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Horticulture

in New Zealand

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



AUTUMN 1977

HORTICULTURE

IN NEW ZEALAND



BULLETIN OF THE ROYAL N.Z. INSTITUTE OF HORTICULTURE

NUMBER 3, AUTUMN 1977

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Cover design by M. Cole

ROYAL NEW ZEALAND INSTITUTE OF HORTICULTURE (INC.)

Patron: His Excellency the Governor General, Sir Denis Blundell

President: Dr. J.D. Atkinson

Chairman of Executive: Professor T.M. Morrison

Editor: M.E. Thomas

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The Editor welcomes articles, letters and news items for consideration for publication. Deadline dates for material are: Autumn issue, February 20; Winter, May 20; Spring, August 20; Summer, October 20. Contributions should be addressed to the Editor, P.O. Box 12, Lincoln College.

Views expressed in the Bulletin are not necessarily those of R.N.Z.I.H.

Registered at Post Office Headquarters, Wellington as a magazine.

R.N.Z.I.H. Publications

The production of the quarterly publication of the Institute has again changed hands. This edition of "Horticulture in N.Z." is being produced from the Institute's new Head Office at Lincoln College.

The first two Bulletins were excellent publications, efficiently prepared by Chris Howden. Unfortunately Chris has retired as editor and the Autumn Bulletin is in new hands with a smaller expense budget. Thanks go to Chris for his work to date. Hopefully members will not mind accepting this less expensive presentation.

I believe that the R.N.Z.I.H. publications should be one of the pillars of the Institute. The Bulletin can act as a forum for ideas and a source of horticultural news and current affairs, needing the support of all members and District Councils to be truly effective. Small articles, letters, advertisements, and District news items are all very welcome.

The Annual Journal provides members of the Institute with a valuable record of progress in the field of horticulture. Each year the Editorial Committee seeks out a variety of articles by New Zealand's leading professional and amateur horticulturists which will appeal to as wide a range of interests as possible.

Also included in the Journal are summaries of N.D.H. theses recently presented. The Journal provides interesting reading as well as acting as a particularly valuable source of reference material.

The 1977 Journal will be available to members shortly and can be ordered from R.N.Z.I.H., Box 12, Lincoln College. Back copies are also available.

Mike Thomas

Exciting Trees for the years ahead

ROLAND CLARK*

Mention trees as a source of income to the average New Zealander and he will think of *Pinus radiata*; press him to enlarge the list and he may come up with apples, pears and cherries. Somehow there is a gap in our knowledge of the many interesting trees which fall between these two and this is where we in the N.Z. Tree Crop Association are working. Working is hardly the right term as it's a lot of fun and intensely interesting.

Basically New Zealand exports one thing only, processed sunshine. We turn it into foreign exchange by way of wool, meat and dairy products. How can we capture more of this wonderful sunpower? One answer is by developing a two-tier agriculture with our animals grazing happily under trees which will either produce very valuable timber, speciality timber, or which will produce a crop for man or beast every year, thus adding to the amount we can harvest off our farms and hills.

The first class of tree would be what I call a terminal crop, one which would only yield a value once cut down. Preferably the wood would be very much sought after thus repaying any special attention. The first trees we tried were hybrid poplars, spaced at 40 foot centres in a paddock twenty years old, which carries at least eight sheep an acre. Six years old now, they look marvellous, providing shade and shelter for the stock and recycling nutrients from far below the root zones of the grasses and clovers. In Italy top grade land is used for poplar production. Here we are only suggesting using it as the icing on the cake. What a fantastic improvement we would see on our Canterbury plains if all our farms were covered with wide spaced poplars!

They are a quick growing crop of course and my present idea is to interplant them with a slower growing but very valuable tree which would be half grown once the poplars were cropped. A prime candidate is the black walnut, *Juglans nigra*. One log of this was sold for \$13,000 and the current price for a board one inch thick and measuring six inches by three feet is U.S. \$10.65, from a firm supplying cabinet makers in Woburn, Mass.

Other trees could be used of course. Tasmanian blackwood or *Eucalyptus saligna*, are good candidates.

Then we have a whole class of trees which will drop fruits or beans which will feed stock. The forests of England used to support great herds of pigs on the acorns shed by the common oak. Allenby's horses in Palestine were tuckered on beans from the carob tree as were Wellington's in the Peninsular. Imagine the effect of these trees being planted on some of our second grade land. How much better the stock would thrive with their shade and shelter with a bonus of autumn crop. I've got a block of forty honey locust growing to start my investigations, and I hope to add persimmons, oaks and whatever else I come across. Bernard Vavassour near Blenheim, is concentrating on this aspect of tree crops and has tried Mexican hawthorn, tamarugo and carob trees. He could change the face of Marlborough.

