Horticulture

in New Zealand

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



31 Autumn 1984



BULLETIN OF THE ROYAL N.Z. INSTITUTE OF HORTICULTURE

NUMBER 31, AUTUMN 1984

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ROYAL NEW ZEALAND INSTITUTE OF HORTICULTURE (INC)

Patron His Excellency the Governor-General
Vice-Patron The Hon. Duncan MacIntyre, Minister of
Agriculture and Fisheries

President Mr R.J. Ballinger, OBE, JP, B.Ag. Sc.

Chairman of Executive Mr J.O. Taylor, MBE, NDH, AHRIH, FIPRA

Chairman of Examining Board Dr R.C. Close, M.Sc., Ph.D.

National Secretary Mr R.A. Foubister

P.O. Box 12, Lincoln College

Annual Journal Editor Mr M. Oates
Bulletin Editor Mr D.L. Shillito
Student's Editor Mr N.W. Owers

The Editor welcomes articles, letters and news items for consideration of publication. Contributions should be addressed to the Bulletin Editor, P.O. Box 12, Lincoln College.

Views expressed are not necessarily those of RNZIH.

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EDITORIAL

It gives me great pleasure to welcome Nick Owers as the new editor of the Student Section. I'm sure he will do a great job and I hope you will give him support by providing interesting and varied articles that he can publish.

Well this issue of the Bulletin seems to have been prepared and printed in record time and on time! No mean task at this time of the year with harvesting etc. I hope you find it interesting reading now that the nights are getting cooler and there seems to be nothing decent on T.V. Don't you wish we had more programmes like the recent 'Our World' on The World of Orchids? - Fantastic. In this issue we have a mixed bag, from information on the forthcoming A.G.M. being held in Wellington, to making potpourris.

I hope everyone has got the 1983 Annual Journal as it contains some very interesting and valuable information for those who have a general interest in horticulture and those who have made horticulture a career. The order form for the 1984 issue is in the back of this Bulletin and all subsequent issues so please use it.

- David Shillito Editor

TEMPLIN TRAVELLING SCHOLARSHIP IN ENGINEERING AND HORTICULTURE

The New Zealand Guardian Trust Company Limited, as Trustee of the John Richard Templin Travelling Scholarship Trust is now calling for applications from Engineering Graduates of the University of Canterbury and Horticulture or Botany Graduates of Lincoln College or Graduates who have obtained a National Diploma of the Royal New Zealand Institute of Horticulture through the reserves Department of the Christchurch City Council.

There are four scholarships of \$11,000 each and they are available for study in the United States of America or Canada and are normally tenable for one year.

Application forms are available from the New Zealand Guardian Trust Company Limited, P.O. Box 9, Christchurch. Closing date for applications is 31.5.1984.

OBITUARY

The death occurred recently at the age of 91 of Mr. Joe Passmore A.H.R.I.H. of Mure Street, Green Island. He had a long association with the Otago District Council, being a council member for 22 years and its chairman on two occasions.

The Associate of Honour was awarded to Mr. Passmore at the R.N.Z.I.H. Conference in 1957. A cabinet maker by trade, Mr. Passmore retired from a woodwork teaching career as Senior Instructor with the Otago Education Board in 1956. He always insisted that he was strictly an amateur horticulturist but his skill as a homegardener and his willingness to share his knowledge became well known. In 1947 he began his regular home gardening broadcasts from 4YA. These became very popular and continued for 13 years ending in 1960 but his advice was often sought and freely given until the very end.

Mr. & Mrs. Passmore celebrated their diamond wedding in December 1983. Now as we extend our sympathy to Mrs. Passmore, we would like to acknowledge her interest in Horticulture and the support she gave her husband for so many years.

A.G.M. 1984

The 1984 Annual General Meeting and Conference is being hosted by Wellington District Council and will be held in the new R.A. Vance Stand at the Basin Reserve, on Saturday 19 May.

The full programme and registration form is enclosed as an insert to this issue of the Bulletin and all members are urged to complete the form and return it to the Conference Secretary as indicated on the form.

* * * REGISTER NOW * * *

REMITS TO 1984 A.G.M.

Remit No. l - "That membership subscriptions be due on 1st January and paid before the Annual General Meeting for members to get full benefit of membership"

Mr. D. Henderson/Mrs. J. Swinbourn B.O.P. District Council.

Remit No. 2 - "That consideration be given to the introduction of an additional Award to recognise people, members or otherwise who have made unique contributions to the advancement of horticulture in New Zealand. Not more than one award should be made annually and could be named after a notable pioneer in Horticulture in New Zealand".

Miss J. Dingley/Mr. P. Jew Auckland District Council.

ELECTION OF OFFICERS

Subsequent to the 1983 A.G.M. several changes occurred in the membership of the National Executive. Ex-officio membership was accepted by the Heads of the Departments of Horticulture at Massey University and Lincoln College (currently Prof. Milne and Prof. Rowe) which resulted in the resignation of Prof. Rowe as a full member. Mr. Ian McDowell was appointed to fill the remainder of Prof. Rowe's term of office, which expires in May 1986.

