12HorticultureWinter1979Bulletin of the RoyalNew Zealand Institute of Horticulture (Inc.)

HORTICULTURE

IN NEW ZEALAND

In this issue



BULLETIN OF THE ROYAL NZ INSTITUTE OF HORTICULTURE NUMBER 12, WINTER 1979

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Views expressed are not necessarily those of RNZIH.

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~ Editorial ~

The production of this Bulletin brings a welcome change from the usual office routine. The typing, headings, drawings, and what we laughingly call layout, are squeezed into intervals between accounts, examination entries, banking and the innumerable student and member queries.

One problem arises - once I have come to the end of members' contributions, I am reduced to plagiarising anything from André Kostelanetz, through MOWD, to the "NZ Orchardist", and what appeals to me, for whom gardening is strictly a spectator sport, may prove to be entirely passe for our horticultural readers, viz. - the "Earwig trap" article. So please - keep those letters and cards rolling in, so that your Bulletin really reflects the happenings in Horticulture in New Zealand.

We welcome visitors to our office - it is always interesting to meet members and students who are passing through. You will find us in Room 03, which is on the north-east corner (ground-floor) of the Hilgendorf Wing at Lincoln College.

BARBARA McCARTNEY, Editor.



Congratulations ~ are due to :

MR JOHN O. TAYLOR, AHRIH,

who was awarded the M.B.E. in the Queen's Birthday Honours, 1979.

This award is for John's services to horticultural education.

John is Chairman of RNZIH National Executive, member of our Examining Board, and member of the Executive of the Canterbury District Council.

MR JACK GOODWIN, AHRIH, (Taranaki),

who was awarded the the Veitch Gold Medal, by the Royal Horticultural Society, in recognition of his services to the Pukeiti Rhododendron Trust of New Plymouth.

This is an honour not lightly bestowed, and is also an honour not often awarded outside the United Kingdom.

CONGRATULATIONS AND BEST WISHES FROM ALL MEMBERS OF RNZIH TO THESE TWO GOOD FRIENDS OF HORTICULTURE.

Pukeiti Rhododendron Trust

has earned a special place in the hearts and minds of all visitors. Over the years a large number have combined their time and talents to build a place of worth and beauty.

Rising costs, and a recent drop in the number of visitors due to often atrocious weekend weather and the worsening petrol crisis, have meant that more volunteer help is needed to maintain this Trust. Assistance in manning the gates from September to Christmas and other public holidays is required, especially as the new visitors' centre and office is due for completion in August. Track and bush margins clearance and dead-heading are tasks which could also be undertaken. If you can help in any way, please drop a note to the Secretary - Pukeiti Rhododendron Trust, P.O. Box 385, NEW PLYMOUTH.

- CHRISTMAS CARD : The design for the 1979 Christmas card has been selected by the executive of Pukeiti, and will feature the beautiful species Rh. Augustinii.
- NOTELETS : Good stocks are available in packets of 12 now and only \$1.50 per packet, plus postage. Available from "Notelets", P.O. Box 385, New Flymouth.



'FLOWERS LIKE PEOPLE -TAKE THEM INTO YOUR HOME"

- this is a sample of wording on posters seen in Europe on bill boards, stations and any place where posters are permitted, by the writer of the Newsletter of the Society of NZ Professional Florists Inc.

The popularity of flowers to take home or give away has risen dramatically over the past 25 years. In a tramcar in Rotterdam I noticed four out of ten people carrying a bunch of flowers.

Mixed bouquets, but not too much, say carnations and Lyatris, roses with asparagus fern, chrysanthemums with oak leaves, Gerbera with Gypsophila, or mixed flowers from the field! (Achillea and daisies and iris.)

Indoor plants are very popular and of a dramatic quality in varieties I had not seen before. Automatic watering gadgets in bigger arrangements. Chrysel and Pokon are very popular and given with orders free.

The estimated current per capita consumption of cut flowers and pot plants is NZ\$5.60 per annum in Great Britain, compared with NZ\$47.00 per annum in West Germany.

GARDENING WITH Rubus parvus (Bramble)

Rather than being a prickly problem, a clump of <u>Rubus parvus</u> can be an asset in a garden.

Definitely a small scale plant of prostrate and creeping habits, two features are of note. One, the red raspberry-like fruits, and two, the striking leaves which are presented in an eye-catching array of colour and

arrangement. It is at home trailing over rocks or a bank, and roots along the stem wherever contact is made with the soil.

The plant's natural distribution is confined to an area west of the Main Divide in the South Island extending from Karamea in the north to Jacksons Bay in the south.

- Graeme Paterson, Dunedin.

District Council News..

