

11 Horticulture

Autumn 1979

in New Zealand

Bulletin of the Royal New Zealand Institute of Horticulture (Inc.)



HORTICULTURE

IN NEW ZEALAND

BULLETIN OF THE ROYAL NZ INSTITUTE OF HORTICULTURE
NUMBER 11, AUTUMN 1979

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Cover design by Julie Thomas		

ROYAL NEW ZEALAND INSTITUTE OF HORTICULTURE (INC).

Patron : His Excellency the Governor-General,
Sir Keith Holyoake.

President : Dr J.D. Atkinson

Chairman of Executive : Mr J.O. Taylor

Bulletin Editor : Mrs Barbara McCartney

1979 Annual Journal Editor : Mr Richard Stevens

National Secretary : Mr R.A. Foubister, P.O.Box 12, Lincoln College,
P.O. Box 12, Lincoln College.

The Editors welcome articles, letters and news items for consideration for publication.

Contributions should be addressed to the Bulletin Editor, or the Annual Journal Editor, P.O. Box 12, Lincoln College.

Views expressed are not necessarily those of RNZIH.

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~ Editorial ~

Communication, they say, will answer many of our problems. People will understand one another better and criticism leading to disenchantment will become less and less. But criticism often identifies an underlying problem which may have gone unnoticed by the 'other' party.

At our Annual Meeting (it could be better described as a one-day conference) we, the Executive, accepted constructive criticism regarding communication, but the Meeting did not accept the need for this to be the subject of a remit. The fact that communication is a two-way affair must not be lost sight of by the members of the Institute and by your local representatives.

Because of the cost of communication (postage alone is \$160 for single letter to each member) we rely heavily on our quarterly Bulletin, which is posted at half the letter-rate. Your Bulletin now has a new Editor, Mrs Barbara McCartney, and with the assistance of the Secretary, Mr Ashley Foubister, we will ensure the best communication possible from head office to members.

We will be doing our best to build on the high standard set by Michael and Julie Thomas over the past two years. So we will improve "communication" from the office and we ask you, the members, to keep in touch with us - letters to the Editor, horticultural items of interest, articles from your district, and your constructive criticism, will always be warmly welcomed.

J.O.TAYLOR,
Chairman, National Executive,
RNZIH.

Items of Interest -

from the **A.G.M., & National Executive** Minutes, April 1979.

Mr J.O.Taylor, as Chairman, welcomed members to the Annual General Meeting, and said it was gratifying to see so many present, representing nearly all District Councils. He thanked the Bay of Plenty District Council for hosting this AGM and for arranging the excellent facilities for the Meeting.

Remits passed included :

That all students who have passed National Certificate in Horticulture level be entitled to use the letters N.C.H. after their name, until such time as they graduate N.D.H.

That the National Executive give favourable consideration to the establishment of an examination centre for Oral and Practical examinations in the northern area.

That the area/location of the next AGM be nominated at the current Meeting. (The Waikato District Council has issued an invitation to hold the 1980 Meeting in Hamilton.)

Annual Reports were presented by the National Executive, Examining Board, Regional Horticulture Sub-Committee, District Councils, and election of officers resulted in the following :

Patron : His Excellency the Governor-General,
Sir Keith Holyoake.

President : Dr J.D.Atkinson.

Vice-President : Mr T.H.Warburton.

National Executive :

- Mr J.O.Taylor - Chairman
- Mr G.G.Henderson - Dunedin
- Mrs R.W.Shepherd - Wellington
- Mrs M. De Castro - Blenheim
- Mr M. Steven - Hamilton
- Mr R.J. Ballinger - Blenheim
- Mr K.L. Davey - Levin
- Mr I.D. Galloway - Wellington
- Mr G.D. Mander - Tauranga
- Mr R.J. Nanson - Wellington
- Prof. J.A. Veale - Massey University
- Mr A.L. Mason - Feilding.

Editor of the 1979 ~~Annual~~ Journal : Mr R.B.Stevens, Dept. Horticulture, Landscape & Parks, Lincoln College.

Editor of the Bulletin : Mrs B.V.McCartney.

ITEMS OF INTEREST FROM AGM & NATIONAL EXECUTIVE MEETING - CONT.

FLORAL ART HANDBOOK : Good progress has been made with the revision of this booklet, and the reprinted version should be available for sale within a month or two.

ANNUAL JOURNAL : The 1979 issue of the Journal will unfortunately be increased in price to \$4.50 per copy. Costs of printing have risen sharply since the last issue, and if the high standard of this publication is to be maintained, a price increase was inevitable. However, to assist our student members, who find the Annual Journal of technical value to their studies, a discount of \$1.00 per copy is offered to those taking examinations.

FRIENDS OF THE INSTITUTE : This new category of membership association with the RNZIH has been adopted by the Bay of Plenty and Waikato District Councils and permits a greater number of local enthusiasts to enjoy horticultural activities at District level, without having to become General Members of the Institute. There are limitations on this type of association in that "Friends of the Institute" may not become office bearers in District Councils, nor do they enjoy the other privileges of full membership. However, it is hoped that the interest in horticulture, fostered by having "friends" on this basis, will result in a number of new full membership applications.

PLANT EVALUATION SCHEME : The Committee set up to implement this scheme has put a lot of time and effort into preparing the way for the recognition and preservation of new ornamentals in NZ. Support for the scheme can be given by Members and District submitting suitable NZ-raised cultivars, both of native and exotic origin for evaluation. Material submitted should comprise trees and shrubs only, which could have ornamental potential.

All material should be sent direct to :

Mr R.C. Gill,
Deputy-Director, Parks & Reserves Dept.,
Upper Hutt City Corporation,
Private Bag,
UPPER HUTT.

NOTABLE & HISTORIC TREES : In its second Annual Report the Notable and Historic Trees Committee advises that some pleasing progress has been made with this scheme. Although the number of confirmed registrations is not yet high, the amount of interest in the scheme emanating from Government Departments, Local Bodies, environmental organisations and individuals, is most encouraging.

An attractive plaque has been designed to attach to registered trees, giving brief historical notes as well as the botanical description of the tree.