Mrs. R.W. Shepherd, Mr. G.G. Henderson and Prof. J.A. Veale retire by rotation this year and none of these retiring members has accepted nomination for a further term. Mr. J.O. Taylor completes two full three-year terms as National Executive Chairman in May this year and under the Rules is required to stand down as Chairman but is eligible for nomination as an Executive member.

Accordingly there are four vacancies to be filled on the Executive and at the closing date for nominations three only have been received. These are :

There being no other nominations the above nominees will be elected unopposed at the A.G.M. and a postal ballot will not be required. The new Executive at its discretion, may appoint another member if it considers such an appointment necessary during the 1984-1985 year.

The National Executive for 1984-1985 will be :

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Chairman - to be appointed by new Executive Mr. I.D. Galloway A.H.R.I.H. - Wellington Mr. A.L. Mason - Feilding Mr. R.J. Nanson A.H.R.I.H. - Wellington Mr. A.J. Jolliffe - Nelson Mr. G.D. Mander - Tauranga Mr. M. Steven - Hamilton Mr. P.J. Jew A.H.R.I.H. - Auckland Mr. I. McDowell - New Plymouth Mr. J.O. Taylor A.H.R.I.H. - Christchurch Mr. L.J. Metcalf - Invercargill Mrs. R. Bagley - Dunedin
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The detailed agenda of the business session of the A.G.M. is not yet finalised but will be distributed to attending members. There will be opportunity for members to raise items of "other business" and to discuss matters of mutual interest with other members.

R.N.Z.I.H. CHAIRMAN'S REPORT TO ANNUAL GENERAL MEETING MAY 1984

Ladies & Gentlemen :

It is my privilege and pleasure to present my sixth and final annual report to members at an A.G.M. During the six years of my term as Chairman of your National Executive I have been greatly encouraged by the continually growing interest in the affairs of the Institute, particularly by many of our younger student members. The greater part of this has been engendered by the activities of District Councils, and I am most appreciative of the contribution made in this respect by members at the local level.

While total membership remains steady at approximately 1900, there is a tendency among student members to remain as members only for the time they are taking examinations. Consequently, we lose quite a number of potential long term members and it behoves us to provide greater incentives to retain these young members.

I wish to record my sincere thanks to all members of the National Executive for the support they have given during the year and for their individual contributions to the Institute's affairs. Some constitutional changes occurred within the Executive following the 1983 A.G.M. and the addition of the ex-officio membership for the Horticulture Departmental Heads of Massey University and Lincoln College will be of long term benefit. During the year we lost the invaluable services of Mr. Gavin Henderson, through ill-health and the announcement that Mrs. W. Shepherd is unavailable for renomination in 1984 is also a serious loss. Both these long standing Executive members have given loyal and sterling service to R.N.Z.I.H. over a period of many years. We are indeed indebted to them.

There were three meetings of the Executive during 1983, in January, May and August. The working efficiency of the subcommittees set up in 1982 has been such that three meetings have proved to be adequate for the conduct of the Institute's affairs and it would seem that this format can continue into the future.

Major achievements during the year included completion of the revision of "Flowers for Shows" by Mr. Eric Toleman. This revised edition is now being printed and should be available for sale and distribution before the A.G.M.in May. The "Careers in Horticulture" booklet is at the final vetting stage and when sponsorship arrangements have been finalised it will also go to print. The resignation of Merv Spurway as student editor of the Bulletin was received with regret but David Shillito will continue as overall editor and will be assisted by Nicholas Owers with the student section.

The Notable & Historic Trees Committee continued its valuable work during the year. The Committee is faced with many problems, not the least of which is lack of positive support from some areas. The future also holds some problems, such as the official and legal protection of registered trees, the appointment of a paid officer to administer the Scheme and the necessity to establish some sound financial basis to meet the growing costs involved. These matters will be of concern to National Executive in 1984/1985.

The Examining Board, under the Chairmanship of Dr. R.C. Close had a busy year and dealt with a number of important matters which are covered in some detail in Dr. Close's Report. As Chairman, I wish to record National Executive's grateful appreciation for the valuable work done by the Board members all of whom give their services voluntarily.

The Annual Accounts for the year ending 31.12.83 are published in the same issue of the Bulletin as this Report. The overall result was seriously affected by a deficit of \$2,662 in the Examinations Account. This deficit was caused mainly by quite substantial increases in the cost of examiners fees and expenses and the additional salary of the Examinations Officer appointed in August. These costs were only partly offset by the increase in the Government Grant.

The General Account recorded a surplus of \$3,361 resulting from increases in subscription income and a reduction in publication costs, together with minor variations in other items of expenditure.

The overall result in the examinations account is of serious concern to the Executive and the Exam. Board. A decision has been taken to increase payments made by students for their examinations so that the fees will be brought up to an amount close to the fees payable by apprentices for their T.C.B. qualifications. Increased Government financial assistance is not forthcoming and the use-pay principle, with less subsidy from the public purse is the nature of the change.

In conclusion I would like to record my thanks to the National Executive, who have given loyal and continuous service to the Institute during the six years of my chairmanship. It is not wise to single out individuals but each in his or her way has given voluntarily of their valuable time and energy for the good of the Institute. Similarly the officers of the District Councils have greatly contributed to the affairs of their Districts and to the welfare of the Institute as a whole.