AUCKLAND :

Watsonias are bright and cheerful members of the Iridacea which have become garden escapees in parts of Auckland. They, together with certain Gladiolus spp. are commonly known in South Africa as pypies. With the exception of W. cylindrica, the species is limited to South Africa and the majority are found in the area of the Cape of Good Hope which has winter rain. Habits differ according to distribution with everyreen ones appearing north of Knysna (on the southern coast) and deciduous ones (with a rest period in late summer and autumn) in the south-western area, whilst W. hysterantha (in which the flower spike and leaves appear separately at different times of the year) is confined to the sandveld near to Langebaan. Watsonias bear 3 types of flowers: W. aletroides has long tubular flowers with very short perianth segments: W. fourcadei, W. meriana and W. longifolia all have a perianth with a cylindrical basal portion which widens gradually to the throat; W. pyramidata and W. marginata belong to the third type with flowers having a short narrow perianth base which widens abruptly to form a wide open flower. The genus is named after Dr. Watson, an apothecary in London, and was so done by the curator of the Chelsea Physic Garden - Phillip Miller - when in 1750 he flowered a plant of this genus from seed.

Like so many other South African genera, much research is necessary before any attempt can be made to redefine the species. It is still not known if the best of the whites, *W. ardernei*, can stand alone or if it is really a colour form of *W. wordsworthiana*. *W. beatricis* has long dense spikes of deep apricot flowers and *W. marginata*, apart from its attractive foliage, bears long branched spikes of <u>Ixia</u>-like flowers in a shade of delicate pink. <u>Watsonia</u> is distinguished from <u>Gladiolus</u>by a small difference in the stigmas, those of <u>Watsonia</u> dividing twice and making 6 branches, while those of <u>Gladiolus</u> divide only into 3 branches. Not much is known in NZ of the <u>dwarf</u> Watsonias and they tend to remain "collector's items". In Collins "Guide to Bulbs" *W. coccinea* (blood-red flowers and stem to 1'), *W. humilis* (to 1½' flowers deep pink with bluish tint) are listed as dwarfs with *W. meriana* classified as variable: from 9" to 3', and flowers of salmon-pink to mauvish-pink. Unfortunately these dwarfs tend to be particularly prone to rust and this usually spells an early demise.

Miss Joan Dingley, AHRIH, has been presented with a medal by the Vegetable Growers' Association for work done by her to assist this body.

"I have never heard of a piece of land which would let well as a building lease remaining unlet because it was a flowery piece." - John Ruskin, 1878.

DISTRICT COUNCIL NEWS (CONT)

WHANGAREI : An interesting evening talk titled "What is a Climber?" was given by Kevin Young, FRIH, at our May meeting. We learnt about a section of plants which twine or climb about their host, also sub-climbers which cling against other plants. Ramblers - straggling or climbing freely and irregularly; Trailers - more suitable over banks, walls and ground covers. The reason for growing climbers is usually for privacy, or to break up the garden into an interesting picture. Prepare beforehand to get maximum value. Study the ground to get the best from it, prepare soil, add a light dressing of fertilizer. Some of the varieties mentioned were -Actinidia, Allamanda, Bougainvillea, Clematis, Mandevilla, Hoya, Kennedyia, Lapageria, honeysuckle, Cigarette Creeper, Petrea, Pyrostegia venusta, Solanum, Trachelospermum,

Grevillea sulphurea, Cotoneaster, and Passiflora.

WELLINGTON : Dr John Troughton's illustrated talk on May 24, on "Transport Fuels for NZ" gave us a graphic outline of the energy problems facing NZ - and the picture looks pretty grim. It is estimated that known oil reserves will last only 5-10 years at the present rate of usage, besides becoming increasingly expensive with scarcity. Hence plans must be made to produce other forms of fuel.

Dr Troughton emphasised that our country is lucky in having large energy resources available - hydro, geothermal, gas and coal, but stressed that vast amounts of money would be needed before they could be developed and it would take many years even if started immediately.

The fact that the coal resources are larger than previously thought has shifted the emphasis away from using good land for growing extensive areas in crops and forests as a renewable fuel source. However, current plans could be implemented to grow fodder beet on an area of the Canterbury Plains with a processing plant set up to handle the crop, to produce ethanol.

We were shown on graphs the amount of fuel consumed by various sectors of the community and it was explained that if the amount used by the private sector was not kept within 3% growth rate per annum it would be impossible to meet our fuel needs in the future.

HAWKES BAY : We have no Hawkes Bay District Council at present, but at Head Office we have had one student enquiring whether such a District Council could be established.

Hawkes Bay has 25 RNZIH members and 41 RNZIH students, so what about it? Surely a District Council could be organised? Please contact Head Office if you would like to be involved.

We have liaison with the POVERTY BAY HORTICULTURAL SOCIETY, through its Secretary, Mrs Kirkham, but again, no District Council there. Poverty Bay has 7 RNZIH members and 12 RNZIH students.

DISTRICT COUNCIL NEWS (CONT)

CANTERBURY : Monday 9th July was the date of the presentation of RNZIH Horticultural Sales' Certificates, National Certificates and National Diplomas in Horticulture, to Canterbury students who attained these awards following the 1978 examinations. As well, prizes were presented to : Roy Edwards, Alan Jolliffe and Terry Canton.

Professor Richard Rowe, newly appointed Head of the Department of Horticulture, Landscape and Parks at Lincoln College, spoke on "The Direction of Australian Horticulture." It was interesting to hear about the state of Horticulture across the Tasman. Professor Rowe also presented the awards mentioned above.

The Chairman, Walter Fielding-Cottrell, extended congratulations on behalf of members and Executive to John Taylor, on his being awarded the M.B.E. in the Queen's Birthday Honours.

