6
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Horticulture
in New Zealand

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HORTICULTURE

IN NEW ZEALAND

BULLETIN OF THE ROYAL N.Z. INSTITUTE OF HORTICULTURE

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In this issue

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.

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Editorial

SHOULD STUDENTS BE MEMBERS?

The article by Alan Jolliffe in the last bulletin displayed an attitude all too commonly missing from R.N.Z.I.H. members. The question of "What can I get out of it?" is asked, not the real one "What can I contribute?"

The Institute is beset with a withering, even dying, purpose - its one-time strengths are dissipated through almost 20 commercial and professional federations and through specialist societies. Its membership slowly, but regularly, declines, as members age without replacement by the young.

At times it lacks the initiatives, the fire, the ambitions of the young, and the statement by Alan Jolliffe, so recently a student himself, signals a change in attitude to be gathered in at all costs. I see a tremendous opportunity for the Institute to gain from its students and for them to gain through forming a recognisable and communicating group within the Institute. Perhaps we may even get student representation on the Examining Board.

Unfortunately, the mechanics of Mr. Jolliffe's suggestion are not so acceptable. Audit will not allow student fees to be used except for Examining Board purposes, and while this might provide for significant extra services, there should be a charge on Government.

Precedent may be set however by the Librarian's Association. It also is responsible for student examining, and ordinary members. Their rules state that no student may sit examinations unless he is a full member - not a special-rate student member, but a full member. What holds for librarians should also hold for us.

T.M. Morrison.

Winston Churchill Memorial Trust

Purpose of Fellowships

1. The Trust Board makes fellowships available to individuals to enable them to undertake some study, investigation, or activity in New Zealand or overseas which will contribute to the advancement of their calling, trade, business, or profession, or will in some way be to the benefit of New Zealand, or will aid the maintenance of the British Commonwealth as a beneficial influence in world affairs.

Eligibility to Apply

2. Under the Winston Churchill Memorial Trust Act 1965 fellowships may be awarded only to :

(a) New Zealand citizens; or

(b) Persons resident outside New Zealand whose visit will benefit New Zealand, or the extension of whose visit would be of benefit.

3. In addition, the Board itself sets some priorities:

(a) Applicants must have a sufficient background of study and experience to be regarded as likely to make a contribution to New Zealand through their careers.

(b) As the money available to the Board is limited, it endeavours to avoid making awards to people who would be eligible for a grant from some other trust or foundation.

4. Apart from the statutory limitations (2 above), and its own policy (which it does not necessarily regard as absolute) the Board is not restricted as to the people to whom it may make fellowships available, nor the projects it accepts as meriting fellowships.

Applications

5. Applications should be lodged with the Secretary of the Board between April and July: 31 July is the standard closing date each year. The applications are under consideration from August onwards and the fellowships are announced at the end of the year, usually in late November or in December.

6. The fellowships are for projects to be carried out in the calendar year following their announcement e.g. the 1977 fellowships are for 1978 projects, and so on. Applicants must therefore make their applications the year before they intend carrying out their projects. The Board does not give consideration to projects which have been completed.

7. Because of the importance placed on the benefit which the projects should hold for New Zealand, applicants should state as explicitly and briefly as possible what their projects are and what fields they will benefit, and the ways in which they would

make the knowledge they have gained available to individuals and organisations in these fields.

Amounts Available for Fellowships

8. The Board is able to grant fellowships only from the income it receives each year from its invested capital. Apart from this limit on the amount of funds available, it is not restricted as to the amount it may award for any particular project. If, for example, it considers a project of sufficient merit, it could allocate all its funds for that year for that project. However, the Board generally prefers to distribute its funds as widely as possible and for as many worthwhile projects as possible.

9. This does not, of course, cover all the factors examined before allocating funds. If the Board makes a fellowship available to assist with the completion of a project, it does not necessarily provide all the funds the applicant may need to complete it.

10. The fellowships are not of any pre-determined sum, as the actual amount is determined from the individual circumstances of each application.

Tenability of Fellowships

11. The Board generally regards a 3 month period as optimum for overseas investigations. The fellowship projects may be carried out in any country or countries. Projects need not involve overseas travel; the Board would also consider any worthwhile project which could be completed in New Zealand.