HONOURS AWARDS : Three awards of Associate of Honour (AHRIH) were conferred at the Meeting :

Professor J.A. Veale - Palmerston North, for outstanding services to horticultural education.

Mr David Anyon - Wellington, for his notable contribution to floral art and design over many years.

Mr Allan G. Scott - Morrinsville, for his life-long support to horticulture, notably as a rosarian, but equally as an administrator in a number of horticultural and floral societies.

Recognition of personal contributions to horticulture and services to the Institute was marked by election of the following as Fellows of the Royal NZ Institute of Horticulture (FRIH) :

Mrs Diane H. Menzies - Wellington,
Mrs Beryl Brown - Wellington.

The award of these Honours was carried unanimously and congratulations are extended to the recipients.

NDH graduates

from the 1978 Examinations :

NATIONAL DIPLOMA IN HORTICULTURE (SCHEDULE ONE) :

R.D.Cantwell - Thesis title : "Weed Control in Bedding Plants."

A.G.Jolliffe - " " "Planning for Recreation Use within a Forest Park - Bottle Lake Forest Park, Christchurch."

NATIONAL DIPLOMA IN HORTICULTURE (SCHEDULE TWO - FRUIT) :

J.M.Hawkes - " " "The Effects of Thinning on Fruit Size on the Apple 'Gala' in Hawkes Bay."

NATIONAL DIPLOMA IN HORTICULTURE (SCHEDULE FOUR - NURSERY MANAGEMENT) :

R.A.Edwards - " " "An Evaluation of Wounding and Hormone on the Rooting of Cuttings."

K.J.Pick - " " "Apple Trees supplied from the Nursery as Dormant Buds, in Preference to Maiden Rods or Branched Trees."

Copies of theses are lodged with the George Forbes Library, Lincoln College, and may be borrowed through Inter-Loan.

Students completing NATIONAL CERTIFICATE IN HORTICULTURE :

SCHEDULE ONE : R.G. Holland, Miss K.M.McBryde, Mrs J.A.Petheram, D.M.Rowe,

SCHEDULE FOUR : G.J.Burton, P.J.Carson, M.J.A.Nielsen, J.A.Sanders.

PRIZES awarded after the 1978 Examinations :

J.A.Campbell Prize - P.J.Carson

David Tannock Memorial Prize - N.W.Struthers

Peter Skellerup Prize (1) - M.E.Millar

Peter Skellerup Prize (2) - J.M.Hawkes

Junior Memorial Prize - Miss W.B.Smith

Dugald McKenzie Prize - A.G.Jolliffe

NZ Veg. & Produce Growers' Federation Prize : G.H.Wells

Whangarei District Council Prize - R.A.Edwards.

HORTICULTURAL SALES' CERTIFICATES awarded since this Meeting :

R.J.Dunn, S.R.Wall, B.J.L.Merrick, B.S.Pollock, Mrs F.E.Haingé,
Mrs J.A.Hayman, Mrs P.J.Snow, K.G.Norris.



"Plant a parent tree at my birth. Should you my parent people die, my parent tree will always be here." - Maori saying.

Prunus subhirtella 'Pendula'

An interesting note appears in the December issue of 'The Garden' - the monthly Journal of the Royal Horticultural Society - and the accompanying photograph shows a magnificent specimen of the Higan Cherry at Mt. Irvine in Australia. This weeping cherry has myriads of blush-pink flowers which soon fade to soft white, and has wide spreading cascading growth. The writer goes on to say this cherry 'certainly grows and flowers well in Sydney's temperate climate, whereas the other Higan cherries are mostly miserable there'.

We have this same cherry in the Auckland district and we have had similar experiences in the flowering of the various Higan cherries. The note confirms that the name above is correct for this free flowering form. Until now, the whole nursery trade in NZ has been growing and selling a pink-flowered cultivar under this name, but the pink form is correctly named *Prunus subhirtella* 'Pendula Rosea'. This pink cultivar makes a lovely flowering tree in most parts of the country south of Hamilton, but in Auckland and the North it performs indifferently, and in some years there are so few flowers that the tree is not worth a second glance. I have seen specimens at Government House and in several other gardens in Auckland, and in my own garden, I have specimens of both trees, the pink form having been planted a few years before the white form and in an equally favourable position. In some years they are both beautiful, but in two years out of three, the comparison is strongly in favour of the white form.

My tree of *P. subhirtella* 'Pendula' was propagated from a tree growing on an orchard property near Parr's Corner, Glen Eden, and this parent tree must be 40 years old. Every year without fail they put on a splendid display of flowers.

Hillier in his Manual confirms the misnaming of the pink form in many European nurseries. He also mentions a double pink form and a deep pink form with carmine buds. They are respectively *Prunus subhirtella* 'Pendula Rosea Plena', and 'Pendula Rubra'. I have seen the latter in bloom as a young nursery tree in the U.K., and it looked very promising, but I have not seen a mature specimen. It is also interesting to note that the original trees of *P.s.* 'Pendula' in Britain were grown from seed sent from Japan, so it may well be that the trees grown in Australia and New Zealand of this species are a superior clone to the one usually seen in Europe and Britain.

A limited number of standard trees of *P.s.* 'Pendula' are now being produced, but prospective buyers should carefully check the source of the propagation material, because of the present confusion of names.

Hugh Redgrove, Auckland.

PRUNUS SUBHIRTELLA 'PENDULA'



photographed in Hugh Redgrove's garden, at Oratia, Auckland.

GARDENING WITH ACIPHYLLA MONROI :

There are Wild Spaniards and Wild Spaniards, and given the choice, I would settle for *Aciphylla monroi*, a pygmy in comparison with its big brothers.

While the plant still has sharp leaf tips and the leaves are upstanding, they are not rigid and hence can be domesticated with some safety.

It is found through the mountain regions of Otago, Canterbury, Nelson and Marlborough, growing in ground-hugging associations of herbs and grasses. Readily propagated by division, plants are best grown in a free draining mix and are equally at home in a container or open ground.

It is difficult to imagine their inclusion in the *Umbelliferae* until the flowers appear, these having beauty in their form rather than conspicuous colour.



- Graeme Paterson, Dunedin.