The programme for the rest of the year will include a trip to Zealandia's new glasshouse complex in September, and a plant auction later in the year.

NOTES FROM THE MINUTES OF THE 2ND JOINT MEETING OF NORTHERN DISTRICT COUNCILS OF RNZIH, HELD IN AUCKLAND ON 16 JUNE 1979.

Discussion at this meeting was very wide-ranging, and these notes are necessarily brief.

Plant Evaluation Scheme : there was general agreement that trial grounds in the northern area are necessary to ensure that plants suited to milder climates will be tested experimentally. The possible problem of security arrangements to protect the interests of owners/importers of new plant material was raised. It was suggested that plants under evaluation be grown in many areas rather than in one or two large sites, to ensure testing under differing climatic conditions.

Preparation of a list of "Good Garden Shrubs" - Horticultural texts produced in the Northen Hemisphere are rarely relevant to gardeners in the porthern parts of NZ and it was felt that a worthwhile service to gardeners within and outside the Institute could be performed by drawing up a series of booklets listing plants which can be most successfully grown in areas relatively free of severe frosts.

Judging Certificates, Assistance to Judges - training and refresher courses for show judges are required. Auckland District Council is at present running such a course, and offered to circulate a a report to the other Councils. The Waikato District is serviced by judges trained and accredited by specialist societies. It was suggested that a day workshop could be held in conjunction with next year's A.G.M. in Hamilton.

Assistance to students - amongst other comments, it was felt that too much emphasis is placed on details of technique rather than the principles involved in horticultural practice.

Plant Evaluation Scheme ~

Over the past two years considerable time and effort have been put into the implementation of the Plant Evaluation Scheme.

RNZIH Regional Horticulture Committee member Alan Mason, while overseas in 1978, spent much time with David Palmer, botanist at Wisley, and Jim George of U.P.O.V. (Union for the Protection of new Varieties of Plants), both of whom are mainly involved with Plant Variety Rights in Europe.

Alan returned with a great deal of information which confirmed the consensus of opinion of the committee that any work involving plant evaluation and subsequent issuing of variety rights would need to be handled by a full-time body, and would be beyond the scope of this committee and the Institute as a whole.

The Committee has been working closely with the Registrar of the Plant Varieties Office, and from him has learned that Government will be giving consideration to amending the Plant Varieties Act to include a wider range of ornamentals, mainly of NZ origin.

The export potential that may accrue from NZ Plants appears to be the main reason for amending the Act.

It appears likely that NZ will in the near future become a full member of U.P.O.V. and the requirements of that body is that a full and detailed description of any plant be carried out before rights will be issued. After perusing a copy of these requirements it is obvious that this work can be undertaken only by a botanist.

The RNZIH Regional Horticulture Committee will be keeping a close watch on further developments in respect of amending the Plant Varieties Act to include a greater number of ornamentals, as opposed to fruit and vegetables.

The Committee feels that some form of evaluation should be undertaken by the Institute with a re-direction towards the preservation of any new ornamentals that are at present in the Country. To this end, the Committee feels that the acquisition of plant material will be from the following sources :

- 1. Plant material on Research Stations which have been imported for other purposes (i.e. Viburnums and Vaccinium for fruit research) that could have ornamental potential.
- 2. Suitable NZ-raised cultivars, both of Native and Exotic origins from members of the Institute or interested Nurserymen.

The following criteria to be met :

- 1. Material of trees and shrubs only, excluding roses.
- 2. Plants having ornamental potential.
- 3. Any material having signicant horticultural features that differ from existing plants currently in cultivation.

The contact person is : Mr R.C.Gill, Deputy-Director, Upper Hutt C.C. Parks & Reserves Dept.

DSIR ESTABLISHES HORTICULTURE GROUP

During the past 18 months, Entomology Division of DSIR has been undertaking an in-depth review of its research programme and organisation. This has resulted in a reorganisation of its research and the establishment of, among others, a Horticulture Group under the leadership of Dr C.H.Wearing.

The latest issue of "The Orchardist of NZ" reports that Dr Wearing states :

"The new structure should permit improvements in the identification of horticultural research needs and in the planning and conduct of all our horticultural research. We shall be maintaining our present level of research on pests of pip and stonefruit and the first change being made immediately is to increase our research effort on kiwifruit pests.



"The Division is already involved in research on the chemical and biological control of leafrollers and greedy scale, and is initiating work on pesticide residues and mites.

"The Horticulture Group is also involved in research on pests of other fruit crops such as grapes and citrus and will be aiming as far as it is able to meet the research needs of orchardists, vecetable growers and other horticultural producers."

Auckland "Chelsea" Show

The Auckland Horticultural Council is holding a "Chelsea" Show at Ellerslie Race Course during October 1979.

The RNZIH Auckland District Council and the Pukeiti Rhododendron Trust are among those arranging displays for this show.

The address of the Auckland Horticultural Council is : P.O. Box 8843, Auckland.