On behalf of all members I personally record thanks to the officers of the Institute, Mr. R.A. Foubister, Mrs. E. Reeves and Mr. N.W. Neeson. Their attitude and application is one of total dedication to the service of the Institute and its members. Their loyalty to me personally has been a great strength and something to which I shall be forever grateful.

- J.O. Taylor Chairman, National Executive.

AGROSOKE - FOR LAWNS

A new growing aid, specifically developed to reclaim vast areas of desert areas around the world, has the unique ability to absorb water and release it, on demand, to plants and grasses.

Most grass areas suffer from lack of water during summer months, but the application of Agrosoke to the grass roots will ensure that lawns remain greener much longer and irrigation needs will be substantially reduced.

Agrosoke is a small, white granule that, when soaked with water, acts like a sponge, absorbing and retaining over 30 times its own weight of water. By doing so, it provides a 'water well' for plant roots to draw on. When mixed with sand or soil it can also improve aeration and porosity.

Developed by the Chemical Discoveries Group, Agrosoke is also non-toxic, non-degradable, neutral in pH, and will not contaminate soil, groundwater or animal life. As Allen Cooke, its inventor, says of Agrosoke, "Almost everyone wanted to test the product to see if it would do everything that we claimed," and already over a dozen countries have carried out very favourable tests. Agrosoke also has the ability to greatly accelerate the germination of seeds and increase the growth rate of seedlings.

THE ROYAL NEW ZEALAND

INSTITUTE OF HORTICULTURE (INC.)

FINANCIAL STATEMENTS

FOR THE YEAR ENDED 31 DECEMBER 1983

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PAGE 2	General Account Statement of Income & Expenditure
PAGE 3	Examinations Account statement of Income & Expenditure
PAGES 4 & 5	Notes to the Financial Statements
PAGE 6	Auditors' Report

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HORTICULTURE	
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INST	LANCE
ROYAL NEW ZEALAND INSTITUTE OF HORTICULTURE	BA
ROYA	

BALANCE SHEET	AS AT 31 DECEMBER 1983
<u>B</u> 1	AS AT

			1983	2,630
ROYAL NEW ZEALAND INSTITUTE OF HORTICULTURE	BALANCE SHEET	AS AT 31 DECEMBER 1983	1983 1982 CURRENT ASSETS	5,012 3,772 Subscriptions in Arrears Bank of New Zealand

4,050 1,050 400

4,500

400 147 996

2,233

DEPOSITS HELD FOR FUNDS (Note 6)

954

996

P.O.S.B. - current account

TOTAL CURRENT ASSETS

Books on hand for sale

Sundry Debtors

1,078

1,147

B.N.Z. Term deposit

4,850

6,159

TOTAL CURRENT LIABILITIES

District Council Funds

Accounts payable

Suspense (Note 3)

CURRENT LIABILITIES

Notable & Historic Trees

Committee (Note 4)

Accumulated Funds

Balance 1/1/83

PUBLICATIONS RESERVE

78

954 500 1,000 9,764

1,000

500

Council

B.N.Z. Notable & Historic Trees

Palmerston North City

1,091

3,361

23,468

24,167

INCOME

CAPITAL

TRUST ACCOUNT BALANCES - Endowment Fund (com)

Accumulated Funds 31/12/83

over expenditure

Excess of income

1,685 1,371 500

B.N.Z. Term Deposit

FOTAL DEPOSITS HELD

FIXED ASSETS

Christchurch City Council Christchurch City Council P.O.S.B. - special funds

B.N.Z. Finance Co.

15,746 6,631

(2,662)23,468

Examinations Account (Note 2)

B.N.Z. Savings Bank

10,796

372

63

1,546

1,483

Less: Accumulated depreciation

220 163 246 179 265 204

- J.A. Campbell Memorial

- F. Cooper Memorial

Fund (comp) Prize Fund Prize Fund Prize Fund

500 200 1,175 500

Office equipment (at cost)

1,732

1,660

1,410

26,868

911,62

2,138

1982

4,987 63 XXX FOR

37,004

39,975

The notes on pages 4 and 5 form part of and are to be read in conjunction with

these accounts.

7,732 37,004

8,683

1,277

7,406

1,175

- P. Skellerup Prize Fund - R. Skellerup Prize Fund

- D. Tannock Memorial

- Junior Memorial

- D. MacKenzie Memorial

39,975

GENERAL ACCOUNT

INCOME AND EXPENDITURE ACCOUNT

FOR THE YEAR ENDED 31 DECEMBER 1983

		1983	1982
INCOME			
Subscriptions Donations Secretarial services - N.Z.I.P.R.A.	17,484 20 42 2		14,157 55 608
Sundry receipts Interest	2,099		13
Net surplus from Publications Account	·		•
(Note 5)	(3,455)		(4,293)
TOTAL INCOME		16,192	11,857
LESS EXPENDITURE			
Accident Compensation	191		147
Advertising	-		25
Capitations paid to District Councils	2,362		2,452
Salary, wages and secretarial services	3,683		3,331
Audit fee	310		360
Depreciation	309		309
Printing and stationery	2,123		1,588
Postages, telegrams, telephone charges	450		753
General expenses	286		171
A.G.M. expenses	511		544
Travel expenses	1,687		1,046
Grant - Notable & Historic Trees			
Committee	500		-
Office rent	-		40
Typewriter expenses	267		-
Plant Raise Awards	152		
TOTAL EXPENDITURE		12,831	10,766
		3,361	1,091
Deficit Examination Account		2,662	-
EXCESS OF INCOME OVER EXPENDITURE		699	1,091
			=====