Otari news ~

from OTARI NATIVE PLANT MUSEUM.

Arthropodium cirratum 'White Cascade'

Arthropodium cirratum 'White Spire'

In recent years at the Otari Native Plant Museum in Wellington, extensive use has been made of Arthropodium cirratum (Rengarenga Lily) for ground cover, a purpose for which the species has proved most satisfactory.

Among the population growing at Otari, at least two distinct types are present. One of these (I will call Type 'A') presents a markedly lax habit, while the other form (Type 'B') is much more erect. Unfortunately, the origin of both types cannot be confirmed.

Each type produces leaves mostly 30-60 x 3-10cm. The inflorescences of both exceed the leaves, but I feel that the size and form of inflorescence and of leaves in each type is sufficiently distinct to warrant at least the application of cultivar names.

Type 'A' - Leaves are usually longer in proportion to their width, compared to those of 'B'. In addition, leaves are usually more arching and of thinner texture than 'B'. The length and habit of the inflorescence is (like the leaves) also longer and more arching. Individual flowers are usually white in bud and when open, although, rarely, buds may be purplish.

Type 'B' - Leaves are shorter in proportion to their width. The rosette of leaves is more erect and leaf texture usually thicker and more fleshy. Inflorescence is shorter and more compact. Flowers are more often purplish in bud and sometimes purplish/white when fully open.

In order to differentiate between these two forms it is proposed to call Type 'A' Arthropodium cirratum 'White Cascade' and Type 'B' Arthropodium cirratum 'White Spire'.

It has been found that each type comes true from seed.

The raising of plants with characters differing from those outlined above may, in future, warrant the application of further cultivar names within Arthropodium cirratum.

from R.H.Mole, Curator - Otari Native Plant Museum.

WARNING !

FROM THE MINISTRY OF WORKS AND DEVELOPMENT ;

An Asian Rust Disease is attacking NZ's Weeping Willow -

A new rust disease which attacks weeping willows has been discovered in New Zealand. The disease appears to be confined to the weeping willow and its hybrids. Inoculation tests carried out by scientists at the National Plant Materials Centre on a range of other willows indicate that most tree willows found in NZ either have a great measure of resistance to, or are immune to the rust. The crack willow, golden willow and Pekin willow (Salix matsudana) appear to be unaffected.

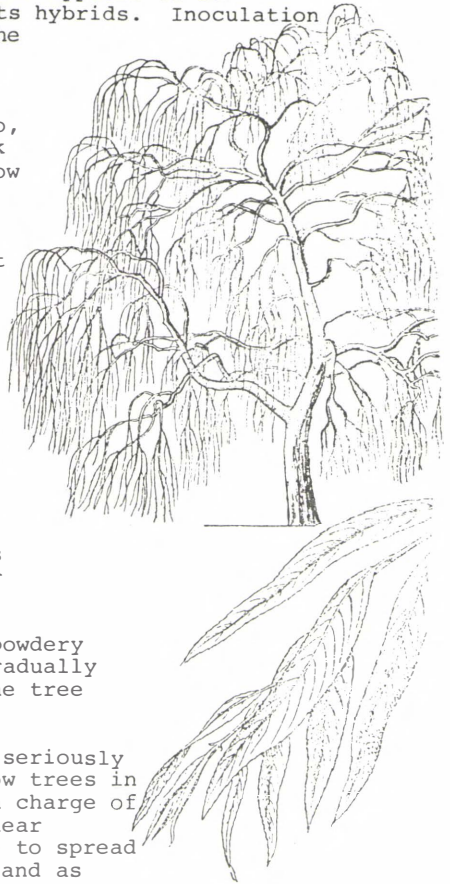
Since its discovery in Northland last November the disease has slowly spread south. It was reported from Auckland, Hamilton, Rotorua and Whakatane in December or early January, and had reached Palmerston North by the end of January.

The fungus disease, Melampsora coleosporioides, hitherto known only in China and Japan, was found in Australia in April of last year. It is thought to have arrived in NZ by spores carried in air currents across the Tasman, in the same way as poplar rust.

When it first attacks, a few yellow powdery spots are seen on some leaves, but gradually all leaves become infected, giving the tree a yellow appearance.

It is still too early to predict how seriously the disease will affect weeping willow trees in NZ. Mr van Kraayenoord, Scientist in charge of the National Plant Materials Centre near Palmerston North, expects the disease to spread more rapidly throughout the North Island as cooler moister weather approaches.

The true weeping willow (Salix babylonica) in NZ is particularly vulnerable as all trees are offspring of cuttings taken from a tree near Napoleon's grave at St Helena, and brought to NZ in the middle of the last century. This means that all the trees have the same genetic makeup and can be expected to be equally susceptible.



District Council News..

WHANGAREI : The February meeting was treated to a trip to Nepal, via films taken by Mr and Mrs Ned Kokich, who were in a party of 21 trampers to that fascinating country. Points of interest included poinsettias everywhere, terraced crops of barley, rice and maize, and flowering rape. The trampers camped out in tents, crossed many swing bridges, often descended valleys on all fours, and enjoyed their meals prepared by Sherpas - especially appreciated the pawpaws which grew at altitudes up to 12,000'. The latest issue of the Whangarei Newsletter includes a "Question Box" conducted by Ann Reed, FRIH, and members have not been slow to avail themselves of this opportunity to receive expert advice.

AUCKLAND : The Seed Scheme is still in operation, but during Dr Goodey's absence last year all the seed and book of addresses of donors and their requests disappeared! He would like to hear from all these people again. Please write to Dr Goodey, at 81 Gladstone Road, Parnell, Auckland 1.

An important development is the PROVINCIAL CONFERENCE, to be hosted by the Auckland District Council, in the Auckland Horticultural Council Headquarters, 6th Floor, Eden House, Khyber Pass, Auckland, at 10.15 am on Saturday 16 June 1979.

Members of the Institute from Auckland, Waikato, Bay of Plenty and Whangarei cordially invited to attend. This is to be a business meeting to discuss Institute affairs - it is hoped to have a National Executive member in attendance. Bring your lunch - tea and coffee provided.