Conditions of Fellowships

12. Fellowships are awarded subject to the following conditions:

(a) The fellowship projects are to be carried out in the calendar year following the announcement of the awards;

(b) The recipients will return to New Zealand on completion of their projects; and

(c) They will submit a full report to the Trust Board on their project, what they have derived from it, and how it can be made to benefit New Zealand, their trade, calling or profession.

13. In the past fellows have sometimes been uncertain of their right to make the knowledge gained during the tenure of a fellowship available to interested organisations and individuals, and to the general public. There is no restriction in any way on the dissemination of the results of a fellowship project. The fellowship scheme as stated above is intended to advance the calling, trade, business, or profession of the fellows, and fellows are in fact encouraged to disseminate their findings as widely as possible.

14. The decisions of the Trust Board are final and not subject to any form of appeal. Enquiries should be addressed to the Secretary of the Trust, P.O. Box 12-347, Wellington North.

Energy Plantations for Sweden

LARS EMMELIN*

In the search for environmentally sound, continuous sources of future energy interest in Sweden has recently been focused on the possibility of using vegetation to catch and store energy from the Sun. Such ideas, which a few years ago would have been dismissed as fanciful, are today receiving serious consideration and official funding.

In particular, experiments made at the College of Forestry by professor Gustaf Siren and co-workers seem to hold great promise that biomass** could contribute a significant proportion of Sweden's energy before the turn of the century. By the use of specially selected strains of willow and poplar very high yields have been achieved in a system called short-rotation forestry. By vegetative propagation (rooting of cuttings) and intensive culture with large doses of fertilizer, yields of as much as 30 tons/ha annually have been achieved. This is equivalent to an energy yield of about 135,000 kWh/ha (1,140 million Btu/acre).

This value can be compared to the average yield of Swedish forestry which is 8,400 kWh/ha (71 million Btu/acre). Naturally energy is expended in order to get these high yields but an energy budget made for a realistic case (with a lower productivity) indicates that a net energy of about 54,000 kWh/ha is quite feasible (455 million Btu/acre) - see Table 2. This means that an area of about 93,000 km^2 would be needed to supply the present total Swedish energy consumption at the production levels indicated in table 2. This is equivalent to about 20% of the total Swedish land area and can be compared to the cultivated land area which at present is about 7%.

Possibilities of an energy forest system

The rough calculations above give an indication that energy plantations may be of interest as a component in a future energy system. To assess the realism of the concept it is necessary to study somewhat the possibilities of producing significant amounts of fuel and of the environmental benefits and problems.

The first major restriction on an energy plantation system is likely to be land use planning. A survey of the possible available area has indicated that there might be in the order of 1 million hectares available where there is no competition from forestry or agriculture. The conservation problems, however, may be significant. The area is divided between about 250,000 ha (617,750 acres) of old farmland which at present is not used for any productive purpose and about 770,000 ha of wetlands (1.9 million acres) of different types. At net yields such as those in table 2 this would mean a

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* Course Director of the Environmental Studies Programme, University and Institute of Technology, Lund.

** Biomass = biological material of any kind

production equivalent to roughly 10% of present energy use in Sweden.

The old farmland included in the calculation is about 25% of the arable land taken out of production since 1951. The rest of that land has either been reforested (35%) or used for urban development, roads, conservation etc. There is a potential conflict between energy plantations and conservation since energy plantations will not be very suitable for recreation and will not be as pleasing to the taste in landscape of most Swedes as the open land it replaces. It is important to remember, however, that since the land in question is not used at present, it is slowly being recolonized with shrubs and trees that look much like energy plantations anyway.

A much more important conservation conflict may probably arise over some of the wetland areas. These are important for wild-life and as water reservoirs in some cases. The area represents, however, just one tenth of the total wetland area in Sweden.

Environmental risks and benefits

Burning fossil fuel increases the concentration of carbon dioxide in the atmosphere (CO_2). This may cause future climatic changes. At the present rate of increase in the use of fossil fuel the CO_2 concentration in the atmosphere will doube some-time during the period 2000 - 2100. This may have profound effects on the Earth's climate with consequent changes in agricultural production in some climatic zones. Some climatologists have argued that this effect may limit the future use of fossil fuels. Burning biomass has no such effect on the atmosphere since all biological material is based on carbon taken from the atmosphere in the process of photosynthesis. Burning fuel from energy plantations thus only releases the CO_2 that was required to producing it.

