

Newsletter

Royal New Zealand Institute of Horticulture (Inc.)



1992
No. 4
December



Executive Officer's News

Firstly may I take this opportunity of wishing all members a thoroughly enjoyable festive season and best wishes for the New Year ahead.

It has been a hectic year at National Office with a number of major new developments, not the least of which being the horticultural qualifications restructuring work and the creation of an Industry Training Organisation (NZHITO).

At a meeting on 5 November I presented a proposal for recognition of the N.Z. Horticulture Industry Training Organisation and a draft constitution to industry representatives. This proposal has now been forwarded to the Education and Training Support Agency (the Government body responsible for recognition of Industry Training Organisations) and the N.Z.H.I.T.O. will become operative on 1 January 1993 as an organisation affiliated to R.N.Z.I.H. and operating out of National Office. It will be a separate incorporated society with its own constitution and will have the organisation of horticulture education and training as its major role and responsibility.

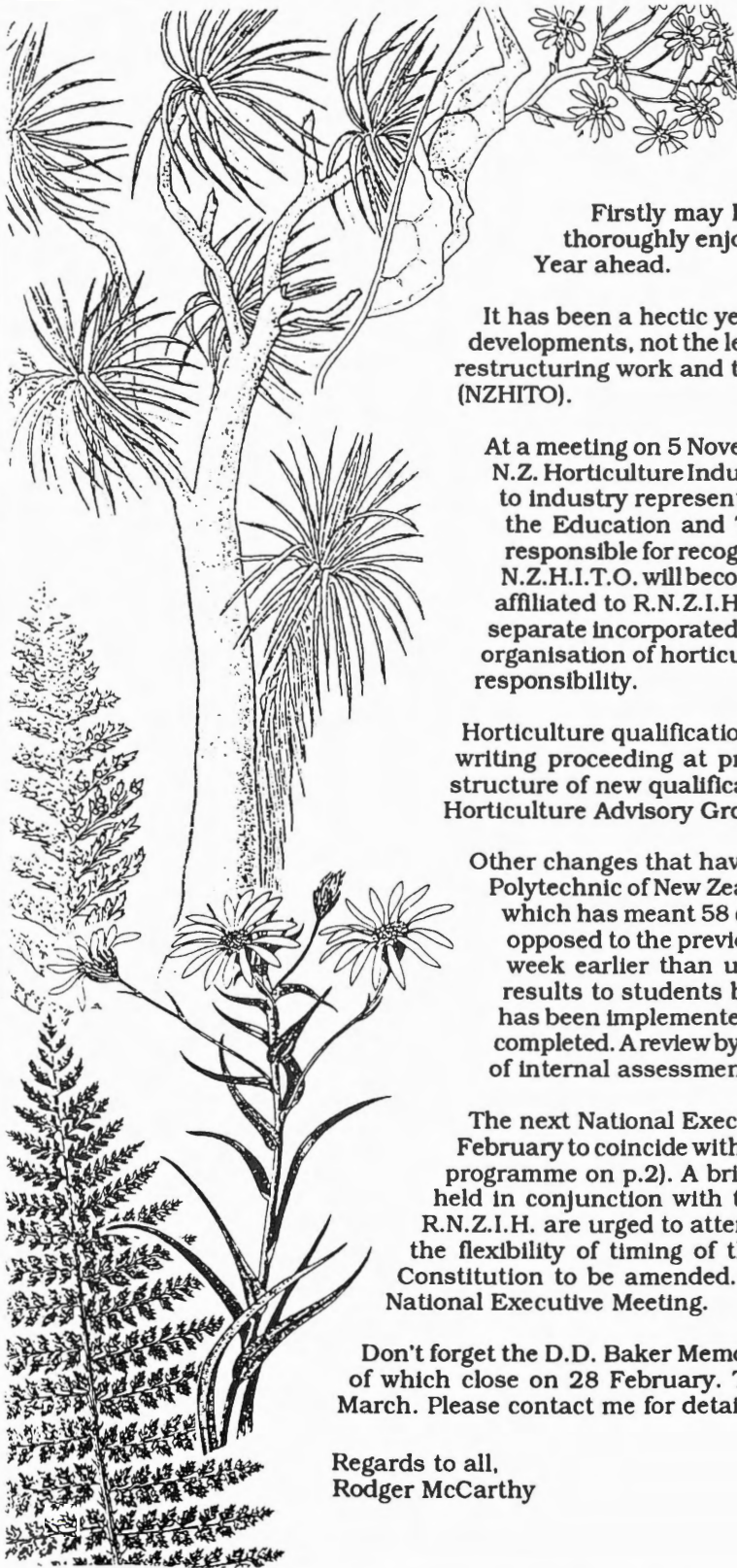
Horticulture qualification restructuring work continues with further unit writing proceeding at present and when these units are completed the structure of new qualifications can be considered by the N.Z.H.I.T.O. and Horticulture Advisory Group.

Other changes that have occurred of late have been the use of The Open Polytechnic of New Zealand examination centres for R.N.Z.I.H. students which has meant 58 centres being available for sitting examinations as opposed to the previous 21. The examinations have also been held one week earlier than usual which I intend will allow the release of all results to students before the Christmas break. Internal assessment has been implemented for Subjects 1 to 4 in 1992 - a major task almost completed. A review by the R.N.Z.I.H. Examining Board of the introduction of internal assessment will be held shortly.

The next National Executive meeting will be held in Christchurch on 25 February to coincide with the Floraganza exhibition on February 25-28 (see programme on p.2). A brief special General Meeting at 12.00 noon will be held in conjunction with the National Executive Meeting and members of R.N.Z.I.H. are urged to attend to consider constitutional changes to improve the flexibility of timing of the Annual General Meeting, Clause 9(d) of the Constitution to be amended. This issue was not considered at the previous National Executive Meeting.

Don't forget the D.D. Baker Memorial Award and the Sir Victor Davies Award, both of which close on 28 February. The Margaret Watling Scholarship closes on 31 March. Please contact me for details.

Regards to all,
Rodger McCarthy



Letters to the Editor

Dear Editor, 

Re: Notable Trees

I wish to convey to the National Committee of the R.N.Z.I.H. through your Newsletter, my appreciation as a Tree Registration Officer, for the outstanding work and untiring effort of Ron Flook for the improvement in the standard of our tree evaluation.

Having been involved in tree registration for some years and facing the disappointment of Local Bodies not fulfilling their legislated obligations on placing our work in their District Schemes, Ron Flook's concerns as mentioned in his article on page 4 of the September Newsletter is both timely and appropriate.


The Forestry Research Institute's plans to reassess trees listed in Burstall's Notable Trees Survey will be of great value in gaining further recognition for our work by Local Bodies. It has been most disappointing to find that with each completed tree registration form forwarded to Local Bodies, a letter is attached requesting such tree be placed on their District Scheme but in many cases this has not been done.

We are indeed fortunate to have Ron Flook and his dedication to our Notable Tree Scheme.

Yours faithfully,

Alby Elwood-Smith,
Chairman,
Marlborough Branch RNZIH



Dear Sir, 

Re: Sophora japonica 'Pendula'

My cousin, Alan Mason of Feilding, was kind enough to give me your name as the best person to contact with regards to the above rare tree.