The notes on pages 4 and 5 form part of and are to be read in conjunction with these accounts.

y. R. Len 27/3/84

EXAMINATIONS ACCOUNT

INCOME & EXPENDITURE

FOR YEAR ENDED 31 DECEMBER 1983

		1983	1982
INCOME			
C.H.P. enrolments Registration Examination entry Exam recount fees Sundry income Government Grant Loder Cup Committee	2,670 2,053 14,335 - 702 33,656 1,000		2,390 2,623 14,925 125 616 30,315 1,000
		54,416	51,994
EXPENDITURE Audit fee	240		240
Exam Board expenses Examiners fees and expenses Sundry refunds of fees	3,448 14,191 429		4,587 7,560 511
General expenses Loder Cup Committee	23		46 1,000
Hired examination room Office rent	254 - 2,411		165 360 1,882
Postage and telephone Printing and stationery Secretarial and office	3,859		2,748
stationery	31,223	57,070	26,264
		57,078	45,363
EXCESS OF EXPENDITURE OVER INCOME		2,662	(6,631)
		=====	

The notes on pages 4 and 5 form part of and are to be read in conjunction with these accounts.



NOTES TO THE FINANCIAL STATEMENTS

NOTE 1 STATEMENT OF ACCOUNTING POLICIES

The following accounting policies have been adopted:

Inventories

Books on hand are valued at the lower of cost and net realisable value

Depreciation

Fixed assets are depreciated on a straight line basis which will write off cost over a period of five years.

Interest Received

Interest receivable has been included in the accounts on a cash basis.

Subscriptions

The subscriptions in arrears are accounted for on the basis of those subscriptions expected to be received by the Executive.

NOTE 2 EXAMINATIONS FUND

As from 1979, the Examinations Fund is accounted for by a separate Income and Expenditure Account. All costs relating to the Examinations Account are charged to that account. Some items of expenditure relating to both the General and Examinations Account, namely salaries and audit fees, have been apportioned between the two accounts on a basis determined by the Executive.

NOTE 3 DISTRICT COUNCIL FUNDS IN SUSPENSE

These are funds received from District Councils which are no longer operating. Interest is compounding and the funds are held separately in the Bank of New Zealand Savings Bank.

NOTE 4 NOTABLE & HISTORIC TREES COMMITTEE

The Notable & Historic Trees Committee is accounted for in these accounts to the extent of funds on hand at the end of the year. The funds represent the unexpended portion of grants, plus interest received.

Balance of Account 1 January 1983	954
Add: Interest from Investment Account	102
Registration Fees	12
Grant from National Executive	500

carried forward... 1,568



NOTES TO THE FINANCIAL STATEMENTS

(Continued)

			brought	forward	1,568	
	Less:	Secretarial Expenses New Labels Sundry Expenses	66 474 62			
					\$966	
					=====	
NOTE 5	PUBLIC	ATIONS ACCOUNT		1983		1982
	SALES			6,289		5,328
	Transf	er from Publications reserv	e	-		396
				6,289		5,724
	Less					
		of publication	9,494			9,731
	Adjustment for decrease in stock on hand	250			286	
			9,744		10,017	
	NET DE	FICIT FROM PUBLICATIONS FOR	YEAR	(3,455)		(4,293)
				=====		=====

Costs of printing and distributing four issues of the quarterly bulletin free to members are included in this account.

NOTE 6 TRUST ACCOUNT BALANCES

The funds in Trust Accounts are represented by investments and bank accounts. The capital portion represents the contributions of the donors and the income portion represents the unexpended portion of accumulated income to date. In the case of the Endowment Fund and the F. Cooper Memorial fund, no such distinction is made and the funds on hand represent a composite of capital and income.

	1983	1982
District Council Funds in Suspense Notable & Historic Trees Committee Trust Account Balances	1,147 966	1,078 954 7,732
TOTAL DEPOSITS HELD FOR FUNDS	8,683 10,796	9,764
		=====



AUDITORS' REPORT TO THE MEMBERS OF

ROYAL NEW ZEALAND INSTITUTE OF HORTICULTURE INCORPORATED

We have audited the attached balance sheet and income and expenditure accounts in accordance with accepted standards, and have carried out such procedures as we considered necessary.

Some sources of publications income cannot be verified prior to entry in the records, and our examination of these has been confined to testing recorded receipts to the bank accounts.

In our opinion, but subject to this limitation, the balance sheet and income and expenditure accounts give a true and fair view of the state of the Institute's affairs as at 31 December 1983, and of its income and expenditure for the year then ended.

Loule Ross - les.

TOUCHE ROSS & CO., Chartered Accountants

Christchurch, N.Z.

27 March 1984

MOIST AND DRY POTPOURRIS.

by

Mr. Carl McDermott

What an immense pleasure it is to capture the scents of blossoms and leaves, to store them away for bleak wintry days. Summer in a jar!