If the biomass is converted into synthetic fuels such as methanol, it can be used in present car engines with only very minor modifications. It is also possible to burn wood in finely pulverized form in boilers and engines. Energy plantations as a source of fuel do not require any major technological changes in contrast with e. . electric cars. The total emissions of such atmospheric pollutants as sulphur dioxide which causes increased acidity of the precipitation over Scandinavia would go down.

There are thus a number of environmental reasons why energy plantations are attractive apart from the fact that they are a domestic source of continuous energy. However, the system is not without potential problems. There are several ecological factors limiting production. The availability of nutrients and water is one example. In the experiments carried out so far the high yields have been achieved with a system of very precise dosage of nutrients and water. This is probably not applicable on a very large scale. If nitrogen fertilizer has to be applied in amounts ofabout 200 kg/ha (about 1,100 pounds/acre) the risks of contamination of ground and surface water is considerable. The amount can be compared to average application in Swedish agriculture which is about 72 kg/ha (390 pounds/acre) which has probably caused or helped cause a health hazard in some agricultural areas. Pollution by nitrogen fertilizer may also enhance the pollution problems caused by sewage in lakes and streams.

One way to overcome the problems of nitrogen fertilization would be to use the ability of some plants to fix atmospheric nitrogen. If the willow or poplar were grown in combination with alder (*Alnus*) the nitrogen fixing ability of the alder would lessen the need for commercial fertilizer. Alder also seems to be an attractive species on some of the wetter areas because of its ability to grow in very waterlogged soil.

Other ecological problems include the risks that pests will consume too much of the plant material or damage plantations. Game animals such as moose, deer, etc., can be controlled but rodents are much more difficult to control. There are several hundred species of insects that live on willow and poplar and fungal infections have killed significant numbers of plants in the experimental plots. Large scale application of pesticides is not a particularly attractive method to control the pest problems. Selective breeding of resistance against fungi would seem feasible and methods of biological control of insects should be developed.

If the environmental risks can be eliminated energy plantations may be developed into an ecologically sound method of producing some of Sweden's future energy.

In a recently published study of energy supply alternatives in Sweden for the year 2000 energy plantations are included. The report has worked with a number of alternative profiles of which one is a "renewable" alternative. (Others are an "oil profile", a "coal profile" and a "nuclear profile" in which the respective sources have a dominating part.)

The renewable alternative contains a high and a low estimate of total energy production in the year 2000 of respectively 513 TWh and 391 TWh. Biomass is included with a production of 157 Twh and 89 Twh, respectively.

Energy plantations has thus become part of the officially discussed energy future although uncertainty of their exact significance is great of course.

Note: kWh is here used as a measure of thermal energy. In the total figures for Swedish energy production kWh thermal and kWh electric are added without any correction factors. This is reasonable for a country such as Sweden where such a large proportion of the electricity is produced as hydropower (3/4).

Table 1. Some conversion factors

1 hectare (ha) = 2,471 acres

1 square meter (m^2) = 10.8 sq ft.

1 kWh = 860 kcal = 3411 Btu

Prefixes :			
T = tera	$= 10^{12}$	=	1 000 000 000 000
G = giga	$= 10^{9}$		1 000 000 000
M = mega	$= 10^{6}$		1 000 000
k = kilo	$= 10^{3}$		1 000

Table 2. Energy budgets for short-rotation forestry

All figures are on an annual basis

	Naturally propagated willow stand	Intensive culture
Energy use for production	2,000 kWh/ha 16.9 MBtu/acre 4.3 Gcal/acre	18,000 kWh/ha 151.7 MBtu/acre 38.3 Gcal/acre
Gross production	18,000 kWh/ha 151.7 MBtu/acre 38.3 Gcal/acre	72,000 kWh/ha 606 9 MBtu/acre 153.0 Gcal/acre
Net yield	16,000 kWh/ha 134.8 MBtu/acre 43.0 Gcal/acre	54,000 kWh/ha 455.2 MBtu/acre 114.7 Gcal/acre
Output:input	9:1	4:1

In the naturally propagated stand production is 10 m^3/ha year. The energy use is for harvesting, transports (including the production of machines and trucks, etc.) In the intensive culture (40 m^3/ha year) energy is used for fertilizer, draining, irrigation plus harvesting etc.

Trees on the Farm

One Day Conference, Lincoln College

The date for the conference will be the 18th of May 1978.

The conference is aimed at providing farmers, estate managers, people with small holdings and members of the rural community with the opportunity of experiencing a wide range of information concerning trees on farms.