Recently, while on a visit to Uruti on the Wairarapa Coast I discovered what I believe is another specimen of the above Weeping Pagoda. It is located on a property called "Eparaima" which was the former home of Lucy Jane, youngest daughter of Thomas Mason, and her husband George Moore. I include a photo., It appears in excellent condition. In my opinion

it is a better specimen than the one at Avalon Cres. and would have been planted c1885. There are a number of other old and interesting trees and shrubs nearby which clearly have their origins at "The Gums", Thomas Mason's renowned exotic botanical garden which was almost totally destroyed in 1922.


The Mason family descendants are coming together in October 1994 for a reunion in Lower Hutt where the Mason's Gardens are still legendary. Recently, while visiting the Hutt I began a process of discussion which I hope will culminate in those residents living on the former gardens allowing a small band of interested people to have access to the inner precincts so as to record all those plants which would have come from the original plantings. I am trying to re-create the garden on paper and have already been able to plot known trees in relationship to the house and other points of reference which are extant. Any interested parties would be welcome to participate in this project to locate and record, just pass my name to them so they can contact me.

In the meantime, if you could please advise my best course of action in order to identify and record the existence of the second Pagoda tree I would be most grateful.

Yours faithfully,

Richard Shadwell, Grt.Grt.
Grandson,
Biographer and Family Historian
Omokoroa Tourist Park,
Beach Road, RD2, Tauranga Ph
(07) 548-0343



Dear Sir, 

I am writing to you in response to the article in the latest R.N.Z.I.H. newsletter asking for information concerning the Loder Cup.

The Otago branch of the R.N.Z.I.H. has a garden history sub group affiliated with the Otago Early Settlers Museum. This group is establishing an archive of garden related material at the museum and some of this is relevant to the Loder Cup.

I have enclosed photocopies, newspaper articles from the 1930s

Otago Witness and other publications describing the Loder Cup competition. Also enclosed is a copy of a letter to the Bennett family, who were awarded the cup in 1930 and 1932, from Gerald Loder (Lord Wakehurst) congratulating them on their achievement. The archive also has copies of photographs of the Bennett family and the cup and of their stand of native plants. Tom Bennett, grandson of Henry Bennett also has a miniature of the cup in his personal collection as well as the original photographs and letter. You may wish to contact him if you would like further information about his family's involvement with the Loder Cup.

The Garden History group hopes that this material may be of some use to your own archives and hopes to be of further assistance to you.

Yours faithfully
Alice Lloyd-Fitt
Convenor of the Dunedin Garden History Group.

Extracts from the archive material supplied by Ms. Lloyd-Fitt are printed on page 4.

Floraganza



"Floraganza" will be staged in South Hagley Park

Christchurch Feb 25-28 as part of the 1993 Floral Festival. The programme is as follows :

Friday 26 Feb

10.30 am - 12 Virginia McNaughton
Magic of Herbs

1.30 - 3.00pm

3.30 - 5.00 pm - Peter Bamber -
Roses

7.00 - 8.30 pm Margaret Vincent
Floral Demonstrations

Saturday 27 Feb

10.30 am - 12.00- K. Garnett
Easy Care Gardening

1.30 - 3.00 pm R. Budd

3.30 - 5.00 pm - W. Scadden

Improving design of your garden

7.00 - 8.30 pm S. Canty F.A. Group

Sunday 28

10.30 - 12.00 - Prof Walker - Soils
& Plant Nutrition

12.30 - 2.00 pm - A Morgan - Lawn
Laying & Management

Turf Training in New Zealand

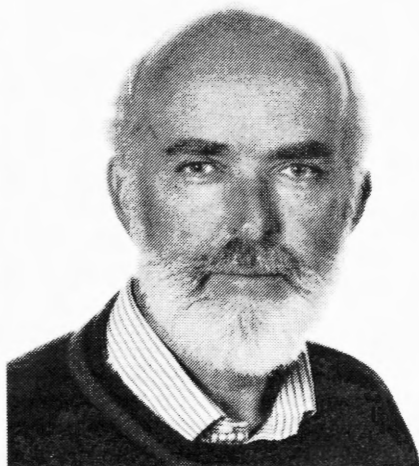
by

Mike Burtenshaw

Work Area Manager,

Horticultural Services, Faculty of General Studies.

The Open Polytechnic of New Zealand



Dr. Ross Ferguson, Member
R.N.Z.I.H. National Executive

Ross Ferguson is a scientist at the Mt. Albert Research Centre, Auckland. Formerly a member of DSIR, he is now with HortResearch, one of the new Crown Research Institutes.

He trained as a botanist and biochemist and has degrees from Victoria and Auckland Universities. He is a Fellow of the Royal New Zealand Institute of Horticulture and of the New Zealand Society for Horticultural Science. He has many publications on various aspects of plant and microbial physiology and biochemistry, kiwifruit biology and horticultural history. For about the last 15 years he has concentrated on kiwifruit research - he is the President of the International Kiwifruit Working Group - and his current projects include *Actinida* taxonomy, kiwifruit germplasm resources, and the nutritional quality (vitamin C) of kiwifruit.

Ross has participated in Institute activities for many years, as Chairman and Editor of the Newsletter, Auckland Branch and as Chairman of the Organising Committee, Annual Conference, 1991. He became a member of the National Executive in 1992. He was a member of the Review Committee, Auckland Regional Botanic Gardens, and he is also responsible for publication of the Newsletter, Auckland Garden History Society.

A quarter acre garden on marvellous volcanic soil on the northern slopes of Mt. Albert is where Ross grows a wide range of plants. He keeps on buying books on garden history and is particularly interested in the history of plant domestication and in the western exploration of the Chinese flora.

I would like to follow up Wyne John's article in your last newsletter.

Since 1970 over 1000 people working in the golf course turf industry have received training. Most golf course superintendents in New Zealand have either a Trade Certificate or a Diploma in Turf Culture and received the theoretical and apprentice block course component of these qualifications from The Open Polytechnic (formerly the Technical Correspondence Institute).

Training has been available to everyone who works on golf courses for over 20 years. The apprenticeship training system which combines on-the-job learning of practical skills, with the theory behind those skills learnt by distance education (correspondence) and two weeks of block course training each year for three years is fully supported by the industry. As Jim Moore, United States Green Section consultant remarked following his visit to New Zealand :

"You are fortunate to have skilled golf course superintendents that are expert in getting the most from each dollar spent" and again

"I feel certain you (NZ golf course superintendents and the courses they manage) could match and even exceed the quality of our (US) courses".

For the last 2 years a Sports Turf Management option has been available along with the Golf Course Turf Management option of the trade prescription. This allows people working on sportsfields and other areas of turf management apart from golf to undertake training.

In my experience, there is strong support for the apprentice training system from members of the golf industry. Certainly, recent changes to training have created some confusion and have contributed to a decline in apprenticeship numbers. However, a recent statement from the Education and Training Support Agency since the Industry Training Act was passed, says:

"Apprenticeship training continues largely as before. Existing apprentices will be able to complete their apprenticeships and employees can and should continue to take on new apprentices."

There is a need for post-trade qualification in turf management. Planning was underway for a Diploma in Turf Management which would have equated to an NDH in turf. This has been put on hold as it is expected that an equivalent qualification will be established in the NZQA's new framework of qualifications. The government is leaving the decisions up to the industry as represented by the Industry Training Organisations (ITOs).