It is so easy to preserve the fragrance of summer by making potpourris, either dry or moist. The dry potpourris are easier to prepare. Made into sachets to perfume clothing drawers or wardrobes or used in large cheesecloth like unto "teabags" to scent bathwater. Dry potpourris may be made any time of the year, so long as dry ingredients are available, but moist potpourris are produced during the flowering seasons. Personally the writer prefers the moist potpourris because their fragrances last extremely well - even up to 50 years, when properly prepared. The latter are packed into crocks or apothecary jars.

MOIST POTPOURRIS

Required two earthenware crocks with glazed lids, a larger one for flower petals and a smaller one for herbs. Also needed two clean flat stones, that fit into each jar. flowers early in the day as soon as the dew has dried, but don't let them dry completely. When they have lost some of their bulk and feel flabby, they are ready to make. Place a layer of flower petals in the larger crock. Your herb crock is prepared basically in the same way, except add some strips of clovestudded orange peel to the herbs and salt mixture. Herbs could include sweet scented geraniums, thyme, rosemary, mint lemon balm, jasmine bay leaves or marjoram. By the end of summer the petals will have shrunk considerably due to ramming down or pressing from the flat stones. Spread out a clean sheet on the kitchen table and get out your crocks. It is necessary to prepare a spice mixture in a separate enamel pan. Mix 4 parts of powdered borax, 1 part of orris root, 2 parts sandalwood, 1 part ground cloves, 1 part of ground mace, 1 part of allspice, 1 part whole Blend thoroughly with a wooden spoon.

Pour a quart of petals onto clean sheet. The petals will have wadded up, so loosen with wooden spoon. Add a cup of herborange-peel mix and sprinkle it generously with the spice mixture, continue layering until all ingredients are used. Mix everything well with your hands. Fluff it WELL. Replace the mixture with your stone. Store in a cool dry place, covered with buttermuslin or similar. Allow it to age for several months and you will have the worlds most exquisite room freshener to give as gifts, sell or keep for your own personal use.

DRY POTPOURRIS

Requirements as for moist potpourris. Tie herbs in small bunches, hang up to dry in a dark, but well ventilated area. Spread flower petals in single layer on a cheesecloth-covered

frames suspended between two chairs. Or you may dry petals on clean unprinted white paper if you are prepared to turn the flowers daily. Flowers and herbs <u>must</u> be protected from direct sunlight whilst drying. The time <u>varies</u> with the humidity, but usually between four to eight days. Sometimes petals are not dry, in such a case the oven is usually slightly warmed, turn heat off and set ingredients in trays so that "herbs" are crispy. At this stage pack them in airtight glass jars, still keeping them in a dry place, until you have enough to make a batch of "sachet" bags. A simple potpourri might contain 1 quart rose petals (specially sweet scented variety) ½ quart of honeysucke, ¼ quart of rose leaves (not any with disease) ¼ quart of orange peel and 1 ounce of borax.

Assemble your jars of ingredients, a wooden spoon, a large bowl, and two wide mouthed quart jars. Do not use metal containers, they seem to have an affect on the odour. Combine dry ingredients and blend thoroughly. Now add any liquids or oils stirring until all are well blended. Although this dry potpourri may be used immediately it is usually recommended to store for about three months in order that the ragrances may blend. During the curing progress it is usual to fluff the ingredients each month.

BLENDING CHART

For dry potpourris mix $1\frac{1}{2}$ quarts scent, $\frac{1}{2}$ quart blender and 1 ounce fixative.

Scents	Blenders	<u>Fixatives</u>
Rose petals	Sandalwood	Orrisroot
Honeysuckle	Rose Geranium	Borax
Carnation	Rose leaf	Gum mastic
Lavender	Corriander	Clary sage
Clove	Vanilla	Balsam
Sweetpea	Marjoram	Cedarwood
Lemon verbena	Rosemary	
Acacia	Lemon or Orange	peel

In a nutshell - sprinkle with a mixture of ½ salt. No need for the salt to cover the flowers entirely. Now firmly ram the mixture with your flat stone. Repeat until all flowers are used. Leave the stone in place, weighing them down, adding fresh petals as summer flowers are available, repeating above process. Once in a while pour off water from the crock, utilising it for your bathwater. Rose petals are the most popular for the most potpourris. Over to you.

DISTRICT COUNCIL NEWS

I regret that due to limitation of time and space I have been unable to include District Council News in this issue.

This popular section will however be back in our Winter Bulletin with the news and events in your region.

Editor.

A.W. BUXTON - 1872 - 1950

NURSERYMAN AND LANDSCAPE GARDENER

When Alfred William Buxton died in 1950, his obituary in The City Beautiful described him as one of the foremost landscape architects and gardeners in New Zealand, who had made a "marked contribution to the development of horticulture". How justifiable were these conclusions? What was A.W. Buxton's contribution to the horticultural development of New Zealand?

Over thirty years after his death, and before all those who knew him have also died, it seems appropriate to review these questions. The questions are particularly appropriate as research being carried out at Lincoln Collge suggests that previous accounts of Buxton's life and horticultural activities contain many inaccuracies and do not do full justice to Buxton's achievements.

