an album of mostly New Zealand ferns, the cover is inscribed "B.C.A. Taylor, Sandown Villa" (Rev. R. Taylor's Wanganui Residence) (Bertha Charlotte Augusta Taylor, Rev. Richard Taylor's daughter but not the collector - that is a different hand).



3. The third has no signature or initials, and is a collection of mosses. It is from a loose collection, on part blue, part white paper, small sheets.



If you can help, please contact:

Kate Pinkham, Registrar, Wanganui Regional Museum, PO Box 352, Wanganui (telephone 06-345 7443)

Forthcoming conferences/meetings

■ 1994 John Child Bryophyte Workshop

The 10th John Child workshop will be held in the Waipoua Forest, Northland, based at the Waipoua Forest Headquarters, approx. 100km north-west of Whangarei, off State Highway 12. The workshop will run from dinner time on Thursday 24th November until after breakfast on Tuesday 29th November.

All interested in bryophytes are welcome - whether novice or expert.

Vegetation types to be visited will include coastal broadleaf/podocarp forest, gum-land scrub, higher altitude podocarp forest, and kauri forest. The appropriate NZMS 260 map is O06. Collecting permits will be arranged for most localities, but collecting may not be permitted at certain prime sites. Some microscopes will be available for specimen study, and participants are encouraged to bring their own where this is practicable. A programme of evening talks will be arranged. Accommodation will be in 4-person, 2-person and single bunkhouses, with separate ablution blocks. Meals will be provided by local caterers. Numbers will be limited to 35. For those coming by public transport, van transport will be provided from Whangarei.

Total cost (including full board, and transport to and from Whangarei if required) is expected to be less than $200. Some funds are available for student subsidies. For further information and/or registration form contact:

Lisa Forester, DoC Northland Conservancy, PO Box 842, Whangarei

■ **The First New Zealand Native Orchid Group Conference**

Native Orchid Conference

Call for papers

The first New Zealand Native Orchid Group Conference
will be held with the annual Taupo Orchid Society Field Days
on 2-4 December 1994
to celebrate the official opening of the
Iwitahi Native Orchid Reserve and Heritage Park
by the Hon Simon Upton, Minister for the Environment.
Offers of papers and registration enquiries should be directed to
Trevor Nicholls, 33 Hinekura Ave, TAUPO. Phone: (07) 3784813

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