It is my hope that the ITO continues to support an apprenticeship-type training system. There are some things that can only be learnt on the job in the work environment from an experienced tradesperson. Germany retains a craftsperson/apprentice training system. A person completing an apprenticeship can go on to become a qualified craftsperson. These people are recognised by society as being on par with doctors and lawyers and they are the ones who pass on their skills to their apprentices.

If you would like more information on turf training in New Zealand don't hesitate to contact Mike Burtenshaw, Horticultural Services, Faculty of General Studies at the Open Polytechnic of New Zealand. If you support the apprenticeship-type training system please make your views known to your industry representatives in the new ITOs once they are up and running.



Loder Cup Archive



Extracts from an Article in 'Gardening Illustrated' February 1933

Loder Cup Competition in N.Z.

The following extracts are taken from the report of the judges in the Loder Cup Competition, published in the October issue of the Journal of the New Zealand Institute of Horticulture. The Cup is presented by Mr. G.W. Loder, who is much interested in New Zealand plants, notably *Leptospermum*, *Olearia*, and *Hoheria* the pride of so many English gardens today :-

There was only one entry for the competition, a fact which made all the more meritorious the comprehensive display that was staged. The winner, Messrs. Bennett & Sons of Dunedin, must have gone to considerable expense and trouble to exhibit such an extensive collection at such a remote distance from their gardens. There were altogether about 800 separate specimens in this exhibit, which in our opinion is deserving of high praise. The plants were robust and fresh, a fact all the more remarkable when one reflects that they had been transported by rail and lorry for over 240 miles. They were set in beds and on stands, and such was the amount of floor space required that the central bed was made over 50 feet long by 24 feet wide, while oval beds on each side were 18 feet by 10 feet, with four circular beds - one at each end of the ovals, and each of 10 feet in diameter.

The number of named varieties totalled 740, of which 630 are described in the last edition of Cheeseman's Manual.

The whole display was a noteworthy one, and one that would have given great pleasure to the donor of the Cup. There can be no question that of late years more attention is being directed to the cultivation of New Zealand plants in our private and public gardens, and competitions such as this are further stimulating a love of what Mr. Loder has termed "the incomparable flora of New Zealand".

Extract from Article appearing in The Otago Witness February 1931

Dunedin's Loder Cup Entry.

Fine showing by Messrs. H. Bennett & Sons

Never before has there been assembled in one place such a representative display of the native flora of New Zealand as that which comprises the entry of Messrs. H. Bennett & Sons, Broadacres, North East Valley, in the Loder Cup Competition which is this year being conducted under the auspices of the Dunedin Horticultural Society at its jubilee show in the Pioneers' Hall, which was opened yesterday afternoon by Sir Thomas Sidey.

Lovers of the indigenous plant life of this country spent hours by the beautifully arranged beds yesterday and keen students and collectors of New Zealand flora marvelled at the variety of the species displayed, their value, their rarity, and above all, the well-grown and entirely natural appearance of every unit in the display. One of the most satisfying features of the exhibit is undoubtedly the perfect fashion in which they have been arranged, giving a surprisingly

natural effect, and making every plant look as if it could not be more at home in its mountain fastness or shaded bush. The display forms a most interesting and profitable study, and would certainly repay the most exhaustive investigation, amateur or expert.

The exhibition provides a lesson in nature study to young and old, and might be regarded in the light of a warning of what the Dominion is in danger of losing unless the proper appreciation of such resources is inculcated into its people.

The Loder Cup is a handsome trophy presented for competition in New Zealand by Mr. Gerald Walter Erskine Loder in 1926 when he was president of the Royal Horticultural Society. His object in making so munificent a gift is set out in the inscription which the cup bears and which reads as follows:

"For the preservation and development of the incomparable flora of New Zealand." The cup has been accepted by the Government, under whose control it remains. It cannot be won outright, and the terms of its award and all conditions relating to competition for it have

been determined by a special committee set up by the Minister of Agriculture. It is annually awarded to the winner of an open competition for New Zealand flora to be staged successively at the four main centres of the Dominion, and the points to be considered in the making of an award are so comprehensive as to ensure that the winner not only possesses a worthy collection, but is familiar enough with his hobby to understand and appreciate its infinite variety and beauty.

The display made by Messrs. Bennett & Sons has been supplemented by additions from the collections of the late Sir George Fenwick, the gift of Lady Fenwick. Mr. J.S. Thomson, Mr. G. Simpson, Mr. J.S. McIntyre, and Mr. H. Hart, and Mr. D. Tannock also arranged a display of botanical specimens from the Gardens, representing every variety and species of native plant domiciled there.

Cherimoya Food of the Gods

Cherimoya, often described as the 'food of the gods', are one of the bright prospects for New Zealand horticulture in the 21st century.

FRST have contracted Annette Richardson and Peter Anderson, HortResearch Kerikeri, to continue their development of a production blueprint for the crop.

Five years ago when the pair began their research only a couple of orchardists were growing cherimoya commercially. Now there are 50 growers, many of them exporting their product to the lucrative Japanese market where they are rated as the most desirable exotic fruit.

Cherimoya, a subtropical fruit of South American origin, are unlike any other fruit grown in N.Z. so it has been a challenge developing management techniques for the crop. Researchers have so far developed pruning and pollination techniques and are now targeting fruit quality.

From HortResearch Seasons, Spring 1992.



R.N.Z.I.H. Branch News



Otago Branch

RNZIH/NZAA Conference, Dunedin 1993

Plants from Here and There 150 Years of Pleasure and Profit in Horticulture

The Otago Branch of the R.N.Z.I.H. is already busy putting together an exciting programme for the **OCTOBER 14 - 18 1993** event.

This time we are working closely with the established "Dunedin Rhododendron Week" organisation and the owner of Larnach Castle, Mrs. Margaret Barker.

Larnach Castle will be our main conference and accommodation venue. We cannot envisage better surroundings for conference delegates. Gardens and surroundings will leave an unforgettable impression and it is the ultimate place to make this conference a highlight of spending time towards Horticulture, Arboriculture and socialising.

Our theme "PLANTS FROM HERE AND THERE" is related to our desire to provide a blend of field events, workshops and discussion between the role of indigenous plants and trees and those introduced from almost every corner of the globe. Our profession needs to take a lead in the care and sustenance of our diverse landscapes as we move into a new century.

We have chosen to let our conference coincide with Rhododendron week, an event of national importance. It also provides the opportunity to invite members of the public at large to attend our conference in an attempt to create general awareness in Horticulture and Arboriculture.

Highlights will include :

- ✦ Banks Memorial Lecture with a rhododendron theme.
- ✦ Private garden excursions with informed commentaries.
- ✦ Discussion on garden history topics and other current horticultural and arboricultural topics.
- ✦ The opening of a major public exhibition on horticulture which will highlight "people and plants" expressed in artwork and photographs with a horticultural theme.
- ✦ Practical workshops
- ✦ Guided walk through the Dunedin Botanic Garden.
- ✦ Historic Tree Tour
- ✦ Climbing jamboree and displays.

Whilst rhododendrons will play an intricate part in our conference programme, the established popular events in Rhododendron Week will continue for several days immediately following the conference, allowing you to extend your stay in Dunedin and also enjoy the Labour weekend holidays here.