Current research on Buxton began from a study of the origins of the present Nurserymens and Landscape Gardeners Wages Award. He was one of the employers cited in the original Christchurch Gardeners Award of 1903, the first award to apply to any part of the horticulture industry. Not only was he prominent in early conciliation and arbitration proceedings in Christchurch, but he was also involved, as President of the Association of New Zealand Nurserymen, in unsuccessful attempts to establish the first Dominion Award for Nurserymen and Landscape Gardeners.

When initial investigations of the development of horticultural industrial relations had exhausted the limited archive sources available, a new approach was developed by focussing on the parties involved. A.W. Buxton was the most prominent of these and also the easiest to investigate, from a base at Lincoln College, with his nurseries and a considerable number of the properties he landscaped being only a few miles away.

The focus of the research has now been expanded to cover all aspects of A.W. Buxton's activities as a nurseryman, landscape gardener, horticultural politician, entrepreneur and employer. From the information collected to date, a broad outline of Buxton's life and work may be given with some confidence. However, there are some areas that are still either unclear or on which the possible information is incomplete.

After serving an apprenticeship in Christchurch with Thomas Abbot (Senior), Alfred William Buxton set up in business as a nurseryman, specialising in rose production, with one acre of land on Springfield Road, St Albans in



A.W. Buxton in 1902 (Photo: Standish and Preece)

1895. His business expanded rapidly and by 1902 he had begun to establish a larger nursery on the banks of the Heathcote River at St Martins. The business was formed into a private company in 1904 when John Pannett, a farmer from Greenpark and a customer, put up a third of the initial capital of £10,000.

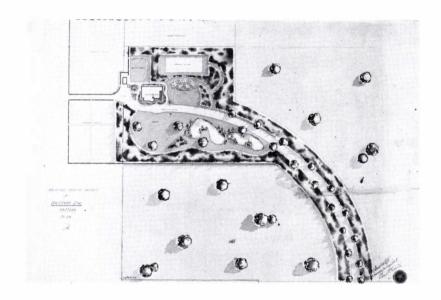
As the nursery expanded, the range of plants produced and sold increased dramatically. The catalogue produced by the Company in 1909 contained over one hundred pages and listed thousands of plants of all kinds. A range of garden equipment was also sold. The catalogues also give prominence to the Company's landscaping activities which Buxton had begun at the time he set up in business.

Clients came from two principal groups - runholders and well-to-do farmers on the one hand and the urban bourgeoisie on the other.

The business continued to prosper and about 1912 landscaping operations began in the North Island. The boom in primary product prices during the first World War provided a major stimulus to landscape work among the farming community and the Company's capital was increased in 1918 and again in 1921 as several new investors joined the venture. By 1922 the expansion of the business required extra land in addition to the seventeen acres of the Opawa Nurseries at St Martins. Rather than buying or leasing extra land in the locality, it was decided to buy a new block of land of 38 acres at Belfast, seven miles north of Christchurch, adjacent to the main north road and the main railway line.

Over the next two years the Belfast site was developed with the latest equipment and the stock plants were transferred from St Martins. It was a major and very costly operation. However, by 1926, primary product prices had slumped and the first signs of the great depression were occurring. The business was heavily mortgaged and the downturn in business conditions, coupled with cost of moving from St Martins, proved too much for the Company to maintain a positive cash flow. In June 1926 A.W. Buxton Limited went into voluntary liquidation.

The nursery was sold to Thomas Lennie and the landscaping section of the business was taken over by Alfred Buxton



Landscape Plan Number 296 prepared by A.W. Buxton Limited for H.G. Cross, Oxford.

himself and his sons, Trevor and Ray. They completed the outstanding landscape contracts, buying in their nursery stock from nurserymen either producing suitably large plants, or who obtained landscape business for them.

A new company, A.W. Buxton and Sons Limited, was formed in 1929. It managed to continue landscape work through the depression, although on a number of occasions there was little money for the payment of wages or bills.

In 1932 Trevor Buxton settled in Palmerston North and in 1933 set up on his own account as a landscape architect. During the depression, the Buxtons worked largely in Otago and Southland. Some work was done in Canterbury and major projects for the Sutherland family of Karori, Wellington, and the Tanner family of Longburn, Palmerston North.

In 1937, at the suggestion of daughter Merle and her husband Arthur Kirkwood, the family home at 33 Papanui Road was sold and the whole family moved to Otaki. Alfred Buxton kept up some landscape work, particularly in the Waikanae and Paraparaumu Beach areas, but devoted more of his time to commercial flower production.

President of the Association of New Zealand Nurserymen in 1921-1922, Buxton continued to be a member until his death in 1950. However, he had given up most of his formal roles in the Association by 1941. Although a foundation

Vice President of the Royal New Zealand Institute of Horticulture, it appears that he did not have very much involvement with the Institute in later years, save as an occasional lecturer on landcape gardening to Canterbury N.D.H. students. A mystery exists about Alfred Buxton's standing in the Institute. In the Institute's obituary notice, he is described as a Fellow of the Institute and yet no record of his being made a Fellow can be found either in O'Sullivan's history of the Institute, or the National or Canterbury District Minute Books.