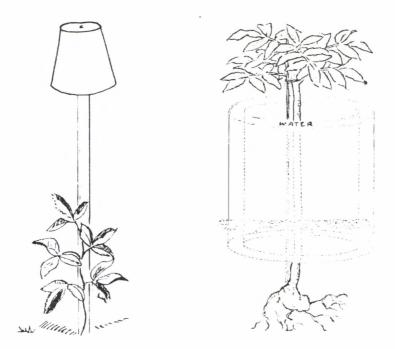
Calouste Gulbenkian in the 1930's spent half a million dollars on landscaping a 150 acre garden 6m from Deauville. Sixty gardeners were employed to look after the huge area of tropical trees planted there and populated by oriental birds. No house was built on the property - instead the owner stayed in a hotel on his twice yearly visits and spent his time working in the garden. There was no admittance permitted by the general public because Mr Gulbenkian believed that 'the most precious thing money can buy is privacy'.

"We listen too much to the telephone, and we listen too little to nature." - André Kostelonets

ATTENTION DAHLIA GROWERS !

ARE YOU TROUBLED BY EARWIGS?

Here are two methods of saving your precious blooms from these pesky creatures. These suggestions were found in an old (circa 50 years) 4 volume edition of Cassell's "Popular Gardening."



On the left - a simple trap. Partially fill the pot with hay and place, inverted, on the stake supporting the dahlia. The earwigs lurk in the hay during the day, and if the pots are shaken into boiling water every morning (!) the earwigs are kept under control!

On the right - a more complex trap. Take two tins about 5" high one to fit inside the other. Remove both ends from the smaller tin, leave enough of the base of the larger one to provide a seal when the smaller is soldered inside. Faint to prevent rusting. Put trap 3" into the soil (to thwart any dastardly earwig tunnellers?), fill the space between the tins with paraffin and water to thwart any dastardly earwig climbers. (Apparently they can't fly that far.)

ANY MAN CAN MAKE THESE TRAPS AT A VERY SMALL COST !!

The mind boggles - I'd be very interested to learn of any member who tries out these traps - Ed.

COMPANION PLANTS -there are various reasons why certain plant combinations are successful. Plants having complementary physical demands are well suited to one another. For instance, a plant which needs plenty of light may be a good companion for a plant which can stand partial shade. Deep-rooting plants open the ground for other species with less deep roots. Tall plants use a different area above the garden from that filled with low-growing plants. Heavy feeders should be followed by light feeders, or plants that make the soil rich again, such as legumes. Plants that cannot stand the competition of weeds should follow those that leave the soil free of weeds.

Gardeners and biochemists are still investigating other less obvious factors in its environment which may influence plant health, such as aroma, leaf and root exudations, or influences from the roots of still other plants further out in the environment.

The book "Companion Plants" by Helen Philbrick and Richard B.Gregg, published by Watkins,London, covers a great deal of ground in this subject, and would interest anyone involved in planning a garden.

Some examples are :

CAULIFLOWER (<u>Brassica</u> <u>aleracea</u> form botrytis) is known to grow better if there is celery in its neighbourhood. It is reported that the white cabbage butterfly is kept away from cabbage and cauliflower by nearby celery plants.

BIRCH (<u>Betula</u>) is good around the outskirts of compost and manure piles where they always encourage good fermentation. This is possibly caused by substances excreted by the birch roots. Birch leaves added to the compost will help exhausted soils. Soil from around birch trees or the soil surrounding their roots may be used to heal the ground where diseased plants have been removed. Before the use of power machinery it used to be a common sight to see an American farmer "brushing" a harrowed field with several birch trees lashed together and dragged behind a horse or tractor. This practice always resulted in a fine seed bed.



CHIVES (<u>Allium schoenoprasum</u>) are so common that they are taken for granted in most gardens. Experiments using chives as companion plants have shown that they prevent apple scab and help apple trees to better health. Some orchardists have made chive tea to spray against apple scab and against downy and powdery mildew on goosberries and cucumbers.

CORN $(\underline{2ea} \ \underline{mays})$ - sweet corn does well with early potatoes. It is also aided by beans and peas, which help the soil by putting back nitrogen which the corn uses up. We are told that when the early settlers came to America, they found the Indians growing corn and pumpkins together - perhaps one of the earliest examples of native American companion planting. EUPHORBIA (*Euphorbiaceae*) - in general, the Euphorbias help and protect tender plants of other species because they foster a soil which preserves warmth, thus simulating conditions of a warmer climate. Euphorbia is a vast genus in other parts of the world there are over 4,000 species.

<u>GLADIOLUS</u> - a skilful market gardener has said that <u>Gladiolus</u> is strongly adverse in its effect upon peas and beans, and the influence can be noted even as far away as 50 feet or more.

GOOSEBERRY (<u>*Ribes grossularia*</u>) - in 1950 a study was made of the lethal effect of the volatile substances from tomatoes on certain insects attacking the gooseberry shrub. The observer noted that gooseberry shrubs in the vicinity of tomatoes were protected from certain insects.

LEMON BALM (<u>Mellissa officinalis</u>) is one of the most fragrant herbs, radiating a beneficient atmosphere all round itself. As a tea by itself, either fresh or dried, or as an ingredient in a tea of mixed herbs, it is pleasant and refreshing.