Dunedin has many attractions that might be seen during your visit, such as the Royal Albatross Colony and nearby central Otago features.

Meantime, make a note in your diary. We would love to see you in Dunedin.....at Larnach Castle, October 14 - 18, 1992.

Conference enquiries to

Secretariat
"Plants from Here and There" Conference 1993,
P.O. Box 8032,
DUNEDIN

Phone and fax 0-3-455 7751

North Taranaki

During May of this year the North Taranaki Branch took the opportunity of giving members and the public the chance to see a wide selection of the numerous notable and historic trees in the region. A series of guided tours to separate localities was arranged on three successive Sundays.

The first was to the arboretum of the Te Wera State Forest, inland from Stratford. When the production forest was planted it was decided to trial a wide range of alternative species, since this was an area well removed and climatically distinct from others. The result is an arboretum quite unique in this locality.

Notable amongst the species in the trial was a mixed avenue of swamp cypress (*Taxodium distichum*) and dawn redwood (*Metasequoia glyptostroboides*) looking resplendent in the entrance to the camp while in the nearby hillside arboretum several fine specimens of the mocker nut (*Carya tomentosa*) stood out amongst a wide diversity from maples to eucalypts. Time did not allow an inspection of the adjoining collection of selected strains of native timber species, nor the opportunity to accurately identify all species but it quickly became apparent that here was a goldmine of genetic reference material of known planting date and origin, constituting a magnificent public spectacle beside State Highway 43. It was very disturbing to learn that on the very next day cutting rights for the forest changed into overseas hands.

Efforts are now being made to find out how this disturbing development will influence the future of the arboretum and adjoining stand of selected native trees. It is also intended to record details of the makeup and size of the arboretum together with any notable specimens established there.

The second survey was to another remote area of Taranaki centred around Tarata and Purangi. Early European settlers and missionaries took with them introduced tree species for a number of reasons together with very high aspirations

for development. The trees are still there but many of the settlements and vanished or dwindled. This was therefore a very interesting journey to study the significance of trees in a changing economy. This area can claim a significantly high proportion of the trees recorded in FRI Report No.19 (1973) by Burstall.

Notable specimens include the American ash (*Fraxinus americana*) Caucasian fir (*Abies nordmanniana*), Norway spruce (*Picea abies*) and Sitka spruce (*P. sitchensis*) not seen often in coastal Taranaki.

A stand of # 50 coastal redwoods (*Sequoia sempervirens*) planted by Mr. M. French on the edge of the upper end of Autawa Road in 1941 have developed into fine specimens, some on private land, some on road reserve and quite apart from being both unique and spectacular, represent an interesting comparison group with that planted in Lucy's Gully near Oakura a few years earlier. Enquiries are in progress to determine what form of protection exists for this stand.

At Purangi the group were hosted by Mr. & Mrs. I. Aitchison who reside in the former school building. They explained much of the history of the area and detailed the high expectations of early European settlers as well as the significance to the Maori.

On the way to view the famous oaks of nearby Ngatoto Rd we stopped to view a particularly spectacular form of *Chamaecyparis lawsoniana* in a hedge about 15m tall. The climax of our journey was the giant oaks beside the river, the largest and most perfect specimen which Burstall recorded in 1973 as having a diameter at breast height (d.b.h.) of 1.448m is now 1.697m, almost 25cm greater. The height is 34m and the spread 33.75 m. The oaks are only a few of a great diversity of species including conifers planted in this very interesting area, probably about the turn of the century. There is also a giant Lombardy poplar (*Populus nigra* 'Italica') nearby which Burstall recorded as having the same d.b.h. as the oak. These are freestanding trees and are surrounded by numerous apple and pear trees which are survivors from an orchard probably planted about the same time. Efforts are now being made to propagate and name these old clones.

The third visit was to Pukekura and Brooklands Parks within the

city of New Plymouth.

At the inception of Pukekura in 1876 there was no evidence of any trees, flat land or still water, three features for which it is now world renowned. Recent scientific surveys have accurately recorded and documented practically every tree and many feature prominently in Burstall's report.

Whereas Pukekura was a derelict gully and never privately owned, the land that was to become Brooklands retained much of its original forest cover with the exception of removal of prime timber and from 1841 was in private ownership. Thanks to the wisdom of successive owners and administrators the park is a fascinating paradox. In its 'bush' areas are found some of the largest specimens of native species recorded, and then there are smaller gems like the glade of hundreds of giant king ferns (*Marattia salicina*) while upon and around its expansive lawns are exotic species which arouse gasps of amazement and admiration.

One feature which made all three visits rather special was a little research beforehand and the involvement of persons with local knowledge who were able to add their own colours to an already rich tapestry.

On Elm and Cabbage Tree Threats

I was going to write of the apparent successful control of Dutch Elm disease, initially discovered in Myers Park, Auckland just before Christmas 1989, the first report of this disease in the Southern Hemisphere. However there has recently been a very good newspaper article on the same subject and the eradication programme has made most people aware of the danger.

The Ministry of Forestry has statutory responsibility to protect New Zealand's trees from introduced pests and diseases - whether this extends to the monocotyledon Cordyline, I'm not sure.

At the recent annual conference of the N.Z. Institute of Parks & Recreation Administration Inc. Dr. Philip Simpson B.Sc (Hons) Canterbury, Ph D (California), a botanist with the Science & Research Division of the Department of Conservation talked on "Some Principles for Restoring Ecosystems with particular reference to cabbage trees". His

work encompasses Tu Karariki (the NZ tree programme) ethnobotany, sudden decline disease of cabbage trees and scientific principles of conservation.

New Zealand's conservation needs are far greater than glorified gardening and involve the need to restore whole ecosystems. Coastal, wetland, riparian and hill country areas are priorities. Ecological principles should underlie this work, not simply public enthusiasm. This means careful planning over several years in order to obtain and grow local genetic stock of widespread common species, local varieties, local species.

With cabbage trees there are some 33 named cultivars spread around and scale insect attack is now rampant in urban areas. There is much province variability and many flowered heavily and repeatedly in the late 1980s, depleting their energy. Therefore a recent theory, that their demise is linked to the ozone depletion leading to greater ultra violet light is not the only relevant factor.

Association with Phormium - it is interesting that the D.N.A. microplasma bacteria demise of flax (flax yellows) is almost identical to the disease of cabbage trees and they are usually associated in the same ecosystem.

The flax yellows bacteria, transmitted by a native leaf hopper was the demise of the flax industry. Mechanical harvesting required draining and therefore winter flooding no longer killed the leaf hopper larvae.

There is a great need to fence off stands of cabbage trees or other natives. The removal of stock means that soil building processes will commence, and regeneration by young seedlings take place. However these new ecosystems will also have exotic weed species which will need to be controlled, and planting with local genetic stock is required to obtain canopy cover to discourage gorse, etc, and form an acceptable sustainable area of bush.

The Taranaki Tree Trust

Conservation groups around the country may soon be taking a leaf out of a Taranaki initiative, after a new trust took root in the region.

The Taranaki Tree Trust is a joint effort between the T.R.C. and the

TSB Bank backed by many local groups.

Chairman Ross Allen represents the regional council on the trust, while other trustees are Taranaki-Wanganui Conservation Board Chairperson Maggie Bayfield, Aila Taylor (Taranaki Maori Trust Board), Peter Winter (Royal Forest & Bird Protection Socy) & Ross Bishop (QEII National Trust).