The late Frank Filmore : The Auckland District Council has opened a Memorial Fund in memory of Mr Filmore, who was an active member of the Auckland Executive and did much to foster horticulture and to assist local Horticultural Societies and Local Bodies, to the benefit of the metropolitan area at large. Should you wish to make a donation, please forward it to Mrs K.J.Veal, 9 Gray Crescent, Torbay, Auckland 10.

A few hints on Maidenhair - if not growing well, check the mix you have it in. To start, maidenhair root best in a moist but FREE DRAINING growing mix. If waterlogged, they go off quickly. They are better grown in a tall-standing container, rather than a squat pot. Watch out for draughts, sheltered positions are best. Feed with a mild stimulant and deal with aphids and mealy bud. To avoid burning place in filtered sunlight.

DISTRICT COUNCIL NEWS (CONT)

NORTH TARANAKI : Have you ever thought about the factors which make this locality unique in terms of horticultural capability? There are few places in the world where so many plants from diverse climatic origins can grow together successfully. Perhaps we owe more to Mt Egmont than realised. Mt Egmont stands virtually as a solitary peak thrusting out on a cape into the moisture-laden prevailing winds coming in from the Tasman. The obstruction formed by Egmont and adjoining ranges ensures steady rainfall on northern and western sectors, and looks after our rhododendrons, camellias, etc. Our remarkably free draining soil is due to volcanic ashes. Where else can you go out and dig in the rain? This free-draining soil takes care of our proteaceous plants, which come from Australia and South Africa and theoretically have no right to survive our rainfall. The cold southerly wind, cooled by Egmont, reduces the creepy-crawlies which would affect our fruit and other deciduous plants. Prevailing 'maritime breezes' keep us relatively frost-free on the coast, (so we can grow citrus), and keep the humid air moving so that we are not buried in fungus.

Dedication of Sir Victor Davies Park : Central Park, New Plymouth, has been renamed the Sir Victor Davies Park, and at its official dedication ceremonial trees were planted by Lady Davies, His Worship the Mayor of New Plymouth, and representatives of 14 local and national organisations. All plants were selected and laid out by Mr A.D. Jellyman, Director of Parks and Recreation, New Plymouth, using a collection of NZ native trees and shrubs. Members of the Institute should take a special interest in this Park, and perhaps around Arbour Day each year a further contribution of plants or trees could be made in memory of the most well-known past member of the North Taranaki District Council.

MANAWATU : "The Cultivators", the newsletter of the Manawatu D.C., reported on a survey of NDH students' needs. Students are interested in getting together and the District Council is keen to help in any way possible with their requests for help, information, etc.

The Summer 1979 Newsletters included articles on : MAF leaflets, Commercial Cut Flower Growing in NZ, Growing Tomatoes in Sawdust, Soil suitable for Horticulture, Historic Trees.

SOUTH TARANAKI : During 1978 we contributed \$16 towards a planting of native trees in the grounds of the Riverlea School. Our Patron, Mr Rod Syme, selected the trees and supervised their planting. We also donated \$40 and took part in a further planting to beautify the grounds of the Eventide Home in Eltham.

Weekend excursions : 26 members used the Taranaki Anniversary weekend to visit Waihi and Hamilton. We called at the rose garden at Te Awamutu, Waihi Museum, the lovely old-world garden of the Misses Menzies and the fabulous Waihi Water Gardens, the Morrinsville Rose Garden, Hillcrest Rose Garden and Hamilton City Council plant nursery and glasshouses. In Hamilton, ex-Hawera identities Royce Barclay and David and June Burton arranged a buffet dinner, and conducted visits to Ruakura Research Centre, the grounds and Chapel of Southwell School, luncheon at Lake Kiosk, and finally to the Gillards' Blueberry Farm.

DISTRICT COUNCIL NEWS (CONT)

WELLINGTON : The March Workshop evening was devoted to "Grasses - their identification, and the use of native species of grass and sedge in horticulture. The main speaker, Mr Colin Ogle, scientist of the Fauna Survey Unit, Wildlife Division, was followed by Mr Ray Mole's talk on "Native Grasses and Sedges". We noted that the Wellington Parks and Reserves Dept. is a large user of our native grasses and sedges, with over 5000 planted in the last season.

Linden Pruning Demonstration - Saturday June 16, 2 pm, is the time and date of this year's first pruning demonstration, to be held at : 57 Ranui Terrace, LINDEN. There will be a plant stall and contributions of plants are welcomed.

Arbor Day - Wellington - the Arbor Day ceremony will be held at Pinkerton Park, Newlands, on Tuesday June 5, at 10.30 am. This is a public function and you are cordially invited to attend.

Camellia Society Meetings - held regularly in the Committee Room, Horticultural Hall, Laings Road, Lower Hutt. You are cordially invited to attend - please bring a camellia bloom, if you have one, no matter how wind-damaged or rainspotted!
The next meeting is : June 20 - 7.30 pm "The American Camellia Scene."

Dr R.N.Rowe, Director of the Knoxfield Horticultural Research Institute, Victoria, Australia, has been appointed Professor of Horticulture, and Head of the Dept. of Horticulture, Landscape and Parks, at Lincoln College.

Dr Rowe has been a visiting lecturer at Melbourne and La Trobe Universities since 1967, with sole responsibility for the preparation of the syllabus and presentation of lectures for the horticultural content of agricultural science degrees at those Universities. He also lectured in Botany at Monash University from 1968 - 1971.

Dr Rowe has a B.Ag.Sci. from Melbourne, and M.Sci.(Hort) from California, where he also gained his Ph.D.(Plant Physiology).

With a colleague, Dr Rowe won the Stark Award from the American Society of Horticultural Science in 1972. He has published several papers, and is Vice-President of the Royal Horticultural Society of Victoria.

Bacon on gardening : "It is the greatest refreshment to the spirit of man; without which, buildings and palaces are but gross handiworks."

"Nothing is more pleasant to the eye than green grass kept finely shorn."

News from Here & There ~

The Society of Professional Florists : Mr Stuart Perry has retired from the position of Secretary, after some years of sterling work. The new secretary is :

Mr Neil H. Haverfield, C/- P.O. Box 30-459, Lower Hutt.