There are several other aspects of Alfred Buxton's life which are unclear and the search continues for recollections of the man himself or his work, for identifying properties he landscaped or people who worked for him. If any readers, have any information relating to A.W. Buxton, whether horticultural or not, any memories/recollections, any documents, old landscape plans, contracts, or photographs; or any other memorabilia or background information, please get in touch with:

Dr Rupert Tipples Department of Horticulture, Landscape and Parks Lincoln College Canterbury

Telephone: Christchurch 252-811

Even quite small items of information can fill vital gaps in the complex mosaic of a historical or biographical study and will be gratefully acknowledged.

RADAR WARNS APHIDS ATTACKING

(Reprinted from 'Farm News from Britain')

British scientists are using radar as part of an early-warning system of aphid attack. The scanners, devised at Rothamsted Experimental Station just north of London, can pick out individual aphids at a range of 500 metres.

Different-sized insects show up as different-sized blips on the radar screen. Scientists hope to be able to identify different species by the radar print of wing beats.

Rothamsted researchers have co-ordinated insect survey data and issued warnings to farmers and growers for some time. The information comes from a chain of 12 metres-high suction traps located around Britain.

They hope soon to have a chain of radar stations alongside the suction traps throughout the southern and eastern counties of England. One scanner will be focussed on insects flying altitudes between 40 metres and 100 metres. Another scanner will cover the 100-metre to 500-metre band.

The scientists hope that once the technique has been proved, and the radar network set up, a much better and earlier warning system will be possible.

A STANDARD CODE OF PRACTICE TREE?

(Taken from 'Punch')

The British Standards Institute has issued a new Code-of-Practice for'Trees in relation to construction'. Is the next step "A Standard Code-of-Practice Tree'?

I pray that I shall never see
A Standard Code-of-Practice tree.
A tree that all year round would wear
A mess of red tape in its hair;
A tree some philistine believes
Should have one hundred thousand leaves;
Not one leaf more, nor one leaf less,
For that would be a sorry mess.
Anathema to the bureaucrat
Who like to know just what is what;
And everything must be exact
In this un-natural artifact.

Its base, one metre from the ground, Is specified two metres round. Its branches must be sixty-four. Not one branch less, nor one branch more. Its trunk must taper perfectly To zero at is apogee. Precisely twenty metres high. As straight as the proverbial die. Each day at dawn its roots must stir And seek the nearest aquifer Whence thirty-seven litres must Be drawn to slake the standard thirst!

Upon the Ides of March each year Its new-born buds must all appear Ensuring that the sylvan scene On May the First is standard green. Then on the twenty-seventh day Of each September, bright or grey, Its leaves must turn from green to brown Or risk a Tree Inspector's frown. The sixteenth of November all The leaves must uniformly fall, And, to facilitate the sweeps, Must pile themselves in standard heaps.

Oh, Brave New World, what have you wrought? This cannot be what man has fought With heart and mind for all these years, At cost of blood and sweat and tears, To keep in style such powerful men Who, passing paper, pushing pen, With sterile, dull, official mind, With stomachs full and pockets lined Who, eyes so dim they cannot see, Pursuing dull conformity, Create in Sub-Committee the Appalling British Standard Tree!

STUDENT SECTION



Solanum laciniatum (Poroporo)

FDITORIAL

I have gratefully accepted the position of student editor and will endeavour to continue on from Merv's good work in this student section since it's inception in the 1981/82 summer edition.

With horticulture encompassing such a wide, diverse sphere there is endless knowledge to be gained and the age old saying 'never too young (or old) to learn' is never more aptly quotable than when it comes to this topic.

As the days draw in and nights become cooler, more time is available for studying and reading. To enable me to continue providing a source of information for students, and others interested in horticulture, I would appreciate any correspondence, news items and views which you may wish to put forward and these should be sent to the address inside the front cover.

I look forward to hearing from you.

Kind regards.

Nick Owers

DROUGHT AND WETTING AGENTS

from the Journal of the Institute of Parks and Recreation
Administration, South Africa, October 1983

"MAKES WATER WETTER"

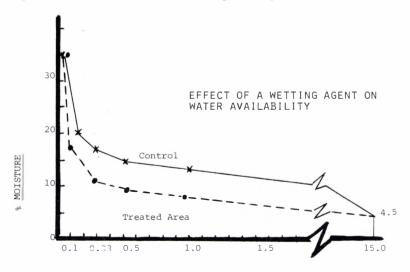
When you water soil, or a growing mix profile, you want it to get wet... wet all the way through. Since plain water doesn't do the job - a good wetting agent can be used to make the water "wetter". By easing the tensions that cause water to puddle, channel, or perch, a wetting agent will allow the water to penetrate more freely into, throughout and through a root zone profile. The free moving water can provide uniform and complete wetting top to bottom, side to side. The water will not stick to itself and the excess moisture will continue to move, providing excellent drainage.

"Making water wetter" means making water move better!

HELPS WATER MANAGEMENT AND CONSERVATION

Wetting agents move water more uniformly through the soil before draining, and quickly release any excess water. Saturating one area of the soil to get another spot moist is eliminated. No more dry areas for fear of saturating another area. The water in a wetting agent treated soil is more available as illustrated below. You will be using only the water you need, - irrigating efficiently with 30% to 50% less water!