* President, N.Z. Tree Crop Association

Thirty years ago we grew our own energy on the farms in the form of oats to feed our horses. Since then we have been living on capital; no need to tell you the story. Dr. John Troughton at the DSIR worked at Stanford University in the States on growing eucalypts for energy. It is technically feasible and economically sound. Some day, someone is going to come to me and say 'We want you to grow twenty acres for energy'. I will plant the eucalypts and harvest them after seven years when all the wood will be either burnt to provide power or turned into fuel or gas. Then I'll leave the gate shut while the trees coppice madly, ready for another harvest in seven years and so on. Similar work is being done right here at Lincoln using macrocarpa as the tree. One of the great advantages of trees is that they act as their own storage tank or shed - there's no need to cut them down till they are actually needed.

Honey trees are my latest interest. We have a thriving export market for honey, most of which is based on the white honey crop. This comes into flower after Christmas and the bees have often got to be fed on expensive imported sugar to keep them strong and ready to take the best advantage of the clover. They get some of their keep early in the season from willows, gorse and so called 'weeds'. John Smith, the very keen Apiary Instructor in Christchurch believes we should plant trees designed to supply the early season food for bees. He's giving me enough seedling Himalayan pea trees (*Caragana arborescens*) and black locust to put in a shelter break. The former is used for shelter breaks in Alberta. Then I hope to plant other bee trees at wide spacings over the paddock, lovey trees like limes (preferably *Tilia cordata*) and *Eucalyptus mellanoxia* (reputedly the best of the eucalypts for honey production though many others are good). The common oak comes alive with bees when flowering, so will provide stock food as well as bee food.

There's a whole host of trees providing various kinds of oils. Life in the overgrazed and very arid Mediterranean countries would hardly be possible without the millions of lovely olive trees, trees which will produce a rich harvest of olive oil from land too abused and too arid for any form of fat production from animals, trees which will produce for a thousand years and more till all that is left is the shell of the trunk. They should do well in Blenheim and down in Central Otago.

There's a whole forest stretching sixty miles south of Bordeaux growing maritime pines which are tapped for their crop of turpentine. They're growing on land that in the eighteenth century was only sand dunes and have so built up the soil that much of the land is being turned into farms. And what visitor to Greece can forget the Retsina wine, flavoured from the tappings of some kind of pine? I'd like to know far more about this and hope that some reader will be able to help.

Paper and packaging all come from trees and the average consumption in Britain is 300 lbs a head a year. The experts forecast that supply won't keep up with demand in the years ahead, but now the scientists have come up with a totally new concept for cellulose production. They're advocating growing willows on wettish ground, spacing them very closely (about 3' x 3'), and cropping them with a forage harvester every year. The stumps will throw up a profusion of suckers and land considered fifth rate for conventional production will become valuable. Pulp mill buyers will be able to go to farmers and offer them contracts to produce the raw material for paper production with a cash flow starting in two to three years. Chris van Kraayenoord in the Ministry of Works, Palmerston North, says he has produced fifty tons per hectare without even trying.

Then there is the giant opportunity opening up for us to produce nut

crops for human consumption. There are 200,000 acres of bearing walnuts in California. We import \$325,000 worth annually and yet we have as good a climate as they have in California and cheaper land and cheaper water. Our walnut industry now is at the stage we were at when we harvested wheat with a sickle. We are using seedling trees, harvesting by picking up every nut by hand and are selling like small time peasants.

We've made a lot of progress. We've picked out the best of the local trees, ones that thrive in our environment, we've discovered how to graft them and we've got 480 keen members raring to go in our Tree Crop Association.

We've found some first rate local hazels and hope to find out how to propagate them by cuttings fairly shortly. We're working on pecans (turnover in the States for pecans is \$80,000,000 annually) and Stuart Dawes of the DSIR, Auckland is testing new varieties, macadamias are growing well and already we have some producing orchards in and north of Auckland.

We hope to find very good chestnuts this fall. They're a first class food for man and beast. They are easy to graft or bud in the open and I hope that some of you will write in and tell me about any good chestnuts you know of.