DUNEDIN NATURALISTS' FIELD CLUB recently visited Maungatua. The party of 33 members travelled by bus from Dunedin via Mosgiel, Outram, Middlemarch, into the farmland on the north side of Maungatua (altitude 897m).

Once liberated from the bus, we were head down and tail up in the subalpine tussock, looking for the small herbs that form the ground cover. The flowering plants were immediately obvious, numerically dominated by *Celmisia gracilentia* and followed by the stocky leaved *Celmisia densiflora*, while in damper situations *Ranunculus hirtus* and the fine leaved *Ranunculus gracilipes* presented hundreds of yellow buttercups. This was December, and seeds of both species were formed and ripe. Small plants of *Drapetes dieffenbachii* had finished flowering and the dainty *Lagenophora* daisy was past its best.

Pernettya macrostigma perhaps provided the gem of the flowers, although the orchids sustained most interest. *Thelymitra* grow almost as a weed, and *Aporostylis bifolia* was dotted singly over the north facing slopes. *Lyperanthus antarcticus* was in bud and the foliage of the onion leaved orchid *Microtis uniflora*, *Chiloglottis* and *Corybas* were noted. The slopes concealed *Sphagnum cristatum* and *Gunnera prorepens*, the sundew *Drosera arcturi*, *Nertera* & *Fostera* species, and *Viola cunninghamii* in flower.

Drier aspects sported cushions of *Oreobolus strictus* and *Scleranthus uniflorus*. *Pentachonda pumila* posed with flowers and fruits, and *Oreostylidium subulatum* still held last season's seed capsules. The most eye-catching plant was *Herpolirion novae-zelandiae*, which formed colonies up to a metre across, with petals from clear white to cream to soft blue.

As the day wore on it seemed that every plant I wished to examine was guarded by the prickly *Cyathodes frazeri* and the ferocious *Aciphylla aurea*! The silvery *Gnaphalium machaultii* and the grey *Craspedia lanata* provided some colour, along with the everlasting daisy flowers of *Helichrysum bellidiodes* and the white Harebell *Wahlenbergia albomarginata* provided light relief among the tussocks. With heavy fog rolling in, nobody ventured along the summit, where other species grow happily.

This was a most enjoyable day - coastal range flora is often under-rated. The Dunedin Naturalists' Field Club, founded in 1872, now has 231 members, and 32 meetings a year - object - to study natural science generally and in the neighbouring district.

more news ~

The Auckland Lily Society :

Seed Exchange, C/- Mrs E.Whittle, Private Bag, Napier, will welcome all seeds of Lilium, Liliaceae, and Amaryllidaceae. (Seeds to be sent as early as harvested.)



The March 1979 Bulletin of the Society contains illustrated guides for propagating lilies from seed (2 methods - Epigeal and Hypogeal). Interested? The New Member Secretary is Mrs M.S.Welch, 12 Almorah Place, Epsom, Auckland 3.

from the Poverty Bay Horticultural Society Newsletter
"CUTTINGS" -

The Spring Garden competition has been planned to be judged on 19/10/79 - so you will have plenty of time to prepare your garden, and to add delight for passers-by.

EASTWOODHILL (see Bulletin 8) has been honoured by the World Society of Dendrologists who visited last year, with a Bronze Plaque for Special Merit.

You can become a "Friend of Eastwoodhill". Contact the Secretary of the Poverty Bay Horticultural Society - Mrs W.Kirkham,
38 Oak Street, Gisborne.

FROM ACROSS THE TASMAN : our immediate past Chairman of the Examining Board and member of the National Executive, Dr T.M.(Mac) Morrison, is now well settled into his new Directorship of the Queensland Agricultural College.

We occasionally hear news of the delights of Queensland - warm temperatures, tropical fruits, etc, and apparently Dr Morrison has taken to very early morning inspections of his new domain, startling the natives and no doubt impressing the staff by his vigilance!

Dr Morrison writes : "Since taking over the position as Director of Queensland Agricultural College, I have been impressed with the relevance of a course to NZ beekeepers. This is a 2 year full-time course leading to the award of Associate Diploma in Apiculture. The course contains lectures, practical work and involvement in the commercial activities of the large College apiary, and experience with extensive research programmes. No prior practical experience with bees is essential.

The course is designed to develop practical skills in beekeeping and to train students in the techniques of planned crop pollination programmes. Besides the commercial apiary the unit maintains a queen-breeding unit and an active research laboratory.

In Australia tertiary institutions no tuition fees are payable, but overseas students pay for residential costs - about the same as those in NZ."

SOME LEAFLETS OF INTEREST TO GARDENERS :

There is a wealth of information available to the home gardener in NZ, and this list may prove useful :

TITLE :

AVAILABLE FROM :

Project 1 - Adopt a Stream

Project 2 - Plant a Native Garden

Urban Trails

Activity Leaflet No. 1 - Raising Native
Trees from Seed

No. 2 - Recycling Waste Materials

No. 3 - Protecting Historic Places & Trees

No. 6 - Establishment & Maintenance of Tree
and Shrub Communities

No. 8 - Conservation in the Garden

No. 12 - Teaching Conservation to your Children

No. 13 - Understanding Soils

No. 15 - Making your Garden Attractive to Wildlife

No. 16 - Growing Native Seeds & Seedlings

No. 17 - Looking after our Trees

No. 18 - Treatment of Ailing Wild Birds

No. 19 - Understanding Soils - Part 2

No. 20 - Planting for Difficult Exposed Sites

A Field Guide to Common NZ Trees & Shrubs

Mangroves and Reclamation

Lakeweed in NZ,

all the above available from :
Nature Conservation Week Campaign,
Box 12-200, Wellington.

Trees, People & the Environment

Commission for the Environment,
Box 11-244, Wellington.

Tree Planting for Native Birds

Wildlife Service, Dept. Int.
Affairs, Private Bag, Wellington.

Watch out for these Poisonous Plants

- Dept. of Health, Private Bag,
Wellington.

Some Tropical and Sub-Tropical Fruits

- " " " " "

Arbor Day

NZ Forest Service, Private Bag,
Wellington.