The Taranaki Trust is designed to complement those organisations rather than compete with them. The Institute should assist in any way possible - another way to actively and practically assist to restore areas of local bush. It has been set up as a charitable trust and the first two projects are Mamuku Reserve a NPDC riparian strip along the Waitara river of about 3 1/2 ha near Petrocorp, the other area was adjacent to the Waiwakaiho opposite the Meeting of the Waters.

Wellington

Tomorrow's Trees

The world's resources of timber are dwindling rapidly., New Zealand is fortunate in the resource we have available in the forests of introduced trees planted over the years, especially since the 1930s

Tomorrow's Trees is a recently published book on the potential of forestry and forest products in New Zealand. The author is Lindsay Poole A.H.R.I.H., once Director General of the N.Z. Forest Service. He considers the history and possible future of the N.Z. Forest Industry. Looked at in depth is land availability, tree performance, and the likely potential of forest products in world markets.

Had it not been for experiments in the planting of introduced trees, N.Z. may well be an importer of timber, instead of an exporter. In fact we would not have a major earner of overseas funds had it not been for the development of our exotic forest.

Forestry uses land to produce a crop, much like farming or orcharding, although the life of the crop until harvest is much longer. What are some of the hazards the crop faces? They include storms, fire, pests and diseases, and political changes.

Lindsay sees it is important that, for successful long term development, the state should be

involved in forestry planning. This involvement could include factors such as forest ownership, encouragement for others to be involved by subsidies and tax advantages, and guiding development by legislation. Successful management is possible only with co-ordinated planning.

Lindsay sees a well planned forestry industry having the potential to equal, or even exceed the earning of the agriculture industry. To achieve the best benefit from our forestry resources, long-term stable plans are need. Lindsay suggests some practical measures to assist the industry.

The book is illustrated with excellent photos in colour and black and white.

Plants for Shaded Spots

How easily can you decide which plants to put in shaded spots in your garden? What are the special needs for plants for such places? The main consideration is probably that the plants must be able to tolerate lower light levels, and secondly we usually expect plants to survive in dry spots under the eaves of our homes, under decking, or in the shade of taller trees and shrubs.

So, some not-so-common plants to try in partial shade are :

Loropetalum chinense: An ever-green shrub with arching growth, and unusual strap-like white flowers. The flowers may appear at intervals through the year, but tend to be best in spring and early summer. The rounded leaves are pale green, and often given an attractive marbled effect. These plants need a well drained soil, and plenty of moisture. Prune as needed to shape. Incidentally, they are worth a try in a large hanging basket.

Agapetes serpens or *Pentapterygium serpens*; Another plant that has arching growth. It grows to only around 1 metre, but when in flower in spring, more than makes up for its small size. It makes a novel basket plant, or plant where it can hang over the top of a raised wall. The flowers are 25mm long miniature lanterns - showy to say the least. Acidic soil conditions are essential, so plant in soil amended with peat, or add acid fertiliser, and make sure the soil doesn't dry over summer. Pruning isn't usually needed, but cutting to shape will encourage new growth.

Andromeda polifolia; (Hopefully it's still sold under this name!) or bog rosemary. Don't try this one unless you can provide acidic soil conditions. It is a miniature that grows only to 20 or 30cm. The narrow leaves are small and leathery looking, and similar to rosemary leaves, but a grey-green colour. The flowers are produced in spring. They are tiny globes, usually pale pink and in clusters at the end of the shoots.

October Field Trip

Our field trip to various bush remnants on the Coast began at the nikau reserve opposite Lyndale Farm. The nikaus do nest on the lower slopes of the reserve, showing this palm prefers moist situations and deeper soils. As we climbed through the reserve the palms thinned and gave way to broadleaf trees and shrubs.

At Hemi Matenga Reserve in Waikanae Rob Lucas showed us some well developed buttress roots here on pukatea. Also some spectacular "cables" made up of groups of supplejack vines twisted together. These are possibly a result of one vine finding its way up a fallen limb and then other vines twisting around the first. The limb that provided the original support has, of course, long gone.

At Nga Manu Reserve Rob pointed out the marked difference in the plant species in the drier and wetter areas. Of special interest were swamp maire roots coming above the soil and water level. This modification is so that they can absorb air for the plant roots in very wet soils. An important feature in the wet period we have had over winter and spring.

We stopped at a reserve in Waikanae to look at epiphytic plants. To me the most interesting was puka, *Grtselinta lucida*. I have always regarded this as a hardy tub plant or shrub for exposed spots. As an epiphyte perched way up in trees it shows up due to its large leathery but glossy leaves. The roots of puka are very characteristic. They have a thick and deeply furrowed bark that is easily recognised. The roots don't twine around the supporting tree trunk, but have lateral roots that grow around the trunk to hold on. The original support for one of the pukas had died and rotted way. Although the plant has gained support from a nearby trunk, it is still possible to see a circle of roots where they had been wrapped around the original supporting tree.

Horticultural Exports Rise 8%

Figures listed are for N.Z. horticultural exports for the last three years ending each June