No doubt there are many more cropping trees I haven't mentioned. We can lead the world in developing a two-tier agriculture, producing an environment kind to man, bird and beast, and working with Nature instead of fighting her.

Land Scheme for Dargaville High School Students

One of the most popular optional subjects at Dargaville High School is proving to be horticulture. In order to further encourage the interests of these high school students in horticulture, it has been suggested to the Dargaville and District Industrial Promotions Committee that some of the large areas of under-developed Crown Land in the area be set aside for their use. The land could well be suited to the growing of such crops as kiwi fruit, avocados, nuts, berry fruit and citrus fruit. Small plots could be made available to interested young people on, perhaps, a two year trial period. If successful a long-term leasehold could be obtained or the right to freehold. Such a scheme could do much to promote interest in horticulture amongst the young people of the Dargaville district.

R.N.Z.I.H. Policy and Objectives

T.M. MORRISON*

1. POLICY

The Institute was founded by an enthusiastic group of horticulturists drawn from nurserymen, parksmen, educators and laymen. Their first achievements were to set up a system of examinations which at that time provided the sole qualifications in horticulture; they provided a platform and publication for discussion of issues common to a developing discipline; they expressed at a National level the concern of members with horticultural policies. They thus provided a blend of the Royal Society and of the Athenium of that time.

By its very nature the Institute encouraged the formation of other groups and thus was soon to be left by the nurserymen and by the parksmen who formed their own self-interested groups. They were followed by some of the educators who turned more of their attention to university departments of horticulture. This left the laymen, whose prime interests were necessarily local and garden oriented, and the Institute gradually lost its National voice and its Royal Society function although its examining system remained the pre-eminent practical test in N.Z. The objects of the Institute have been totally expressed in the Rules drawn up recently. These statements are highly optimistic and are simply not achievable with the Institute's limited resources of people and money. It has no permanent home, worst of all it has no permanent executive from which most of the strength of other important bodies is gained. Its members speak with other hats on. There is no way that we can speak for the whole of horticulture and we are better not to attempt to do so. This limits the objects and policies of the Institute and these are expressed below.

- (i) The institute must maintain vigorous publications to its members.
- (ii) We must maintain our monopoly of practical horticultural examining.
- (iii) We must concern ourselves with New Zealand's indigenous and exotic flora.
- (iv) We must foster regular communication between District Councils and other horticultural organisations.
- (v) We must take responsibility for matters not covered by other horticultural organisations.

2. OBJECTIVES IN 1977/78

Conferences - I believe that the Institute must regain its Royal Society function and this could be assisted through conferences. In the early life of the Institute travel costs did not prohibit the holding of conferences nor did competition with alternative forms of entertainment and learning inhibit attendances at local meetings. At present the bulk of Institute lay members do not wish to attend either conferences or local meetings. The former are left to the subsidised professional and practical horticulturist, the latter

* Chairman, National Executive.

are left to a few loyal stalwarts. Nonetheless, conferences should be encouraged and I hope we will continue to try to set these up with horticultural groups.

In 1977 we have committed ourselves to take part in a major weeklong convention with other agricultural and horticultural organisations in Dunedin in August. We intend to put aside one day to discuss from the professional and amateur viewpoints, the contributions that science, design, economics and engineering make to Horticulture. The Banks Lecture will be held in conjunction with this.

Our AGM to be held on May 28 in Wellington will consider policy statements made here as well as other matters such as the special type of membership put up by the Poverty Bay District Council. All of direct interest to all members and District Councils.

Publications - I attach tremendous importance to our publications, since the majority of Institute members are in contact only through our journal and bulletins. The bulk of horticultural matters, therefore, only reach members through our publications and this imposes a tremendous importance on them. I believe we have sold ourselves too cheaply through our publications and it is evident to me that all members should take the journal as part of their subscription. In addition, I find it hard to believe that our students should not be compulsory members of the Institute at least while they are taking examinations. All university students are compelled to pay about \$30.00 per annum as members of a student association, yet our students who are working full time during their study, are not even compelled to pay the very minor membership of the Institute and, therefore, are not reached by our bulletins, nor are they compelled to subscribe to the journal through which much useful information to students could be disseminated.

Examinations - We must continue to provide a system of examinations in practical horticulture and the higher levels of practical training in conjunction with T.C.I. In the latter we are severely hampered by two factors. First, we have no permanent tutors and secondly, we have provided too cheap a service to the horticultural industries.