"Gardening isn't a pastime -
it is a fine art, a philosophy,
a compulsion, a mania, an
emotional disturbance with
masochistic behavioural
patterns." - Warren Kenfield.



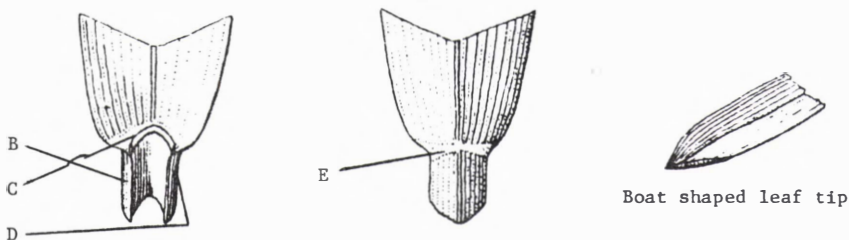
Know Your Turfgrass - 3

D. E. ALDOUS

Kentucky bluegrass (*Poa pratensis*)



A - Blade : Folded in the bud, V-shaped to flat, keeled below, abruptly boat-shaped apex.



- B - Sheath : Overlapping below, glabrous, somewhat keeled.
 C - Ligule : Membranous (0.201mm long), truncate.
 D - Auricles : absent.
 E - Collar : medium broad, divided glabrous.

Remarks : Native of Eurasia and widespread in NZ.
 Turf type *Poa* species best adapted to moist, fine textured soils. Prefers full sunlight and does not persist under shaded conditions. Its recuperative potential and rhizomatous development result in Kentucky bluegrass being well adapted to general purpose turf, athletic fields and commercial sod in the cool humid and transitional climate of the U.S. Requires medium to medium-high intensity of culture, cutting height 2.5-5.0 cm preferred. In NZ rust can be injurious to Kentucky bluegrass swards.

A REQUEST FROM OVERSEAS :

Mr A.G.Crouch, Superintendent of Grounds, University of Exeter, Northcote House, The Queen's Drive, Exeter, U.K. writes :

"I enjoy and find it useful to be able to meet and converse with other horticulturists wherever they are. I would be most grateful if you could put me in touch with such societies and organisations.

"We have suffered extremely low temperatures and atrocious weather conditions this past winter resulting in very heavy losses amongst our plants - even Phormiums have died. The many Australasian and Chilean plants that we have come to accept as being hardy in the south-west of England have succumbed and it has even been necessary to remove 80' high gums such as Eucalyptus viminalis."

If any members and organisations would like to correspond with Mr Crouch, please write to him at the above address.

TREE OBSERVING IN THE U.S.S.R.

FROM MOLLIE SCRIVENER, LIFE MEMBER,
NORTH TARANAKI D.C., RNZIH.

For the vagueness of this article I offer three excuses : (a) lack of personal knowledge, increased by leaving reference books at home, (b) difficulty in obtaining information on flora, both during and prior to the trip, from any source, including Moscow itself, (c) the speed of the Trans-Siberian railway - my observations were often done from the train moving at 60 mph. and at distances of up to half a mile or more.

The first trees we saw in the USSR were poplars, at Nakhodka near Vladivostok - viewed through the porthole of our cabin. The trees were just coming into new leaf in mid-May and gave a lightness to the otherwise drab port. My diary states : "Nakhodka is a 50/50 mixture of poplars and gasometers". We were not able to set foot in the town, but they appeared to be the Black Poplar (*P. nigrai*). Next day we awoke on the boat train between Nakhodka and Khabarovsk, to see in the early dawn mist the swampy landscape featuring the tree most seen across Russia and Siberia - the birch. I have not been able to determine the species, though *B. costata* is listed as growing in NE Asia. They surpassed the common *B. pendula* in whiteness of trunk, even small seedlings of 2' in height showing the same characteristics.

In Khabarovsk, a city founded in 1858, I recognised the Amur cork tree, *Phellodendron amurense*, just sprouting into foliage in the berms. These are not berms as we know them - no grass visible, the sandy earth beneath the trees having a half-dug, half-trampled appearance. The berms were a veritable forest and a traffic hazard, had there been more than the average of three cars seen around each day. The people took advantage of the shade offered by these plantings, 15-20' wide, and thick with young deciduous trees and saplings. They gave a leisurely atmosphere to the city and a cleaner atmosphere to breathe. Town planners of the future could well take some lessons from Siberia when deciding street and footpath widths.

The "parks" were similar - no grass, few specimen trees, just concrete walking areas with large beds of young deciduous trees - oak, birch, maple, aspen, lime, etc. edged with smaller shrubs such as *Spiraea* and *Weigela*. The Siberian Elms (*Ulmus pumila*) bore dense masses of green winged seeds, the leaves not yet having appeared.

Aboard the Trans-Siberian railway proper, my "botanising" centred around edible specimens sold on the station platforms - extremely hard Pine kernels, which none of our party succeeded in cracking, (possibly from *P. cembra*, the Arolla Pine or Siberian Cedar. I brought back some samples which I hope will germinate.) Then bunches of broad green leaves resembling Lily of the Valley - chew the stalks for a spring onion flavour! Another botanical mystery was an acid purple berry. These were picked in Autumn and frozen to be sold in one-pound jars by elderly ladies, along with mashed potato and other delicacies. Our Russian guides described them as "delicious", and although we could not agree with this description, we ate them as a possible source of much-needed vitamin C. I think they were some type of *Vaccinium* or *Gaultheria*.

TREE OBSERVING IN THE USSR - CONT.,.,

Siberia in May was all green and white - the spring foliage of the birches and other trees, and the blossom of Chokecherry (*Prunus maackii*), Pear blossom and another *Prunus* suggesting Sloe or Blackthorn. A soldier presented our guide with an armful of Chokeberry to distribute among the party, and we used it as table decoration in the buffet car. Private ornamental horticulture was non-existent in the little wooden settlements of this part of the Far Eastern Territories. Each house stood in its plot of dug ground of irregular shape surrounded by a wooden paling fence. Land is free, and each person encloses as much space as he needs to provide for his family, or as he feels capable of cultivating. There was not a sign of greenery in these enclosures - there may have been potatoes underground.