The subject areas concerned will be :

Trees for fuel,

Trees for food crops and honey production,

Trees for stabilization,

Trees for shelter,

Trees for economic forestry,

Trees for amenity,

Trees for fun,

Trees and maintenance.

The objective is to encourage farmers to plant more trees, appropriate trees, and well-located trees in the rural landscape. Hence the technical and economic aspects have been included as well as overlying amenity goals.

ANZAAS Congress

The Australian and New Zealand Association for the Advancement of Science (ANZAAS) is to hold its 49th Congress in Auckland from the 22nd - 26th January, 1979. The Congress is held every year or so and was last held in N.Z. at Christchurch in 1968.

It is anticipated that 3000 - 3500 people will attend the 5 - day Auckland meeting, the theme for which is "Directions for the Future" subtitled "Good women and men leave an inheritance for their children's children". The Congress is divided into 33 Sections, of which one is Agriculture and Forestry. The organisers for this Section are Dr. Errol Hewitt, Plant Diseases Division, DSIR, Auckland, and myself.

We believe that the Congress will offer a rare opportunity for the public, representatives of publicly elected bodies, community groups, trade unions, farmers, foresters, industrialists and scientists of many disciplines to meet and hold discussions on the issues to be faced in the next 50 or so years. We anticipate speakers with expertise and/or research experience in particular areas providing a basis for wide-ranging discussion both in Sectional and inter-Sectional Symposia. At the same time, there will be a place for specialist research papers which have bearing on the major topics under discussion.

We are currently seeking ideas for such major topics and for knowledgeable, perhaps provocative speakers from Australia and New Zealand, to go with them. In that regard we hope you will give this some thought, keeping in mind the Congress theme and let us have any ideas as soon as possible. "Agriculture and Forestry", at least for the purpose of this Congress, includes both the fresh and sea-water environments and their possible exploitation. A preliminary Congress programme is to be published in February next year and we would like to have all information in to us by November 20th 1978, particularly where speakers from overseas are involved.

Besides contributing possible topics and speakers, we look forward to your organization's participation in the Agriculture and Forestry Section of the 1979 ANZAAS Congress.

O.R.W. Sutherland,
Secretary,
Agriculture & Forestry Section,
1979 ANZAAS Congress.

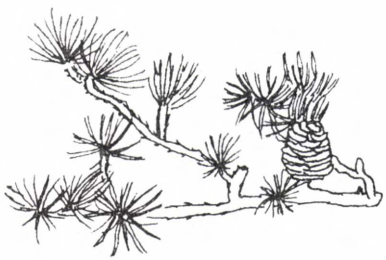
Know Your Conifers — 2

M.B. Thomas Drawings by B. McCartney

CEDARS *(Cedrus)* Fam. Pinaceae

Cedrus Spp. (true cedars) are evergreen, with needle-like leaves borne in tufts along the shoots. The species have large erect barrel-shaped cones, which disintegrate when mature, and two seeds (with large wings) to each scale.

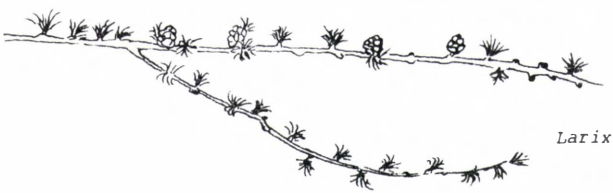
ATLANTIC CEDAR
(C. atlantica)
- cones smaller than *(C. deodara)*



DEODAR CEDAR
(C.deodara)
- needles longer than *C. atlantica,* and branches more pendulous at tips

C. libani (not shown) is an uncommon species. It has similar foliage to *C. atlantica,* but larger, less cylindrical cones.

LARCH *(Larix)* Fam. Pinaceae
Quite closely related to cedrus, but has much smaller cones, and is deciduous. Cone scales woody and persistent.



Larix decidua (European Larch)

Native Plant Protection Act, 1934

CHRIS HOWDEN

The Tree Society of New Zealand have got government enthusiasm for a revision of the above Act. The Nature Conservation Council is now co-ordinating opinions on the need and content of such a revised Act.

The Native Plant Protection Act 1934 has, over 43 years of existance, been fairly ineffective as an overall law to enable the protection of native plants.

The question can be raised - is it necessary to have such an Act when the protection of plants is covered in other more recent legislation? For Example: the Town & Country Planning Act, the Municipal Corporations Act and the Reserves Act.