I intend that we should make vigorous approaches to the various industries and to Government to ensure that our students, who all receive sound and advanced training for industry, are given the same advantages as the 28 horticultural cadets at present linked to the Horticultural Training Committee of the Vocational Training Council. It seems illogical that industry (except for Parks and Reserves) gives nothing, and Government only a trifle for training and examining 300 NDH students and yet are prepared to make a heavy financial commitment to training a few cadets.

Environment - Amongst the matters concerned with the environment and flora we should follow vigorously a number of objectives.

(a) The introduction of a national listing and recognition of historic and notable trees. This to be well underway before the end of 1977.

(b) We should follow up the two papers presented on our behalf at the Environment '77 Conference - one on renewable energy from *Cupressus* and the other on the problem brought about by the play-farmer around our cities.

(c) By the end of 1977 we should draw up a national and detailed scheme for testing cultivars throughout New Zealand.

(d) We should bring some pressure to bear on D.S.I.R. who have allowed the studies of taxonomy of introduced cultivars in New Zealand to lapse.

Secretarial - We must achieve economies in secretarial services. I am sure that members would not be aware that the bulk of their subscription is swallowed up in office and secretarial services. A brief look at our last Annual Report makes this fairly clear and the audited statement to March of this year amplified. I am certain that the arrangements we have now come to, once they are properly underway, will achieve these economies.

If we can achieve these objectives this year and make sure our membership is aware of them we should be able to maintain membership.

New Senior Lecturer in Parks and Recreation for Lincoln College

The Department of Horticulture, Landscape & Parks, Lincoln College, recently appointed Mr. P. J. Devlin as Senior Lecturer in Parks & Recreation. Pat Devlin has been a member of the Institute for some years. It will be remembered he was awarded the Loder Cup in 1969. The Loder Cup was given to Devlin in recognition of his initiative in forming and acting as the stimulus for the Hamilton Junior Naturalist Club. The Club established a field lodge and outdoor education centre and arranged for the acquisition and development of some 800 hectares of native bush now known as Te Kauri Park. It is still a very active group. Since that time Pat has been a lecturer at Christchurch Teachers' College and has retained his interest in promoting the study of Natural History and Environmental Science among his students. He has been very active in environmental studies in the Canterbury area and has just completed a postgraduate degree in Sociology, in which he examined the public usage of Tongario National Park.

He will join John Taylor in supervision of courses in Parks and Recreation at Lincoln College, but will concentrate principally on National Parks, while John will continue to concentrate principally on Local Authority Parks and Reserves.

The Devonian Botanic Garden

PAT SEYMOUR*

The Devonian Botanic Garden of the University of Alberta is some 15 miles outside the city of Edmonton, Alberta, Western Canada - the most northerly botanic garden in Canada. Presently the Garden consists of some 80 acres (with options on more land nearby). The 80 acres is made up of a mixture of Aeolian sand dunes and peat bottoms, the sand dunes being the relic of glacial lake Edmonton. The peat is slightly alkaline, the sand being fairly fine and slightly acid. Why a botanic garden on a sand dune? Because the land was donated for use as a botanic garden.

The Garden has been developed on strictly naturalistic lines with the main development following the lines of the dunes and peaty areas. There are two ecological reserves, a large slough (a slough is a small lake with no inlet or outlet) with bordering vegetation, and a dryland forested area. One area has been set aside as a nature conserve with some of the plants labelled. A nature trail goes through this area.

The climate is severe - cold dry winters and normally hot dry summers. We have about 100-120 frost free days. We get 17 inches of rain per annum, mostly in the form of snow which comes in winter. The snow can come anytime after the end of September though not normally until December, and it can last until April, particularly on the north facing slopes. We can have over a month of sub-zero temperatures in winter.

The natural vegetation is variable according to aspect and light. *Picea glauca* (White Spruce), *Pinus banksiana* (Jack Pine), *Populus tremuloides* (Aspen) and *Betula papyrifera* (Paper Birch) are the upper story on the drier tops of sand dunes. The middle story consists of *Prunus pensylvanica* (Pincherry), *Prunus virginiana-melanocarpa* (Chokecherry), *Corylus cornuta* (Hazelnut), and *Amelanchier alnifolia* (Saskatoon). Lower story has *Rosa acicularis*, *Ribes* spp., and *Shepherdia canadensis* with herbaceous plants. In the lower, wetter areas of the dunes *Populus balsamifera* replaces *P. tremuloides*. The peat bottoms have a heavy growth of *Salix* spp., with an occasional *Larix*, grading into sedge and grass. Prominent amongst the plants are *Lathyrus venosus* (a pink pea), *Viola adunca*, *Sisyrinchium montanum*, *Lilium philadelphicum*, var. *andinum*, and *Corydalis aurea*.