As we journeyed west the birch forest, known as taiga, became taller, and soon there appeared beneath the canopy a beautiful light mauve mist. This also appeared on our dining tables and proved to be a wild deciduous rhododendron with flattish, slightly speckled flowers about 1" across. We saw willows along the track, and a shrub in catkin which I at first thought was hazelnut, but as larger specimens appeared I put down as an alder. In places the birches gave way to larch (*L.dahurica* & *L.sibirica*?) and I caught glimpses of reddish stems - *Cornus alba Sibirica*? There were now patches of snow by the track, and more signs of cultivation on a vast scale - less of the swampy grassland and taiga. At one point my diary states that I could see nothing but pines!

Our second overnight stop was at Irkutsk on the Angara River, not far from Lake Baikal. The only plants I noted here were Chokeberry, Siberian elms, some unhappy spruces, *Acer negundo* or its double, a *Crataegus* just forming flowers, a rowan, lilac bushes, and Dogwood used as an edging shrub for small blocks of trees in the parks. 70km away, at Mt Cherski, (which takes all of 30 minutes to climb) we were at last among the birches, larches, Siberian "Cedars", alders and pussy willows, with underfoot the blue flowers of *Pulmonaria obscura*, white flowers of a cruciferous type, *Adonis vernalis*, *Pulsatilla patens*, low wild raspberries, the pale mauve deciduous *Azalea* and familiar weeds such as dandelion and yarrow.

Novosibirsk, which we reached two days later, provided a lesson to our housing site developers. The entire satellite town of Akademgradok, devoted to the sciences, had been carved out of the virgin mixed forest of birch, larch and spruce. The builders had used no more space than the floor space of each house - not even lawnspace were cleared. Houses were barely visible from their neighbours, and one wonders whether the learned men of science might become lost in the woods on their way home! There were notices up for people to protect the squirrels.

to be continued in next Bulletin.

TRANSPLANTING TRAP FOR TREE PLANTERS -

We live in a container age. For the tree-planter this has been a mixed blessing. On the credit side it is now possible for the 38,000 families scattered all over NZ who possess holiday homes/cribs/baches to shift young trees into their favourite recreation site in most seasons of the year. And there are some desirable species that need to be transplanted with minimum disturbance to the delicate rooting system.

Examples include such typically Mediterranean species as Italian Cypresses, Italian Stone/Umbrella Pine, Atlas Cedar and the Holm Evergreen Oak(***) just to name a few commonly transplanted to sunny dry holiday spots like Central Otago and Taupo.

In addition, many of the Eucalypts need to be transplanted in containers or specially designed tubes. Other Australian species such as the Wattle come into this category too.

Generally speaking these trees are characterised by proven drought-hardiness but often suffer some sensitivity to frost - more especially in the early years of settlement into a new site. Some times the trees are a little bare in fibrous feeding rootlets.

The catch is that nurserymen often make up a propagating/potting mixture which is appropriately sharp AND rather porous. Misting and trickle irrigation techniques ensure success and a healthy looking young tree is the result.

When the young trees are planted out in their permanent setting they look fine, and following a liberal watering, the holiday home owner leaves the trees in a spirit of confidence and expectation. Dismay and disappointment come a few months later when many of these trees die unexpectedly - especially when considering their proven drought hardiness record. We have suffered this result on a number of occasions on our very dry exposed site at Bridge Hill, Alexandra, over the 17 years of planting experience at the Jolendale Research Parkland scenic reserve.

I would suggest that the problem is in large measure due to the incompatibility of the transplant pot soil mixture, which by its exceptionally porous nature allows the tree roots to dry out very freely - indeed its function could be likened to an efficient evaporator.

The outcome is especially significant for those who leave the site for lengthy periods of time while the 'locals' can overcome the problem by regular watering until such time as the tree extends its roots into less porous soils.

Finally, I suggest that our nurserymen could afford to specialise a little more in the direction of the requirements of the 38,000 holiday home owners and 'tailor-make' the transplants accordingly.

*** *Cupressus sempervirens* 'Stricta', *Pinus pinea*, *Cedrus atlantica*,
Quercus ilex.

OPPORTUNITIES : OPPORTUNITIES : OPPORTUNITIES :

VACANCY - Propagation Overseer, MOWD Newstead Nursery,
Hamilton.

The duties and responsibilities of this position involve overseeing propagation operations, maintenance of all plant stock, and organising plant supply for landscape outwork. The nursery has a team of 12 workers and propagates within the range of 100,000 plants yearly, holding a total stock of approximately 200,000 plants.

The desirable level of skill required would be : either a horticultural trade background with a minimum of five years' experience in modern nursery and propagation techniques, or a graduate of the current Lincoln College Diploma in Horticulture course, with suitable experience.

Commencing salary \$8,100 with opportunity to obtain merit grades to \$9,220. Assistance may be given to a married appointee required to move household.

Enquiries to : Mr B.D.Brown, (REF 12/2/21, 36/20/1/20/1)
MOWD, Private Bag, HAMILTON.

TUTORS REQUIRED - NZ Technical Correspondence Institute,
Lower Hutt.

Tutors required for the Horticulture Department.

Re-organisation and an expanding roll have created a need for more tutors to teach a wide range of horticultural subjects to students working at NDH and Trade Certificate level.

Tutors need a sound theoretical knowledge backed by experience in parks departments or commercial horticulture. Training in techniques of distance teaching are given and tutors have opportunities to keep up with developments in the horticultural industry.

Starting salary within the range \$8,692 to \$12,162, with annual increments to the top of this scale.

Application forms and further information may be obtained from the :

Head of Department
Horticulture and Pest Control
Box 30-335,
LOWER HUTT.

LANDSCAPE CONTRACTORS SHORT COURSE - Massey University, in association with the Landscape Contractors Group of the NZ Nurserymen's Association, will be holding their second short course August 6-8th, 1979. Further enquiries to :

Dr David E. Aldous,
Course Director, Dept. of Horticulture &
Plant Health,
Massey University, PALMERSTON NORTH.

"GARDEN" - PUBLISHED BY THE GARDEN SOCIETY,
A DIVISION OF
THE NEW YORK BOTANICAL GARDEN,

is received in the office of the Institute, at Lincoln College, and we wonder whether any of our members know of this delightful publication.