Perhaps the most valuable use we have found for <u>Melissa</u> is to rub the inside of the bee hive with a handful of the herb after hiving a new swarm. The swarm will never leave the hive.



LILY OF THE VALLEY (<u>Convallaria majalis</u>) - if <u>Narcissus</u> and lily of the valley flowers are put together in one bunch, they will soon wither. Similarly, mignonette increases the withering of flowers in a vase.

PEARS (*Pyrus*) - root tip growth of pears was suppressed by the root excretions of grass. In other words, pear trees will grow better under open cultivation.

ROSES (Rosa) - roses and garlic are mutually helpful as has been

proved by innumerable American rose gardeners in the past few years. Bulgarian gardeners grow onion and garlic as intercrops with roses and it has been observed that the roses with the garlic produce stronger perfume than without garlic.

Roses are also helped by the nearby presence of parsley, as are Mignonette and lupins. The rose does NOT like boxwood, whose roots interfere with the roots of the rose bush. It is better to plant roses with plants whose roots go deep rather than widespread.



NEWS

FROM THE

AUCKLAND LILY SOCIETY.

The June 1979 Bulletin of the Auckland Lily Society announces that there will be a SPECIAL MEETING on MONDAY 27th AUGUST, in the AUCKLAND BUILDING CENTRE, to which any member of a horticultural society or club is invited.

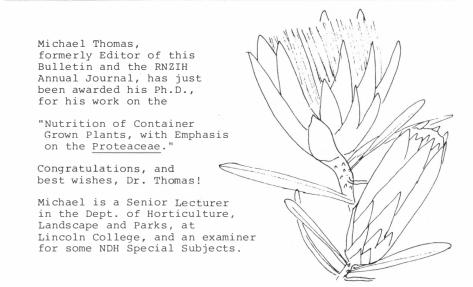
DR R.M. WITHERS, of Melbourne, Australia, is visiting New Zealand for the Camellia Conference, and has kindly consented to address Auckland horticulturists at an evening meeting. The Darby Street doors of the Auckland Building Centre will be open from 7.00 pm.

Dr WITHERS is widely known for his interest in all aspects of breeding and raising plants, not only Lilium, but Rhododendron, Camellia, etc., and this should prove a most interesting meeting.

The 32nd Annual Report of the Society presented in May 1979 notes the buoyancy of the Society, both in activities and membership.

Lectures, displays, the annual bulb sale and Annual Show, and workshops held in June and July were well attended, while the highlight of the year was the return trip to Cook's Beach to see once again the hundreds of beautiful Formosanum lilies in full flower.

The June Bulletin includes Garden Notes on the upkeep of your lilies during June-July-August.



NOTABLE AND HISTORIC TREES

a national scheme to promote and register New Zealand's notable and historic trees.

New Zealand has a landscape that is constantly changing. Throughout the country there are trees of importance which must be protected within our environment for the following reasons :

- * they are objects of beauty
- * recognised landmarks
- * of scientific importance
- * sources of rare propagating stock
- * of historical importance.

Two recent Canterbury additions to the Notable and Historic Trees Register are a Walnut (Juglans regia) at Tai Tapu, and a Norfolk Pine (<u>Araucaria heterophylla</u>) at Akaroa.

Perhaps you have, or know of a tree which could come into the category of Notable or Historic?

To obtain the registration forms and details of the scheme, please contact :

RNZIH Notable and Historic Trees, P.O. Box 11379, Wellington.

Walnut - Juglans regia.

NOTE : the letters "NZ" are no longer used by Fellows and Associates of Honour of the RNZIH. Fellows now use the letters "FRIH" after their name, and Associates of Honour the letters "AHRIH".

We are pleased to announce that the Hon. Duncan MacIntyre, Minister of Agriculture and Fisheries, has consented to be Vice-Patron of the RNZIH.

Mr MacIntyre has been a member of the Institute for some years, in the Bay of Plenty district.

In the last Bulletin we told you about one magazine received in the RNZIH office. Another (this time annual) publication received is

GARDENS

OPEN TO THE PUBLIC

IN ENGLAND AND WALES.

published by the National Gardens Scheme, 57 Lower Belgrave Street, London SW1W OLR.

This book is a guide to 1,450 gardens, including 1,250 private gardens not normally open to the public.

This year (1979) is the 'Year of the Garden' with a Special Promotion by the English Tourist Board and Special Events including a major exhibition at the Victoria and ALbert Museum, and one at Selfridges, and a Festival of Gardens in the West Country.

The National Gardens Scheme was started in 1927 to support a Fund to develop the district nursing service and to care for the nurses in retirement. The country was renowned for its gardens, but few people ever had an opportunity of seeing them; over 600 were opened during that first Spring and Summer in 1927, with large numbers of people enjoying what was then a remarkable opportunity to visit some of the best gardens all over the country. The idea was so successful that the Gardens Scheme has been organised annually for the Queen's Nursing Institute ever since.

The National Trust maintains public gardens which are open to the public almost daily, and many generous private garden owners open their gardens on listed dates, at small admission costs which go towards the Queen's Nursing Institute.

The booklet lists gardens in Counties, and gives dates of open days and admission charges. Also included are photographs showing the wide variety of gardens.