The aims and objectives of the Devonian Botanic Garden include the following :

1. (a) To establish a collection of cultivated plants hardy in the Edmonton region; both for University teaching and public education.
- (b) To conduct Plant Introduction and Winter Hardiness Trials with the aim of increasing the range of plants grown in the Edmonton region.
- (c) To seek out variations in native materials suitable for introduction as ornamentals.
- (d) To establish a complete collection of indigenous plants of Alberta (i.e. a Taxonomic, Systematic Botany Garden); both for the

* Article obtained from Allan Mason.

Pat Seymour - University of Alberta, Devonian Botanic Garden, Edmonton Alberta, Canada.

benefit of university and school students, and the education of the General Public (no such collection exists in the province).

- (e) To construct a garden of plants used by Native Peoples of Alberta: to enable the non-indigenous peoples of Alberta to appreciate some facets of Native Culture.
 - (f) To take part in the International Seed Exchange with some 400 world-wide institutions and Botanic Gardens
2. To conduct research into: a. ground-cover plants and plants for sandy soils; b. breeding and selection of hardy roses; c. the propagation of herbaceous perennials.
3. To provide outdoor laboratory space for University students (classes in Botany, Biology, Horticulture, Education, Forestry, Zoology, Geography, Entomology), also for high school Biology 10, 20, 30.
4. (a) To take an active part in the proposed National Botanic Garden System for Canada: Federal support for northern and western regional projects of National Interest.
- (b) To take part in the National Gene Pool Conservation Programme: already maintaining an historic collection of 400 varieties of *Gladiolus* (The Kilduff Collection).
- (c) Taxonomic research on ornamentals *Potentilla* c.v., *Allium* spp., *Paeonia* cv., *Primula* spp., *Meconopsis* spp. and other selected genera (Herbarium of cultivated plants now has some 1500 specimens).
- (d) To carry out research on succession in the two ecological reserves, terrestrial and aquatic.
5. Public Relations and Extension
- (a) To provide an aesthetic setting for the Public to see, enjoy, and learn in various ways about the collection of plants maintained for different purposes (as outlined above) in a naturalistic setting.
- (b) To enable the Public to become aware of, and appreciate, one of the many aspects of the extension work of the University in a congenial setting.
- (c) To encourage public interest in, and support for, the Garden by means of the Friends of the Devonian Botanic Garden.
- (d) To provide demonstrations of horticultural practices and techniques at summer and winter meetings of the Friends.
- (e) To publish informative bulletins on horticultural and allied topics.
- (f) To publish a regular news magazine "Kinnikinnick" for the Friends which contains reports on hardiness trials and horticultural information.

As we are a University Garden, research is very important. The winter hardiness trials are a vital part of this research and a part which

has great interest to the general public (last year we had some 7,000 visitors on weekends, afternoons, and from 4 until sunset during the week from May to September).

We use Rehder's "Zones of Hardiness" as a rough reference for possible new trees and shrubs. We can usually grow plants in zones 1 - 3, sometimes 4. If a shrub stays below the snow it has a better chance of survival. Some species, e.g. *Cytisus supinus*, *Genista* spp., are zone 5 but because of our good snow cover, survive and flower well. We are rather limited as to trees; less so as to shrubs. Herbaceous plants and bulbs are much easier, again due to snow cover. *Meconopsis* spp., *Primula* spp., *Lilium* and *Narcissus* all do well, as do alpine.

This year, 1976, we have just been building a large alpine garden - some 600 tons of rock. For shape we used the contours of the dunes which have given us most aspects we need. Some alpine were planted in September. In general, for our Himalayan plants we use north facing bottom slopes of dunes where they meet the peat. These areas have the best and longest snow cover.

As is evident from our aims and objectives above we have a lot to do. One of our problems is staff. We have a summer staff of up to 20, but a small permanent one of 4. At the moment we are planning a headquarters building and a greenhouse at the Garden. When this is finished (a year from now) we will have more space and will be able to employ more staff in the winter - also we will be able to do some extension work which is not possible at the moment. Also, as is evident from our 'Aims' we have a very enthusiastic fund raising support group - their last effort was a Capital Grant of \$750,000.