Any new revision could include the following:

1. Provide guidelines for the protection of native plants.

2. Scheduling for the protection of rare and endangered plants.

3. Scheduling of Notable and Historic Trees.

4. When scheduling such plants certain criteria or technical information must be provided. The information can then be used for the protection of the tree/plants or land, if they should be threatened. In other words guardianship is given to plants.

On 23rd November a question was asked in the House of Representatives: "Was the Native Plant Protection Act being revised?" The Minister for Lands Mr. Young replied that while there is much legislation that provides for the protection of trees and vegetation (e.g. The Reserves Act and Town and Country Planning Act) the Nature Conservation Council is being asked to report on a revised Native Plants Protection Act, with the view to protect rare and endangered plants.

IDEAS FOR A PLANT PROTECTION ACT

1. Create local and regional Plant Protection Committees. These committees would operate independantly within territorial local authorities to co-ordinate the necessary protection of plants.

2. The committees must include -

   a representative from the local authority,

   a government representative,

   a qualified botanist or horticulturist,

   members of the public.

3. The committee must work as an independant body and could act

as the Official Advisory Body which will identify and gather information on plants that need protection within a district.

4. Once such information is gathered this can be used as a basis for registering or designating the plants/trees under a district scheme or enabling the protection of the plants/ trees under other legislation.

5. The committee, once it has identified areas of plants or trees of importance, must have the power to protect them. Once plants/trees are registered various penalties should be applied if such plants/trees are damaged.

6. If the above plants/trees are to be removed or damaged there should be a hearing procedure before a magistrate or as under the Town and Country Planning Act appeal system.

7. Plant Protection Committees could be constituted by territorial local authorities over a determined period (e.g. 2 years). If no committees have been formed then the Minister should have the power to form committees consisting of such interested and qualified people as required. (This may be required in rural areas where territorial L.A. do not have the resources.)

8. The committee must elect a chair-person or plant protection officer and operate under flexible conditions defined in the Act.

9. The committee would be responsible for -

   (a) Notable tree registers

   (b) Rare and endangered plant registers

   (c) Guidelines for protecting plants and vegetation within that local authority.

   (d) Producing urban forest management schemes (such schemes have been successful in North America and Europe).

The central theme of any proposed legislation is -

1. To get local authorities, central government and interested citizens, working to protect trees at the <u>local</u> level.

2. To form a committee that actually does work rather than pass out masses of recommendations and achieve nothing.

3. To use the mass of voluntary experience and interest that is present in the community.

Native Plant Hygiene

GRAEME PATERSON

Are our native plants providing a habitat for an increasing range of pests and diseases of both indigenous and exotic origin? From recent observations I have noted some frightening outbreaks of pests and diseases and have concluded either an increasing awareness on my part or an actual increase in the depredations of pests and diseases. In Dunedin mature lancewoods have succumbed to scale attacks along with large specimens of the southern rata, and large kowhai have been entirely defoliated by the indigenous caterpillar.

Scale attacks appear to be most prevalent on totara, native broom, rata and lancewood, and galls on *Olearia, Hebe, Coprosma* and *Clianthus*. Bacterial and fungal outbreaks on *Senecio, Olearia* and flax are deadly or disfiguring with chewing insects being responsible for devouring great portions of cabbage tree leaves.

If ever there was a living "Trifid" it must be the clematis rust *(Aecidium otagense)* which parades itself in grotesque form. Following an interest in breeding coloured forms of flax I have obtained differing variations but in some cases at the expense of susceptibility to fungal attacks.

With increasing numbers of people reaching alpine areas, the mass transplanting of plants and soils to the cities not only transfers indigenous insects and pathogens to infect other natives but the opportunity is provided for the possible subsequent transfer to exotic plants.

I regard the generalisation that all native plants are so rugged and ideal for our gardens as a myth and see rather a need to face up to the proneness of native plants to pest and disease attacks, just as are exotic plants, and therefore the need for deliberate preventative and eradicative programmes to be instigated.

A Gene Bank for Plants

CHRIS HOWDEN

The preservation of fauna and flora is usually understood in terms of protecting animal species or preventing the destruction or modifcation of forests. However we hear little about protecting the future of the more than 20,000 species of plants which are under some threat of extinction.

Wakehurst Place, a branch of the Kew Botanic Gardens, concentrates on collecting seeds of endangered plants. The seeds are first tested for germination characteristics and then they are frozen. The freezer at Wakehurst houses between eight and nine thousand seeds - an important gene bank for the protection of important plants.