For any intending visitor to the U.K., who would like to visit gardens, this booklet is a must. It is available from :

THE NATIONAL GARDENS SCHEME, (address above), at a cost of 78p plus postage.

And which are the best gardens to visit in Spring, early Summer, late Summer or Autumn?

Which town has 52 parks?

How can you find a company that runs coach tours of gardens?

Why did they call him 'Capability' Brown?



ORCHIDEEËN WERKGROEP ZAAIEN&MERISTEMEN

The Hague (Holland)

Dear sirs,

The undersigned, H.G. van Attevald, Tasmanstraat 139, The Hague 2518 VM, would like to draw your attention to the following :

I am a member of the Netherlands Orchids Association (N.O.V.) and the "Nederlandsche Zaad en Meristeemclub" of which club I also hold a seed-depot.

I would like to make the following request : If you are in the possession of orchid seeds (preferably botanical kinds, but others are also welcome), I would be obliged if you could let our club have them.

We have to expand our collection. All our activities, which are mainly intended to conserve the varieties (mainly the botanical kinds), are done by hobbyists.

As we have only a few kinds of orchid seeds, we are trying with the help of this letter to gain possession of more seeds. In case you send us seeds or pods, please state name and pulling date as well as details on the parent plants so that we can enter such information in our card-index.

I like to emphasise once again that all kinds of seeds are welcome.

Hoping you can meet this request and thanking you in advance, I remain,

with kind regards, H.G. van Atteveld.

ORCHID FANS - please write direct to Mr van Atteveld if you can help him. Perhaps this could be the beginning of a most rewarding correspondence.

Know Your Turfgrass - 4

D. E. ALDOUS Browntop (Agrostis tenius)





- B Sheath : Round, glabrous, split overlapping margins.
- C Ligule : Short membranous, truncated.
- D Auricles : absent

E - Collar : conspicuous, narrow to medium broad.

Remarks : Native of Europe, common throughout New Zealand. Produces a fine-textured, dense turf tolerant of close mowing. Adapted to wide soil types. Creeping stems sometimes found, as well as very short underground shoots. Best of the lawn grasses and often grown in association with Chewings fescue. Browntop is certified by the NZ Government as being true and free from the impurity Redtop (A. giganzea).

REMINDER :

NZ INSTITUTE OF AGRICULTURAL SCIENCE CONVENTION,

HORTICULTURAL SECTION -

TO BE HELD AT LINCOLN COLLEGE,

MONDAY AUGUST 20 - THURSDAY 23.

IF YOU HAVE NOT RECEIVED A PROGRAMME, AND WOULD LIKE ONE, WRITE TO P.O. BOX 12, LINCOLN COLLEGE.

FROM THE HORTICULTURAL DEVELOPMENT COMMITTEE

"SERVICES NEEDED TO PROMOTE HORTICULTURAL EXPORTS"

New Zealand has a golden future in horticultural exports provided there is full back-up servicing to market the products.

"We have the capacity to produce world beating crops but must impress the fact upon international consumers," says the executive director of the Horticultural Development Committee, Mr Westbrook Haines.

Commenting on the release of a report from the horticultural export opportunity team which visited Northern Europe late last year, Mr Haines said if NZ properly organised and promoted its horticultural industry, exports could soar.

"The export team's report on cut flowers, live plants, and berry fruits substantially confirms this view of the Horticultural Development Committee and points out the servicing areas that need to be improved," said Mr Haines. "Transport arrangements, promotion, and market research are highlighted as the major requirements. Communication in horticultural industries must also be extended throughout the various sectors of involvement, and between representatives of the different products.

"The Horticultural Development Committee will pursue its role of bringing together the various sectors of the industry, suggesting ways of assisting each to develop, and encouraging research into investment requirements for each step from the farm gate to world markets. A response is being sought from the national horticultural organisations as to how this should be achieved," said Mr Haines.

"At the same time as procedures and services are being upgraded, research must focus on market and product requirements overseas. With a good growing climate, contamination-free soil, clean air and water, we can grow products the world needs, and should capitalise on this 'healthy' image.

"The manufacturing industries have demonstated what can be achieved on overseas markets. The export trade percentage of manufactured goods rose from 2 percent worth \$20 million in the early 1960's, to 25 percent valued at around \$1,000 million this year.

"Given a properly planned approach, there is no reason why horticultural exports should not develop at least the same rate of progress.

"The success of kiwifruit exemplifies the potential on world markets of properly identified and well promoted consumer items. If New Zealand is prepared to make the initial investment it should expect to increase by many times the volume of income from horticultural products which this year will earn around \$150 million in overseas exchange." Mr Haines added a note of warning however. "There is a tendency for people to assume that other potentially successful products will be swept on to overseas markets with relatively little effort, but that is an unrealistic outlook," he said.

"The kiwifruit success did not just happen. It was preceded by many years of hard work and thorough forward planning involving detailed study of market requirements, close co-ordination between producer and exporter and the provision of ancillary support services Unless this approach is followed through all phases of growing, processing, packing, storage transport, marketing and promotion, products new to overseas consumers cannot hope to reach the same level of identification and acceptance as the kiwifruit.