In February, 1976, I was in New Zealand on holiday. When there I saw Allan Mason's old roses. This led me to ask if he exported; so we obtained some from him in June. They were only out of the soil a short period of time. Some of them had put on 12 inches or more of growth by September and many had flowered. We are looking forward to the spring to see how they have weathered our sub-zero temperatures. I was also on the Old Man range looking at alpine - and was fascinated by their wonderful plants. I am convinced that many of these would thrive here given our good snow cover.

Finally, I would like to extend a warm welcome to any visitors from New Zealand who no doubt may well be visiting Edmonton for the Commonwealth Games in 1978. If so, do come and see us at the Devonian Botanic Garden.

Royal Society of New Zealand

1977 EXPEDITION TO SOUTHERN TONGA AND THE LAU GROUP OF FIJI

The above Expedition is planning to leave in the middle of June and to be in the field for a month or five weeks. It will be a multi-disciplinary operation and Botany is one of the sciences which will be represented.

Dr. P. J. Garnock-Jones of Botany Division, DSIR, Christchurch will study the floristics of three islands in the Lau group and will pay special attention to the pollination biology of selected species.

Dr. G. N. MacRaid of the Botany Department, University of Canterbury, will study the distribution of marine algae around several of the Lau group.

Mr. W. R. Sykes of Botany Division, DSIR, Christchurch will concentrate primarily on the botany of 'Eua near Tonga Tapu. This is one of the richest islands in Tonga in respect to terrestrial plants. In addition to making a general collection of much needed specimens from the Tonga area for the Herbarium, it is hoped to study the principal plant communities from an ecological standpoint. A short time on Tonga-tapu is planned in order to assist the Department of Agriculture with several problems.

Scientific Studies in National Parks

A plea for help has recently been received from the National Parks Authority of N.Z. concerning Scientific Studies in National Parks.

Each year a report is presented to the National Parks Authority outlining details of scientific work which has been carried out in national parks by outside organisations, university students and government departments during the preceding 12 months. However individual Park Boards have been having difficulty preparing these reports because of a lack of information supplied to them about work being done. The Authority feels scientific studies are of vital importance in the planning and management of national parks and only with research and understanding can park resources be fully utilised.

Any member of the Institute involved in research in National Parks is reminded of the importance of keeping the Park Board informed of findings.

R.N.Z.I.H. Executive Meeting

EXTRACTS FROM MINUTES OF MEETING HELD IN
WELLINGTON ON 15 DECEMBER 1976

LODER CUP COMMITTEE

Mr. R. Syme had expressed a desire to resign from the committee. It was agreed to consider a replacement at the next meeting and Professor G.T.S. Bayliss has agreed to represent us.

Professor Bayliss is Professor of Botany at Otago University and is an Ecologist of note who has taken particular interest in National Parks and native flora during his professional life. It was agreed that Mr. K. J. Lemmon continue as Secretary for this Committee.

SECRETARIAT

Professor Morrison reported that accommodation was available at Lincoln College at a rental of \$4.00 per week. A postal box would be available at the College. A removal firm would have to be engaged to transfer all the records etc. Membership addresses will be placed on computer records. Someone would need to determine what records could be disposed of.

Mrs. Rona Nugent had been appointed from mid-March,

BULLETIN

It was considered a cross section of leading material was essential - Almanac type of information, problems and answers. The editor of the Bulletin was disappointed at the lack of response from District Councils and members. He was doing an excellent job for the Institute almost single handed. Cost of publications were rising because Editorial Services were being asked to do more. The Editor would not be available to continue in office after the "Winter" issue 1977.

It was decided that the Executive publish the Bulletin as a quarterly and that the required certificate may now be given to the Post Office Headquarters endorsing this decision. It was agreed that service could not be given to members without cost and that no service could be supplied for less than a \$5.00 p.a. subscription today.

EXAMINING BOARD

The following were appointed : -

Mrs. M. de Castro (N.Z. Vegetable and Produce Growers Federation)
Mr. G. Smith (N.Z. Nurserymen's Association)
Mr. P. C. Gardner (N.Z. Nurserymen's Association)
Mr. I. G. Forbes (Ministry of Agriculture and Fisheries)
Mr. I.D. Galloway (N.Z. Institute of Park and Recreation Administration)
Mr. G. G. Henderson (N.Z. Institute of Park and Recreation Administration)
Mr. J. O. Taylor (N.Z. Institute of Park and Recreation Administration)
Mr. D. J. Mackenzie (N.Z. Fruitgrowers Federation)
Mr. J. S. Say (N.Z. Technical Correspondence Institute)
Mr. G. Hyde (N.Z. Technical Correspondence Institute)
Mr. H. G. Gilpin (O. & P. Examiner)
Mr. J. W. Bolton (O. & P. Examiner)

AGRICULTURAL TRAINING COUNCIL

Professor Morrison had circularised all of the major horticultural organisations, putting the Institute's views to them.