Exports	1990 \$NZ f.o.b.	1991 \$NZ f.o.b.	1992 \$NZ f.o.b.	% change 1991-1992	Exports	1990 \$NZ f.o.b.	1991 \$NZ f.o.b.	1992 \$NZ f.o.b.	% change 1991-1992
STONEFRUIT					FRESH VEGETABLES				
Apricots	1,803,735	2,811,158	4,388,464	+56	Potatoes	5,587,893	6,986,996	6,974,420	0
Nectarines	5,349,517	6,065,698	5,124,274	-15	Tomatoes	279,166	603,659	1,206,215	+100
Peaches	342,432	627,302	971,176	+55	Onions	37,632,689	29,556,952	39,616,767	+34
Plums	188,887	91,160	64,580	-29	Cabbages	237,046	212,156	323,598	+53
Cherries	1,834,719	2,767,560	4,585,180	+66	Carrots	456,848	451,749	694,679	+54
Other Stonefruit	1,746	-	-	-	Corn	1,244,227	988,044	1,609,687	+63
BERRYFRUIT					PROCESSED VEGETABLES				
Strawberries	6,008,549	5,396,451	7,332,515	+36	Dried vegetables	4,619,512	4,818,146	4,894,968	+2
Raspberries	195,018	209,244	223,706	+7	Vegetables in vinegar	140,192	234,758	114,747	-51
Blackberries	283,761	94,031	234,158	+149	Peas, frozen	24,143,284	21,276,099	36,986,252	+74
Blueberries	2,168,844	2,022,613	3,012,157	+49	Beans frozen	4,997,862	5,563,549	9,550,384	+72
Other berryfruit	74,074	25,761	95,319	+170	Corn frozen	13,910,370	19,338,264	16,842,697	+13
CITRUS FRUIT					OTHER FRESH FRUIT				
Oranges	69,399	82,872	813,670	+882	Grapes	907,808	1,018,111	745,439	-27
Mandarins	11,968	81,643	74,801	-8	Melons	2,363,184	3,577,828	5,010,809	+41
Lemons	470,792	890,708	954,263	+7	Other fresh fruit	911,145	1,343,826	321,930	-76
Grapefruit	10,188	3,377	15,479	+358	PROCESSED FRUIT				
Other Citrus	513,385	243,214	510,976	+111	Peel etc.	1,276,133	1,150,575	3,786,229	+229
SUBTROPICAL FRUIT					PIPFRUIT				
Avocados	3,355,252	5,154,309	9,643,396	+87	Apples	214,288,669	296,831,334	326,008,645	+10
Tamarillos	634,345	610,627	898,030	+47	Pears	2,040,362	3,409,852	3,931,750	+15
Kiwifruit	539,123,864	519,678,881	492,686,341	-5	Nashi	3,580,647	4,513,573	5,355,407	+19
Passionfruit	277,853	293,569	329,415	+12	OTHER FRESH FRUIT				
Feijoas	285,598	195,210	289,922	+48	Grapes	907,808	1,018,111	745,439	-27
Persimmons	2,671,373	5,105,908	4,082,989	-20	Melons	2,363,184	3,577,828	5,010,809	+41
OTHER FRESH FRUIT					OTHER FRESH FRUIT				
Grapes	907,808	1,018,111	745,439	-27	Other fresh fruit	911,145	1,343,826	321,930	-76
Melons	2,363,184	3,577,828	5,010,809	+41	PROCESSED FRUIT				
Other fresh fruit	911,145	1,343,826	321,930	-76	Peel etc.	1,276,133	1,150,575	3,786,229	+229
PROCESSED FRUIT					FLOWERS & FOLIAGE				
Peel etc.	1,276,133	1,150,575	3,786,229	+229	Chrysanthemums	111,777	128,743	107,719	-16
Jams & jellies	1,797,049	1,736,960	7,167,328	+313	Orchids	8,142,669	11,750,840	13,209,900	+12
Fruit & Veg juices	21,673,722	31,774,630	44,558,109	+40	Carnations	603,258	579,690	734,956	+30
Table wines	17,901,118	24,185,738	34,349,277	+42	Roses	1,325,597	1,443,314	1,553,984	+8
Fortified wines	480,129	687,429	395,331	-42	Proteaceae	536,731	978,577	909,849	-7
Kiwifruit wines	819,476	1,204,031	1,754,690	+46	Alstroemeria	415,639	568,020	352,203	-38
Fruit wines	353,490	257,334	63,850	-75	Gypsophila	465,391	331,658	268,508	-19
Raspberries frozen	1,760,259	789,847	1,100,552	+39	Spring bulbs	24,978	97,304	55,518	-43
Strawberries frozen	294,480	221,114	144,147	-35	Zantedeschia	1,896,732	3,177,987	3,539,017	+11
Blackcurrants frozen	1,167,498	430,534	342,736	-20	Other cut flowers	5,437,496	5,635,212	7,081,101	+26
Boysenberries frozen	4,182,930	3,532,407	3,523,885	0	Proteaceae foliage	94,956	967	0	-100
Blueberries frozen	591,453	967,164	963,450	0	Other foliage	219,562	442,985	491,817	+11
Kiwifruit frozen	1,956,761	1,214,977	1,069,227	-12	SEED AND PLANTS				
Other fruit frozen	2,007,295	755,099	2,539,100	+236	Flower & Tree Seeds	569,132	1,233,911	1,627,506	-32
Fruit salad, canned	136,027	127,846	366,855	+187	Vegetable seeds	2,108,942	4,303,217	4,589,567	+7
Apricots canned	62,164	171,315	222,556	+30	Bulbs, tubers, corms	1,760,421	3,299,318	4,954,616	+50
Peaches canned	112,301	151,565	1,144,205	+655	Indigenous trees,				
Pears canned	1,549,900	1,844,094	1,652,939	-10	plants	261,706	551,236	570,229	+3
Blackcurrants canned	233,407	379,031	1,858,199	+390	Kiwifruit stock	20,748	39,593	37,437	-5
Boysenberries "	934,499	555,623	1,030,694	+86	Other fruit stock	173,329	96,463	37,202	-61
Kiwifruit canned	4,021,938	7,221,784	5,566,170	-23	Other live plants	2,076,470	2,686,774	2,841,185	+6
Apples canned	1,843,806	1,673,234	5,527,687	+230	TOTAL HORT EXPORTS 1,078,833,445 1,176,712,262 1,270,061,065 +8				
Other fruit canned	405,685	1,012,031	1,223,456	+21	=====				
Other fruit processed	41,463	72,933	128,677	+76	From Horticulture News, September, 1992				

Aerial Topdressing - the Ruin of some Reserves and Natural Habitats

A letter received from Frank Chambers, Opunake

I have always been interested in native plants and in the early 1950's I was Draining Contractor draining farmlands on the western slopes of Mt. Egmont.

One particular farm up to Kaweora Road was rather boggy with rushes, patches of blackberry and fern and native bush. The fertility was very low and it appeared it was used mainly for grazing cattle in winter. *Juncus* and *carex* species were very common and among them grew about a half a dozen species of ground orchid *Thelymitra*, *Microtis Orthoceras*, *Prasophyllum*, *Drosera binata* and new to me was *Spiranthes chinensis* like a very miniature pink gladiolus.

I showed the latter plants to Bill Kleeman and one can see it illustrated in his book "Under the Mountain".

About a year or two later, the first

aerial topdressing plane appeared and this area was applied with fertiliser. The result was that the rough grasses etc. grew knee high and all these plants just vanished. About the same time we had a family picnic day at Blue Rata Reserve on the edge of the Stoney river. There was bush both sides of the road but only a narrow strip on the north side, then grazing land. Under the edge of the bush on the south side was stony shingle ground exposed to the sun for about half the day. Here I found the N.Z. parsley fern growing in abundance. A few years later I was up there again - the fern had all gone - replaced by great masses of fog-grass almost certainly the result of aerial topdressing again.

It appears to me that aerial topdressing could ruin certain reserves as natural habitat.

Notable Trees

Thanks to our Otago Tree Registration Officer, Frank Buddingh', three Umbrella/Stone Pines (*Pinus pinea*) growing at the Clyde Cemetery were registered in October. It is seldom that the date of planting of any registered tree can be given with exactitude but, thanks to the archives of Clyde Historical Museum, we have a planting date of August 19, 1868. Also the C.H.M. records that these and other trees in the cemetery were selected by the then Mayor of Clyde, Mr. D. Feraud, Dunstan Magistrate Mr. Robinson, and Nurseryman Mr. E. Mathews.

Thomas Loog of Hasting - still N.Z.'s most 'prolific' Tree Registration Officer - initiated the second R.N.Z.I.H. registration of Bartram's oak, *Quercus x heterophylla*. This fine tree, estimated to be about 85 years old, is the largest of its species in our register, despite being pollarded in 1977. Its girth at 1400mm above ground level is 3210mm, its height is 16m and its canopy spread 16.5m. Following an interview in May 1977 with the then Director of Parks and Reserves, a Hawkes Bay newspaper printed an article stating that the first discovery

of this hybrid of red oak and willow oak was made by "John Bartrum (sic) in Philadelphia in 1812". No reliable references have been found as to how or when this rare tree came to be named after the world-renowned and first native American botanist and hybridist but, if Bartram did indeed discover the tree, it must have been much earlier than 1812 as he lived from 1699 to 1777.