"These facts are reflected in the export quality team's report and are known to the Horticultural Development Committee", said Mr Haines. "Our task now is to generate co-operation throughout the horticultural industry to strengthen common links between the producers, the market place, and production research. The Horticultural Development Committee believes that with suitable investment in support services, New Zealand can boost horticulture into the highest category of export earners. We have the production knowledge, the marketing skills and the individual initiative to make this possible.

"The committee will await with interest the response from national horticultural bodies, to recommendations of the export opportunity team in its report on cut flowers, live plants, and berry fruits," said Mr Haines.

Note : The report is available from the Department of Trade and Industry, Private Bag, Wellington.

"It is our mission to work toward a healthier world by doing what comes naturally - namely planting and caring for our plants. It is the thing we can do best in dealing with the environmental crisis.

"Plant plants everywhere a space can be found for them they are smog-eaters. The more plants we plant, the better our chances of breathing fresh, clean air."

- Dr Russell Seibert, in a guest editorial of the Journal of the American Horticultural Society.

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

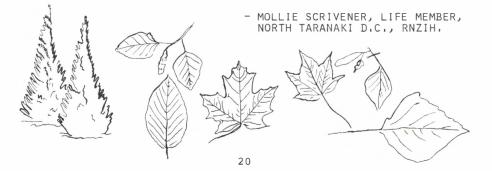
continued from Bulletin 11.

Two days later we crossed from Siberia into Russia, and my diary notes "the Urals as mountains proved disappointing, but their forests were rather lovely - taller birches interspersed with far more of the tall slim spruces of the shape of *P. omorika* plus a few pines. The latter I believe were *P. sylvestris*, orange-barked on the upper part of the trunks, and the RHS lists *Picea ajanensis* and *P. obovata* as being present in Siberia. By the time we reached Moscow the variety of trees was noticeably wider - very lush and leafy here. The most noticeable additions to the native flora we saw before leaving the train were a small shiny-leaved lime (*Tilia*) and a large-leaved maple of the *saccharum* type, tinged bronze like a sycamore.

I was looking forward to visiting the Moscow Botanic Gardens, where, our guide assured me, the specimens were labelled and where I hoped to solve all the mysteries of Siberia. Reaching them was not easy, and I must give the gardens the benefit of the doubt and assume that owing to language difficulties I arrived in the wrong section - perhaps by trying to ask for "trees" I landed in a part set aside for natural self-seeding and regeneration, for that is obviously what it was - the usual oak, birch and spruce with never a label in sight, even in Russian. I then stumbled upon some rectangular blocks of iris, paeony, etc. and their pride and joy lilacs, beautifully labelled in Russian, French and English. Whilst trying to find my way out I passed two beautiful specimens of Malus in full flower, but the only label I saw in the entire Botanic Gardens, apart from the lilacs, was on a lowly Privet bush. The considerable effort of getting to and from the gardens was barely justified, but I feel sure there must have been a labelled section somewhere.

By the time we reached Leningrad the parks had acquired a much more conventional western appearance and the main shrubs I noted in the Field of Mars were lilacs, *Viburnum* and deciduous *Berberis* species, and a rose in leaf resembling *rugosa*, whilst limes were again the predominant street tree.

Some of our party were heard to remark during the journey across Siberia they they never wanted to see another birch tree as long they lived, but as a tree-lover I cannot echo their sentiments at all. I would happily repeat the trip at any opportunity, preferably armed with more botanical information.



HOW TO PLANT TREES, SHRUBS, FRUIT TREES & ROSES -

FROM A LEAFLET DISTRIBUTED BY THE RNZIH & NZ NURSERYMEN'S ASSN.

1. SELECTION

Are the plants you have chosen suitable for your locality? Rate of growth, ultimate size & shape, soil texture, drainage, exposure to sun, wind, saltspray & frost are all important factors. If you need any advice about your plants & their welfare don't hesitate to consult your NZNA nurseryman.





2. SOIL PREPARATION

Thoroughly cultivate top soil to a depth of 30-50cm & break up sub-soil without bringing it to the surface. Mix peat, sand or compost with heavy soils to improve texture. Light soils can be improved with peat.

Larger areas are best dug over or rotaryhoed to an even depth. Fertiliser is best applied after planting. If your ground is too wet for easy working, wait for drier conditions.

3. DRAINAGE

"Wet feet" is one of the main causes of plant failure. Some form of drainage is necessary, especially with isolated planting holes in heavy soils, as these act as pockets where water collects.



A series of lines from the planting hole cut with the full depth of the spade will permit water to disperse.



4. PRE-SOAKING IMPORTANT

Whether your plant is balled, container grown or wrapped in peat, sawdust or straw, its roots are probably too dry for safe transplanting. Submerge the roots completely in water for five minutes, or until bubbles stop rising.

Allow time to drain before removing wrapping or containers.

5. REMOVE CONTAINERS

Plastic bags, cans or pots must be removed prior to planting without disturbance of the root ball. Plastic bags are easily cut away with scissors.