The A.T.C. had appointed a horticultural officer and was proceeding,

Professor Morrison had been appointed to the Horticultural Committee of the A.T.C.

PRESENTATION OF CERTIFICATE TO MR. H.S. WILLIAMS

This has been performed by Mr. A.W.W. Greig in Gisborne in association with the Poverty Bay Horticultural Society. Mr. Greig was thanked for his part in this.

INTERNATIONAL HORTICULTURAL SCIENCE CONGRESS 1978 - SYDNEY

Mr. P.J. Salinger (as N.Z. representative on the section for Ornamentals I.S.H.S.) tabled his comments on the Ornamental and Amenity Horticulture, Section 8. He considered there was a paucity of N.Z. material in the Congress. The use of "Australian" instead of "Australasian" was regretted. Professor Morrison undertook to follow up Mr. Salinger's comments with the Planning Officials. Every effort should be made to make the best use of the international figures who will be visiting N.Z. Much more information on the Congress tours in Australia is needed for circulation amongst perspective N.Z. visitors to the Congress.

PLANT VARIETIES ACT

Mr. Forbes emphasised that any schemes introduced into N.Z. will have to be self-supporting financially. The Government will not be financing any scheme. The Registrar will possibly approach the Institute for its views. If the whole scheme is to operate in N.Z. it will have to call on local expertise.

"FLOWERS FOR SHOW" BOOK

Mr. Lycette had reported progress is slow and response from specialist societies is poor. Mr. Short had been working on the General section, and hoped to have material ready for the Editor early in 1977. Mr. Mander undertook to discuss with the Bay of Plenty District Council becoming involved with the editorial and publishing work required to produce the book. Mr. Taylor suggested a cover change desirable, and the price must be reasonable. About 500 seemed a likely quantity to print.

DENDROLOGICAL SOCIETY TOUR

About 30 persons are expected. Mr. S.W. Burstall is maintaining N.Z. liaison with the groups.

REGIONAL HORTICULTURE SUB-COMMITTEE:(MRS. R.H.SHEPHERD,CONVENER)

LABELLING OF HISTORIC AND NOTABLE TREES

Mr. P.J. Skellerup had agreed to sponsor the cost of the labels up to \$1000. Local Bodies and District Councils will have to meet the cost of adding the name and particulars; also backing for the plaques.

MONTOA FARM SETTLEMENT

Letter to be sent to the Commissioner for the Environment commending the report's conclusions and recommendations. Any further reports should include maps to facilitate identification of the areas specified.

GENERAL

The Chairman would welcome suggestions of items that the Executive should give attention to.

Gardening with Poroporo *

CHRIS HOWDEN

Poroporo, the native plant that is used in the manufacture of oestrogens ("the Pill"), can be used for ornamental purposes.

Solanum aviculare and *S.laciniatum* are naturally found in coastal and lowland forest margins north of Dunedin. The plants are forest colonisers and proliferate when the forest is disturbed and the soil exposed.

In the garden Poroporo can occur as a weed. However, if not competing and preventing the growth of "wanted" plants, it could be left to grow.

The species *S.laciniatum* can have the following advantages in a garden :

- .. Fast growing
- .. Acts as a filler and protector to slower growing shrubs, especially native. Seedling Poroporo could possibly find a place in a successional or ecological approach to gardening.
- .. Very attractive with irregularly shaped leaves, purplish stems, blue purple flowers and orange berries.
- .. Easily grown from cuttings and from seed.

Poroporo is best treated as a herbaceous perennial and cut back each year to prevent the plant from becoming scraggly.

Like all plants there are disadvantages; the green berries can be poisonous.

At a time when natives are becoming more popular in gardens Poroporo is an interesting plant to experiment with.

* See also "Trials with Solanum Species," Summer Bulletin, 1976.

N.Z.I.A.S. Convention, 1977

DUNEDIN, 15 - 19 AUGUST

PROGRAMME

In order to meet, as far as possible, the requirements of participating societies the programme has been arranged so that only the first two days are devoted to plenary sessions. This will leave the rest of the week for Society meetings.