A Monkey Puzzle (*Araucaria araucana*) at Gore has been registered at the instigation of T.R.O. David Baird, Invercargill. This tree, planted c.1915 by a Mr. Faulkner in Charlton Lane, is smaller than the Invercargill Botanic Garden Monkey Puzzle which was planted about ten years later. Also registered on David's behalf were:

282 English Oak *Quercus robur* (Gore)
283 Ironwood *Parrotia persica* (Invercargill)

284 Common lime *Tilia x europaea*
Registration number 282 is a 100 year old tree 50 metres from State Highway 1. Trees like this are uncommon in the Southland countryside.

Although David isn't specific, it appears that the Ironwood was planted by F.G. Hall-Jones, father

Reminder

D.D. Baker Award
Applications close 28 February 1993

Margaret Watling Scholarship
Applications close 31 March 1993

See Newsletter No. 3 1992 for details of the D.D. Baker Award and the Margaret Watling Scholarship

Sir Victor Davies Award
Applications close 18 February 1993

The "Sir Victor Davies Award" is awarded annually to a person under the age of thirty years who has demonstrated an outstanding plant knowledge in New Zealand. The recipient will be presented with a certificate commemorating the award and a suitable gift decided upon annually by the Award Committee. Applicants must be New Zealand citizens or residents.

Associate of Honour of the R.N.Z.I.H.
Closing date for nominations extended to 31 December 1992

Associate of Honour is awarded to persons who have rendered distinguished service to horticulture.

Fellow of the R.N.Z.I.H.
Closing date for nominations extended to 31 December 1992.

Awarded to members who have made a significant contribution to horticulture by their activities or interest in or service to Horticulture

Plant Raisers Award
Closing date for nominations extended to 31 December 1992.

For further information please contact:
The Executive Officer, Royal New Zealand Institute of Horticulture (Inc.), P.O. Box 12, Lincoln University Canterbury.

of the present owner who stated that this particular tree was the first sale of this species by Duncan and Davies. From which statement we are, with the assistance of Mike Oates and the Hollard Gardens, Kaponga, hoping to deduce the tree's age.

The common lime, an impressive specimen tree 24 metres high, is growing at a busy Invercargill intersection.

Wilf Watson TREE REGISTRAR



Notable and Historic Trees



Living Reminders of the Past Pioneers Left Historic Trees as Monuments

By a Staff Writer from Freelance, April 1958

Nowadays we raise monuments of stone to commemorate historic events. In other times New Zealanders planted trees, Maoris and pakehas alike. Indeed, the custom still prevails to some extent and the Dominion is rich in these living reminders of past accomplishments in peace and war.

The founder of Men of the Trees, Richard St. Barbe Baker, who intends to write a book on the Dominion's famous trees, will find the ground well prepared. In 1938 the Royal New Zealand Institute of Horticulture adopted a remit urging the Government to preserve trees planted by the pioneers, or other historic trees, and the late Dr. H.H. Allan, C.B.E., then director of the botany division of the Department of Agriculture, and honorary botanist to the Institute, applied himself to the task of compiling a list of such trees.

The first instalment appeared in the Institute's Journal in June, 1940. You will find another instalment in the September issue, and there is a final allusion in June, 1941. After that the Journal became a casualty of war. Possibly some of the trees Dr. Allan listed have since perished, but it remains thought-provoking and not a little inspiring.

Heading Dr. Allan's list are Tane Mahuta and other giant kauris in the Waipoua State Forest, and it continues to spread its branches through an astonishing recital of trees, not pretended to be anywhere near complete. Early missionaries planted widely: a large oak still standing at Waimate North, two pear trees on the site of the old mission station at Keri Keri, an oak at Waima, on Hokiangā Harbour, planted in 1834 and having a girth of 27ft. in 1940.

Maoris may not have planted many, but frequently trees are linked with cannibal feasts. It happens with pohutukawas on the coast at Taranui Bay, at Otamatea and on Kawau Island. Yet the Maoris did plant trees to mark notable events. At Taumarunui may still stand the totara planted to commemorate the agreement with the Government surveyor, John Rochford, who

persuaded local Maori to allow the survey for the main trunk line to go on.

Near the railway station at Otorohanga was a kahikatea said to have marked some historic event in Maori history.

There is hardly a locality in the country without a tree of local or general significance. In the school grounds at Kamo are oaks planted in August, 1892, when Arbor Day was first celebrated in New Zealand. The first of all Anzac memorials was a pohutukawa planted at the corner of Rata and Oroua Streets, Eastbourne by the Mayor, J.P. Kelly, on Arbor Day, 1915, only two and a half months after the landing. The late Sir Joseph Heenan planted two kauris at Muritai - one in 1919 in memory of H. Marsden, killed at Passchendaele, and the other in 1929 to Hugh Girdlestone, killed in 1916.

Rich in History

Christchurch is rich in historic trees, and its botanic gardens contain possibly the biggest group of trees planted by Royalty and other distinguished persons in any New Zealand park. Others of historic interest are dotted through Canterbury. The grounds of the University of Canterbury contain a ginkgo planted half a century ago. Oaks at Fairlie commemorated the fiftieth and sixtieth years of Queen Victoria's reign. Said to have been the first deciduous tree introduced to Timaru, an ash in Ashbury Park was planted in 1861 by Captain Woolcombe, the district's first magistrate. At Willowbank, Temuka, from seed sown in 1859, may still stand the first bluegum planted in South Canterbury. Picturesque Peel Forest is the site of a *Pinus insignis* planted about 1860 and one of the oldest in Canterbury.

Not all Giants

You find these living memorials even in the deeper south. But they don't need to be giants to qualify for distinction. The original Roxburgh Red apricot tree was planted at Roxburgh by the late J. Tamblyn of Coal Creek, about 1862. Ten years ago there were nearly 12,000 trees of that variety in the district. In 1902, the year of King Edward's coronation, a rhododendron in the gardens of the old ministerial residence in Molesworth Street, Wellington, was given to the late Rt. Hon. R.J. Seddon by the Duke of Argyle. At Russell you find rose bushes planted along the drive of old Government House by Captain Hobson. An orange tree at Keri Keri is claimed to be the Dominion's oldest.

There is no end to this fascinating story. At the Three Brothers Corner, near Richmond, Nelson, till a few years ago stood three tall gumtrees that gave the locality its name. One survives. On the run from Kaikoura to Hapuku stands the lone sentinel by the side of the road, its bole marked by a sheet of tin.*

At Waiānakarua, North Otago, stands sentinel by the railway line a clump of bluegums remembered in at least one poem.

The material for Mr. St. Barbe Baker is prodigious. It calls chiefly for judicious selection and factual treatment to produce one of the most fascinating books New Zealand could yield.

*Tree Registration No. 267



The following is a letter received from the Marlborough Tree Growers Assn. Woodland Marketing and Investigation Group

Dear Sirs,

Cork Oaks *Quercus suber* and *Q. variabilis*

As you may already know, our group has commenced a nationwide study of the Cork Oaks (cited

above), as a long term project designed to ascertain the survival, growth rates, adaptability and potential for cork production as a commercial possibility with time.

Our search so far has been very successful and we now have 80 locations for these trees throughout New Zealand comprising well over 300 trees in all, of all ages from 1837 to 1992. We are still researching and receiving reports. A large number have been recorded on our questionnaire form, complete with photos and foliage samples. We hope to collate all the data and publish an appropriate report sometime next year.