This bi-monthly magazine contains the most beautiful photographs, of a consistently high standard, that we have seen. Articles cover a variety of topics of interest to the keen horticulturist, be he home gardener or commercial grower.

The latest edition features articles on :

"Reading the Bark" - by Gary A. Borger

"Et tu? - the stresses that man imposes on urban trees" -
by Richard M. Klein

"A closer look - Limp Lettuce"- by Richard M. Klein

"Witch Hazel" - by Mary Vanaman O'Gorman

"The Great Indoors - the exotic Hoya" - by Charles
Marden Fitch,

and others.

Book reviews and a guest column are always included.

This issue's article on the Hoya carries luscious-looking photographs, capturing the moist wax appearance of this plant.

If you are interested in subscribing, here is the address to write to :

"Lasca Leaves - Garden" magazine,
The Garden Society,
Botanical Garden,
Bronx,
New York 10458.

Non-membership subscriptions are available for US\$10.00 from the above address.

Single-copy price is US\$1.50 plus 50c postage/handling.)



Exbury Azalea



Fraises des Bois

ANNOUNCING :

NZ INSTITUTE OF AGRICULTURAL SCIENCE CONVENTION :

HORTICULTURAL SECTION,

in conjunction with the RNZIH, will be held at :

LINCOLN COLLEGE,

MONDAY AUGUST 20 - THURSDAY AUGUST 23, 1979.

Speakers on a wide variety of topics, plus plenary sessions, will ensure that this is an interesting, thought provoking and worthwhile Convention.

Mr John Taylor, Chairman of RNZIH National Executive, is Convenor of this section of the Convention.

Details of registration etc, available separately.

Amidst limestone hills and tors of this Canterbury landscape is the only habitat of the rare buttercup, *Ranunculus paucifolius*.



This photograph by G.C.Kelly, appeared in "Landscape 5", published by the Dept. of Lands & Survey, Wellington.

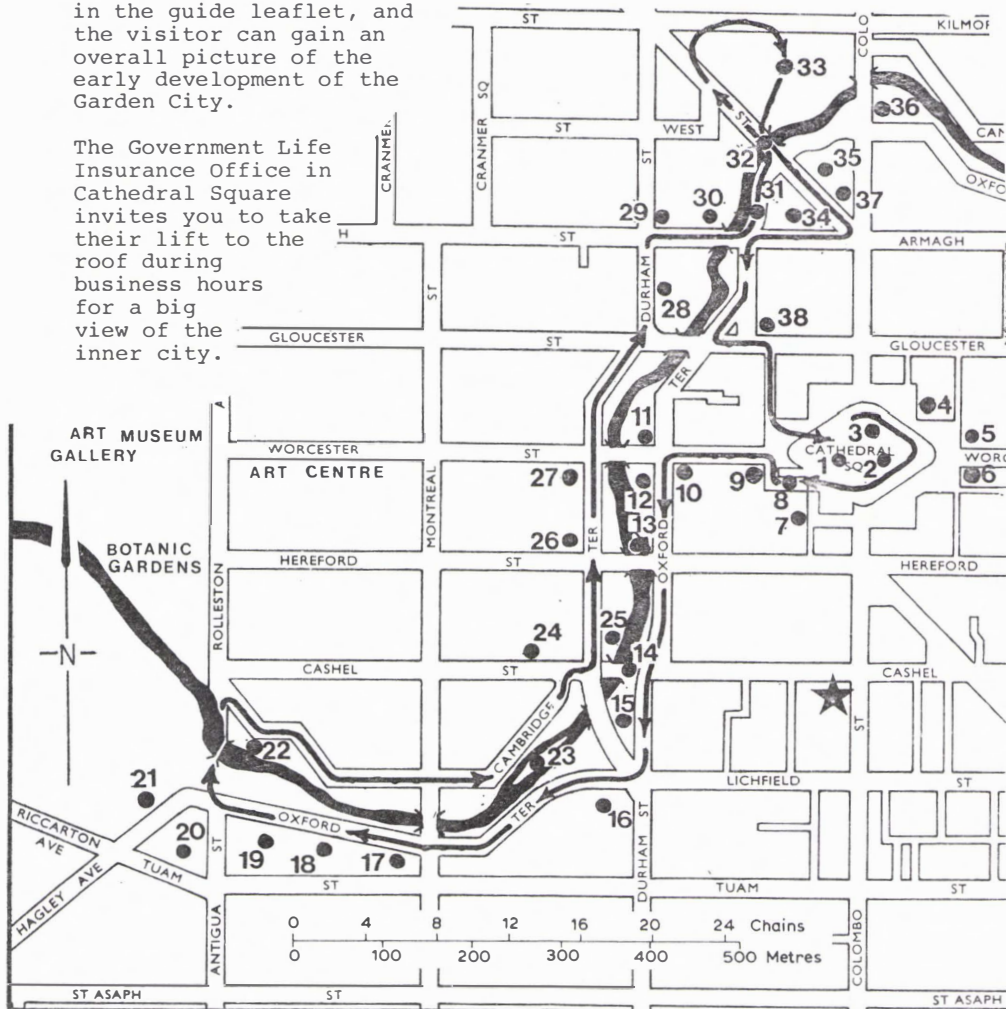
CHRISTCHURCH RIVERSIDE WALK - CITY WALKS COMMITTEE,
 PARKS AND RECREATION DEPT.,
 CHRISTCHURCH CITY COUNCIL.

Members visiting Christchurch (perhaps for the NZIAS Convention in August) should take advantage of the City Walk.

This Central City Walk, No. 1, is divided into three sections CATHEDRAL SQUARE - AVON RIVER - VICTORIA SQUARE, which may be taken separately or in one continuous trip, taking no more than 90 minutes.

Points of interest are noted in the guide leaflet, and the visitor can gain an overall picture of the early development of the Garden City.

The Government Life Insurance Office in Cathedral Square invites you to take their lift to the roof during business hours for a big view of the inner city.



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Get in touch with your District Secretary and become involved
with local RNZIH affairs.