PARTICIPATING SOCIETIES

Society meetings include the Annual Conference of the Agronomy Society of New Zealand and a one-day symposium on "The Production of Deer for Slaughter in New Zealand" sponsored jointly by the New Zealand Society of Animal Production and the New Zealand Deer Farmers Association. The New Zealand Society of Farm Management is planning a field day in conjunction with their Annual Conference. The New Zealand Farm Forestry Association is holding a short session on "Farm Forestry in Relation to Optimum Use of the Land Resource in New Zealand". The Royal Horticultural Society and the New Zealand Veterinary Association will probably also hold meetings during the Convention.

ORGANISATION

Programme details and registration forms will be mailed to members by mid June and you will be asked to indicate which sessions of the Convention you wish to attend.

You must return your registration form by 22 July.

Accommodation and meals will be in University College. Plenary sessions and Society meetings will be held in the Archway Lecture Theatres of the University of Otago.

J.B. Milne
Chairman
Organising Committee
N.Z.I.A.S. Convention '77

District News

WAIKATO 1977 PROGRAMME

March 24th :	Mr. H. Redgrove, "Creepers and Climbers."
April 28th :	Autumn Show.
May 26th :	Mr. S. Dawes, "New Fruit Crops."
June 23rd :	Mr. & Mrs. H. Tinkler, "New Guinea Today"
July 28th :	Mr. T. Hatch, "Culture of Natives in Use in the Garden."
August 25th :	Mrs. V. Morgan, "Alpines of the Americas."
September 22nd :	Spring Show.
October 27th :	Mrs. D. McVeigh, "Cacti and other succulents."
November 24th :	President's Evening.

WHANGAREI 1977 PROGRAMME

March:	Mr. Sterling, "Begonias"
April:	Frank Boffa, "Landscaping for the Home Garden,"
May:	Jack Lees, "Tropical Fruit"
July:	Peter Todd, "National Parks"
August:	Peter Rough, "Conceptual Landscaping"
September :	Guy Cherry, "Vegetables."
October :	Annual General Meeting and Members Slides.
November :	Practical Meeting to be held at Snow Conservatory, First Avenue. Glasshouse construction, tool maintenance etc.

At the September meeting of the Whangarei District Council, Mrs. Myrtle Kennedy F.R.I.H. (N.Z.) was nominated for the honour of Associate of Honour, R.N.Z.I.H. The resolution was carried unanimously and with acclamation. Mrs. Kennedy has had a lifelong interest in gardening and has made a considerable contribution to horticulture in Northland, in particular Whangarei, and to the affairs of the Institute.

DISTRICT COUNCIL SECRETARIES

Auckland:

Mrs. K. J. Veal,
9 Gray Crescent,
Torbay,
AUCKLAND, 10.

Poverty Bay:

Mrs. A. I. Pole,
Darwin Road,
GISBORNE.

Bay of Plenty:

Mrs. D. A. Hardwick,
F.R.I.H.N.Z.,
Minden Road,
Te Puna,
TAURANGA.

Southland:

Mr. G. A. R. Petrie,
Rochdale Road,
INVERCARGILL.

Canterbury:

Mr. G. R. Bethwaite,
162 Halswell Junction Road,
Halswell,
CHRISTCHURCH.

South Taranaki:

Miss C. Free, B.E.M.,
23 Egmont Street,
HAWERA.

Manawatu:

Hon. Secretary,
R.N.Z.I.H. District Council,
P.O. Box 1905,
PALMERSTON NORTH.

Waikato:

Mrs. S. A. Payne,
120 Comries Road,
Chartwell,
HAMILTON.

North Taranaki:

Mr. C. I. McDowell,
35 Fitzroy Street,
NEW PLYMOUTH.

Wellington:

Mrs. D. Menzies,
"Authene",
Main Road,
Akatarawa,
UPPER HUTT.

North Wairoa:

Mr. C. F. McKavanagh,
F.R.I.H.N.Z.,
Naihue R.D. 2,
DARGAVILLE.

Otago:

Mrs. R. Bagley,
11 Ascog Road,
Ravensbourne,
DUNEDIN.

Whangarei:

Mr. John D. Sholl,
13 McInnes Avenue,
Kamo,
WHANGAREI.

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Lincoln College.

Get in touch with your District Secretary and become involved with local
R.N.Z.I.H. affairs.