HOW TO PLANT TREES, SHRUBS, FRUIT TREES & ROSES (CONT)

Plants in solid containers can be turned upside down & the rim of the pot gently tapped on a post. post. Hessian may be removed when young roots are growing strongly through it. In this case, cut twine and pull hessian away from stem. It will soon rot away after planting.



DON'T DISTURB THE ROOTS



Some plants don't mind, but as a general rule when planting do not break up the root ball, or disturb the roots of any balled or container grown plant apart from removing containers or hessian. Gently straighten out any roots which have spiralled around, but disturb as little as possible. Deciduous species in their dormant winter state are lifted from the nursery without soil. The protective material around their roots must be removed at planting. Don't let the roots dry out.



is important & helps in 3 ways. It straightens up bent stems & keeps them straight, protects stems & branches from wind damage, & stops movement which would break off new roots. Place stakes in position before planting to prevent root damage. Tie with a flexible tie, such as old stockings. Inspect & adjust to prevent strangling. Remove labels from main stems & place either on lower twig, or store for reference.

PLANTING 8.

IT IS WRONG TO PLANT TOO DEEPLY. The top of the root ball of container grown or balled species must not be more than 1" below the soil surface. Plant deciduous species in their dormant state, at the same level as they were in the nursery - indicated by soil marks on the stem. Tread soil in firmly around roots, but leave the surface loose.





9. FEEDING

Avoid excessive feeding at planting time. General rule - scatter 2 handfuls of a balanced fertiliser on top of the soil after planting.

By the time this reaches the roots it will be in soluble form, easily taken up by the plant. Liquid foliar feeding at planting time is very beneficial.

Some plants may be harmed by fertilisers - especially some exotics. Discuss their diet with your nurseryman. 22

HOW TO PLANT TREES, SHRUBS, FRUIT TREES & ROSES (CONT) -

10. WATERING

Water each plant well after planting, making certain moisture has gone through the full depth of the root ball during dry weather.

Initial watering will settle the soil around your plants & carry fertiliser to the roots.

REGULAR THOROUGH SOAKINGS ARE VITAL DURING CONTINUED DRY WEATHER. Light surface hosing is of little value when soil conditions are dry.





11. MULCHING

Mulching with a 5-8cm layer of peat around plants acts as an insulator, preventing evaporation of moisture & keeping roots at an even temperature. It also stops the soil surface from "caking" & controls weed growth. Be sure to soak the ground before mulching & thoroughly moisten peat after applying. Mulching is particularly beneficial to <u>Rhododendrons</u>, <u>Azaleas</u>, Ericas, Daphnes, and Camellias.

12. PRUNING

Fruit trees & roses MUST be pruned at planting time or soon after. If they appear to have been cut back when purchased this may have been for convenience and further pruning is probably necessary. Brochures on pruning are available from your NZNA nurseryman.

Apart from any obvious shaping, evergreens require no pruning at planting time. Flowering shrubs which bloom on current season's growth, such as heaths, manuka, broom, boronia, etc. need cutting back by at least 1/3 after flowering to encourage strong, healthy growth and maximum bloom next year.



Plants in your garden provide shelter, give coolness, enrich the soil, filter the air, add to property value, hold the soil, produce colour, offer perfume, regulate water, form privacy, create shade, make food, absorb noise, attract wildlife, are serene, inspire, enhance views. Now's that for value for money?

News from the far north ~

the WHANGAREI NATIVE FOREST & BIRD PROTECTION SOCIETY INC.

- founded in 1936 by the Northland Sawmill Association, thrives in the far north, with bi-monthly gatherings, plus field days and club outings. To observe Arbor Day this year, some 90 trees and shrubs were given by the Society to each school, and to Children's Homes.

During the year, six kauri trees were planted at the Matakohe Museum, and fifty at Reed Park. 20 native shrubs and plants were donated and planted at the Forest View Kindergarten, and pohutukawas were planted at Ocean Beach, One Tree Point, Ngunguru Domain, Oakura. Hikurangi and Maropiu School received native trees.

1978-79 Chatham Islands Taiko Expedition had an exciting start because of the recent capture of three Chatham Islands Taiko (Pterodroma magentae). A well-organised base camp has been established and tracks opened up.

Maungatapere Walkway - established and maintained by the Lands and Survey Department, traverses a divide through the hilly gum country towards Maungakaramea. The attraction of this walk is the wide variety of plant life - from native bush to gumland scrub coverage. Location - travel to Maungatapere, continue on the Dargaville

on to the end of the road. The Walkway is clearly signposted.

the WHANGAREI LADIES' GARDENING CLUB INC.

- established 1927, is an active club with well attended meetings. During the past year, the club presented a Rotary Cultivator to the Busck Memorial Gardening Centre for the Disabled, and the club has been making a point of sending flowers to Wards 8 & 9 at the hospital.

Snow Conservatory - the club gave \$2,500 to council and the opening of the new wing took place to commemorate the founders of the club. The large attendance at the opening included many members of past years.

The PRESIDENT of both the Whangarei Native Forest and Bird Protection Society and the Whangarei Ladies' Gardening Club is Mrs MARGIE MADDREN, FRIH and member of the RNZIH Whangarei District Council.

"Miller owns this field, Locke that, and Manning the woodland beyond. But none of them owns the landscape."

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