Environment and Conservation Organisations of New Zealand

EXTRACTS FROM NEWSLETTER

ANNUAL CONFERENCE

The 1977 ECO Conference in May brought together a large number of people both as individuals and as representatives of organisations, and a wide range of subjects was discussed.

In the opening speech, Sir Frank Holmes, Chairman of the N.Z. Planning Council, set out clearly the real concern the Council has towards the environment. He stressed the need for much greater freedom of access by interested parties to Departmental and Governmental papers and plans.

The Conference was divided broadly into two sections, Energy and Native Forest. On the first Dr. Garth Harris of the N.Z. Energy Research and Development Committee spoke on "Energy Scenarios for New Zealand", which forecast the future energy demands of three scenarios called Continuation, Low N.Z. Pollution and Limited Growth. The study showed that even with limited economic and population growth the standard of living would still rise.

Professor Fred Knelman of the Department of Science and Human Affairs at Concordia University in Montreal, Canada, was the ECO visitor for 1977 and the papers he presented created considerable interest and discussion. He has a detailed knowledge of the Nuclear Field including the history of its development through to the problems that are now being posed by expansion of nuclear power stations and the disposal of nuclear waste.

On the second day of the Conference, Sir Charles Fleming chaired the discussion on the preservation of the Central North Island Rainforests and spoke on the history of the Kokako. Mr. Ian Crook of the Wildlife Service described the distribution and habitat of this bird, which is in some danger of extinction unless more of the native forests it lives in can be preserved by the Forest Service.

Mr. Guy Salmon finally discussed the possibility of persuading the Forest Service and the Government to cease cutting the remainder of the once magnificent forests.

The Okarito situation was discussed by Mr. A.T.T. Ellis, Chairman of the Royal Forest and Bird Protection Society, who detailed the strategies that had been considered in planning the court injunction to try to stop cutting of the South Okarito State Forest.

Mr. Kevin Smith who had been working in the area gave an account of local developments and stressed the need to preserve the remaining stands of Kahikatea.

A highlight of the meeting was the presentation by Mrs. Te Rina Sullivan-Meads of Waiora Action, Napier. She spoke about the traditional attitudes of Maoris towards the land and the environment.

NATIONAL PARKS

ECO's Forestry Working Party is placing a high priority on proposing and documenting extensions to national parks. At present, New Zealand's national park system has a predominantly montane character, and it does not represent the full range of New Zealand's natural landscapes and ecosystems. In particular, coastal and lowland features are poorly represented. The heavily timbered lowland forests which once covered so much of New Zealand make up only four percent of the area of our national park system at the present time.

ECO has been particularly active in promoting the extension of Westland National Park toward the sea to include parts of Okarito, Waikukupa and Karangarua State forests. At its last meeting the National Parks Authority adopted the greater part of these proposals, and put them forward in the form of a recommendation to Government.

The Parks Authority has also recommended the addition of the Red Mountain ultramafic region to the Mount Aspiring National Park. This is also a most important national park addition, and one for which Federated Mountain Clubs have been pressing for many years. The boundaries of the proposed addition have yet to be defined.

Obituary—Mr Jack Living

The death occurred recently of Mr. Jack Living, prominent Wellington businessman and a past President of the R.N.Z.I.H.

Mr. Living was Chairman of the Wellington District Council from 1950 to 1955 and also maintained a close link with the Wellington District activities, attending meetings most consistently with Mrs. Living who shared his close interest in horticulture.

He was elected Dominion President in 1962 and was also for several years chairman of the Finance Committee. He was elected an Associate of Honour of the Institute in 1968 and served as a member of the Examining Board and on the Publications Committee.

Mr. Jack Living was a great lover of horticulture and his death is a sad loss to the Institute. The following quotation is from the Conclusion to his Report of the Dominion Council, 1967:

But horticulture is not merely a trade or profession. It has a distinct and vital cultural value and this must not be lost sight of in our scientific and materialist age, for if culture is destroyed and lost to us the very soul and balance of life will go.

Then let us firmly resolve to hold on and to continue encouraging and promoting the cultural art of horticulture in happy partnership with educational and material pursuits for the lasting benefit of mankind.