We believe that your Institute may have some records of these trees and their status although the only one we know of definitely as protected is the tree at Avalon in the Hutt (Mason's Gardens).

Could you let us know please if you have any records on these species, locations, status, owners, growth records, ages etc. to add to or check with our own records to date. Also if you have any references in the literature we would be glad to be advised as to titles, location, author, etc.

We hope this will not be an undue burden on your resources but if necessary we could come to Lincoln and do any searching ourselves that may be necessary.

We look forward to your assistance in our project.

R.S. Macarthur, Convenor,
The Grove, RD1 Picton.

Dear Mr. Macarthur

Thank you for your letter of 21 October. Obviously you have an impressive collection of data on the *Q.suber* species. Perhaps you could let me have photo-copy details of a few of the older/bigger specimens, especially if their owners would like them registered under our scheme.

I regret that we have only eight of these trees featured in our register. Our records include a colour transparency of No.76, a colour print of 113K and a colour negative of one of the 2321 stand. Within the constraints of a limited budget/time frame I could, if you wish, send you additional details as required by your questionnaire.

Best wishes for your interesting project.

Wilf Watson, Tree Registrar,
R.N.Z.I.H.

World Tree Man Brings us a Message

Planting a thousand trees is easy.

Ensuring each tree will survive and flourish is where the frustration and sometimes heartbreak comes.

Dr. Alex Shigo has one simple message about trees, "Know the Tree and the Treatments are easy."

He's in New Zealand to help tree professionals and all enthusiasts with new ways to manage trees.

Dr. Shigo says that often trees are being cared for using the very best intentions but the wrong methods, so trees are in trouble. More than insects, diseases and pollution, the major causes are mistreatments by man.

Dr. Shigo's treatments are based on knowing what goes on inside every part of a tree and what trees therefore really need to flourish. "When we understand how trees really work, we can create much better procedures to look after them. This is the basis of modern arboriculture".

The studies he has done on trees over his lifetime have created his worldwide reputation as Shigo the Man of Trees. From the work he and his colleagues have done in forests round the world, a new tree biology has emerged based on new concepts like microbial succession, compartmentalisation and genetics.

Today his life's work is devoted to ensuring that his discoveries come out of the laboratory and into the hands of everyone who wants to better understand and properly care for trees.

In New Zealand he'll present three one-day seminars. He will be in Auckland on 19 February 1993, in Wellington on 22 February 1993 and in Christchurch on 24 February 1993. He will talk to horticulturists, arboriculturists, government departments, local authorities and botanists, everyone in fact who wants to better understand and find proven new ways to care for trees.

For further information please phone Ed Chignell (09) 276 2846

Alternatives to Methyl Bromide

An international ban on the fumigant methyl bromide would close the export markets on about 25% of New Zealand's fresh fruit. Methyl bromide is used world-wide to kill pests of quarantine importance on export fruit. This chemical may be banned because recent evidence suggests it damages the ozone layer.

FRST is funding HortResearch scientists to find non-chemical alternatives. Controlled and modified atmospheres, heat treatment, irradiation, and microwaves are some of the treatments being investigated at Mt. Albert Research Centre by a 20-strong research team led by Dr. Tom Batchelor. Insects for this research are mass-reared in purpose-built laboratories on artificial diets tailor-made to the tastes of each species.

Research on alternatives began about 1984. A modified atmosphere treatment for persimmons looks promising for commercial use. Work on heat treatments and controlled atmospheres will soon benefit from a semi-commercial plant recently developed by HortResearch engineers at Ruakura.

A heat treatment alternative to ethylene dibromide is also being developed to reduce the risk of fruit flies entering New Zealand on produce from the Cook Islands. This research is jointly funded by FRST and the Ministry of External Relations and Trade.

For further information please contact Dr. Tom Batchelor, HortResearch, Mt. Albert Research Centre, P.B. 92 169 Auckland. Tel 0-9-849 3660

From HortResearch Seasons, Spring 1992



Congratulations

to the following successful candidates who completed the Certificate in Horticultural Practice in the R.N.Z.I.H. examinations held in October.

ADAMS	David	MOTUEKA	LLOYD	William	RUSSELL
BAKER	Tony	NELSON	LOUDEN	Andrew	WAIUKU
BAYLIS	Glen	HASTINGS	MANDENO	Paul	WHANGAREI
BENSON	Mark	KERI KERI	MARTIN	Roland	HASTINGS
BLACKBOURN	Stuart	HASTINGS	MATTSEN	Miles	MOTUEKA
BLAKE	Andrew	WAIPAWA	MAULGUE	Michael	CHRISTCHURCH
BROMWICH	Scott	NGARUAWAHIA	McCAULEY	Gregory	NELSON
BROOKER	Shane	TARADALE	McLEAN	David	CHRISTCHURCH
BROWN	Andrew	CAMBRIDGE	McLEAN	Jason	NAPIER
CASSIDY	Barry	RANGIORA	NICHOLSON	Richard	N.CANTERBURY
CODYRE	Nicola	WHANGAPARAOA	NORTON	Clint	AUCKLAND
DAVIES	Owen	GISBORNE	PATON	Alan	DARGAVILLE
EDER	Gregory	RANGIORA	ROBSON	Jeffrey	HASTINGS
EVANS	Timothy	CHRISTCHURCH	ROE	Richard	CHRISTCHURCH
EVERETT	Shane	NELSON	SAMPSON	Anthony	NELSON
FITZGERALD	Andrea	HAMILTON	SENIOR	Bernard	BLLENHEIM
FLETCHER	Bevan	RANGIORA	SHEA	Bernadette	CLYDE
FROST	Terry	CHRISTCHURCH	SKERTEN	Geoffrey	RAKAIA
GILL	Russell	GISBORNE	SMITH	Brendon	TE PUKE
GLOVER	Nicole	DRURY	SMITH	Priscilla	WAIPAWA
HAMILTON	Tony	WAIPUKURAU	STEPHENS	Mark	HAWKES BAY
HARRIS	Hamish	GISBORNE	TARRANT	Priscilla	MORRINSVILLE
HAZELWOOD	Fenton	HASTINGS	TRACEY	Shellyne	HELENSVILLE
HORSEFIELD	Tony	HASTINGS	TRENEMAN	Craig	HASTINGS
HUGHES	Cameron	NELSON	WHITE	Christopher	HAMILTON
JARRETT	Trevor	NELSON	WHITE	James	GISBORNE
KING	Lynita	WHANGAREI	WILLIAMS	Simon	MOTUEKA
KRAUZE	Karlis	CHRISTCHURCH	WOODMAN	Marcus	MOTUEKA
KURMANN	Antony	CAMBRIDGE	ZEGWAARD	Karsten	HAMILTON
LADLEY	John	NELSON			

Welcome to the following new members

Ms. Vanessa AMANONO	AUCKLAND
Mr Brad CADWALLADER	NELSON
Ms Lyn HEATON	CHRISTCHURCH
Mr David JAMES	BLLENHEIM
Mr Alan JEMISON	HAMILTON EAST
Ms Pamella JENKS	DUNEDIN
Mr P.B. KEATS	UPPER HUTT
M.M. LEAMY	OTAKI
MANAKAU WORKS	AUCKLAND
Mr Wally MARSTERS	HENDERSON

Newsletter



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