District News

Auckland: The first outing for next year will be held on Saturday, January 21st at 2 p.m. This will be a visit to Mr. J. Snelling's residence, 16 Avis Ave., Papatoetoe to view his large cactus and succulent collection.

WAIKATO TRIP: From start to finish this was a wonderful trip, thanks to the organisation of the Waikato District Council. In company with Waikato members and a few from the Bay of Plenty, we visited a total of 12 gardens, all different; from the huge trees in Dr. Roger's garden to the rock plants in Robert Scott's garden; from the breathtaking blue of the bronze-leafed Ajuga in Mr. Williams' garden to the well-fed-on-pig-manure Scillas of Mrs. Small's garden. Then there were the individual trees which caught our eye: *Cornus nuttalli* in flower in Dr. Parle's garden (we were also shown a sample of the lovely *C. florida rubra:* apparently there is one tree in Hamilton which does well and is true to label): a kowhai with its petals turned up giving the whole tree a dancing grace; a whole avenue of what, at first glance, appeared to be *Librocedrus* sp. but which turned out to be *Thuya pyramidalis,* in another garden. And then of course there were the rhododendrons in Mrs. Oliver's garden up in the hills overlooking Matamata ... We are indebted to our hosts for all their work, and for entertaining us so well.

An extract from a letter in an overseas newspaper: 'Trees get a raw deal .... Almost everyone has one, yet few people try to find out about their needs and how to keep them healthy. For example, if they become sickly, diseased, or afflicted by insects, the first thing most people do is lop off their branches. Trees are one of the things that make human survival possible, but their importance is given little acknowledgment. They increase the range of animal life that can be supported .... Trees really are nature at our back door. They are beautiful, majestic, long suffering and defenceless against people'.

South Taranaki: Auroa meeting: The attendance was excellent for the meeting on 11th October which proved successful and very enjoyable.

Mr. D. Kidner spoke about the care and cultivation of Dahlias, Mr. H. Barker explained his methods of dividing and re-potting orchids, demonstrating his art on an excellent specimen supplied by the President and Mrs. D. Duff's interesting talk on Camellias was illustrated with blooms from South Taranaki Nurseries, Hawera. Mr. Chamberlain entertained with a colour slide Programme of his latest trip overseas with emphasis on the Chelsea Flower Show which featured displays to compliment the Queen's Silver Jubilee. A new note was introduced by Mrs. Upson and her Group who showed the knots used in making macrame plant holders and they displayed some excellent examples of their work.

The Display Table was quite outstanding containing some fine samples of the many blooms to be found in members' gardens at this lovely season of the year.

Wellington: Historic Trees

Report by Diane Menzies.

The Wellington District Council are acting as hosts to a sub-committee of the RNZIH on Notable and Historic Trees. It is the job of the committee to launch the Institute scheme for labelling and protecting historic and notable trees and to keep a register of such trees once ratified as being of national significance.

The committee have sent out pamphlets describing the scheme to local bodies and asking for their support and assistance with it. Copies of the pamphlet describing the scheme in more detail can be obtained from The Historic and Notable Trees Committee, P.O. Box 11379, Wellington.

Briefly, the scheme seeks suggestions of suitable trees to be put to the committee, who will supply a registration form to be completed by a horticulturist or some other qualified person. If the tree suggested meets the criteria it will be entered in the register and the owner/s or organization supporting the proposal will be sent an enamel label with the symbol of either HISTORIC TREE or NOTABLE TREE on it plus the botanical name of the tree. There will be a small charge for the enamel plaque to cover our costs. Details will be enclosed for displaying the label in front of the tree.

The committee will hold the register of trees and will supply lists to interested people.

This scheme has never been attempted on a national scale before although some local bodies have introduced schemes for tree registration and protection in their local areas. We are hoping that we will get the support of local authorities because they have the legal power to protect trees. The Institute scheme is purely voluntary and for success depends on the interest and support of all members of the Institute and the public generally.

If there are trees in the Wellington region which you think should be preserved and which may qualify for registration under this scheme would you please write to or ring Mr. C. Howden of the Parks Dept., Wellington City Council, or the secretary of the W.D.C. If you can suggest trees but are not able to do any further investigation, the committee will do it for you. We need your support.

PLEASE NOTE.

We know and wish you to note that our secretary, Diane Menzies has been allotted a new phone number - UH 67 - 512 - but to our surprise we noticed in the RNZIH Bulletin No. 5 that she has been also allotted a new christian name! (Our sincere apologies - Ed.)

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