Water conservation is a growing concern today ... Water savings means labour, time and money savings!



TENSION, bars

STUDENT REGISTRATION STATISTICS

1 MARCH 1984

Registrations : Total number of students	registered	= 1064
Number registered in : National Diploma in Horticulture -		
Schedule I Amenity Horticulture		521
Schedule II Fruit Production		127
Schedule III Vegetable Production		36
Schedule IV Nursery Management		248
Horticultural Sales Certificate		52
National Diploma in Apiculture		14
Registered - current address unknown		66
	Total	1064
Examinations 1983		
Written Examinations :		
Number of candidates examined		371
National Diploma in Horticulture		
Schedule I Schedule II Schedule III Schedule IV Horticultural Sales Certificate National Diploma in Apiculture	200 47 16 86 20	371
Number of Examination Centres		37 *
* (Kaitaia to Invercargill and including on	e Australian Cen	tre)
Number of scripts completed and marked.		998
Number of examiners appointed		45
Oral & Practical : National Diploma in Hort	iculture	
Number of students examined :		
Auckland - Schedules I and IV Lower Hutt " I and IV Christchurch " I and IV Levin " II and III		41 32 39 19

Oral & Practical: Horticultural Sales Certificate

Auckland	1
Wellington	1
Christchurch	nil

Oral & Practical : Certificate in Horticultural Practice

Auckland	9
Tauranga	46
Gisborne	14
Hastings	11
Nelson	6
	86

General

- 1. Five candidates have presented theses for the award of the National Diploma in Horticulture.
- 2. Fortysix students have qualified by examination for the award of the National Certificate in Horticulture :

Schedule	I	25
Schedule	II	3
Schedule	III	2
Schedule	IV	16

 Two studentScompleted the examination for the Horticultural Sales Certificate

DIPLOMA AND CERTIFICATE GRADUATIONS - 1983

I regret that limitation of time and space have prevented publication in this issue of the names of graduates in the National Certificate and National Diploma examinations held in 1983. A full list of graduates and prize winners will be published in the next issue of the Bulletin.

Editor.

HONOURING N.Z.-BRED RHODODENDRONS

For the first time, New Zealand has bestowed its own Award of Distinction on cultivars of rhododendrons. The award scheme has been jointly sponsored by the Pukeiti Rhododendron Trust and the New Zealand Rhododendron Association.

The first awards have been given to R. 'Irene Stead', a deep pink Loderi-type rhododendron bred by the late Edgar Stead in Christchurch. R. 'Ilam Cream', a cream and pink Loderi-type also bred by Mr. Stead. R. 'Kaponga', an early-flowering arboreum hybrid with cherry red blooms, bred by Bernie Hollard of Kaponga. R. 'Lemon Lodge', a light yellow prolific flowering hybrid bred by the Pukeiti Rhododendron Trust, New Plymouth.

TWO COMMOM RARE PLANTS

by

P.B. Heenan

Myosotidium hortensia, the Chatham Island forget-me-not is a vulnerable plant on its only home the Chatham Islands. It grows in sandy peat on cliffsides or beaches. Clianthus puniceus or kowhai ngutu-kaka as the Maoris called it, is an endangered plant of the North Island. It has the distinction of being one of the few plants the Maoris cultivated for its ornamental value. In the wild it is limited to about one hundred plants. There are three forms of kaka beak, the typical red species, the white form'Albus' and the pink cultivar 'Roseus'. 'Roseus' is a highly variable cultivar because it is commonly raised from seed by nurserymen. A white form of Myosotidium is also available in seedlists and through nursery channels.

It has been regularly stated that because these two plants are in such wide cultivation in New Zealand and overseas that their preservation would be ensured if not in the wild, then in the artificial garden environment. I feel however that this point can now be disputed with the increasing numbers of hybrids of these plants that can now be grown. Although the different forms and cultivars all have a right to existence and they do have obvious ornamental horticultural values, they have the potential to cause havoc for conservation efforts being made on behalf of the true species.

The cultivar forms of both <code>Clianthus</code> and <code>Myosotidium</code> can readily hybridise with the true species with the resultant seedlings being of a variable genetic makeup and quality. The results of this hybridisation can already be seen with <code>Clianthus</code> in many gardens today with the large numbers of pink forms and ever increasing numbers of the white form. I envisage it is possible due to the short life span of <code>Clianthus</code> that in two or three generations the red form could be totally lost to cultivation in private gardens and the hybrid forms could be dominant. The causes of the demise of <code>Clianthus</code> <code>Puniceus</code> in cultivation are thus threefold: (a) hybridisation between the species and forms produces intermediate forms. (b) Plants are commonly propagated by seed and so there is increased possibility that plants of variable genetic makeup will become more common. (c) Public preference for the pink and white forms at the expense of the red species.

To a lesser extent the same is true of Myosotidium hortensia as far us hybridisation is concerned especially as most plants are raised by seed and hybridising between the white flowered form and the species could occur. However the porcelain blue flowers, for which the plant is renowned, will ensure the true species is cultivated in perpetuity.

In cultivation Myosotidium hortensia prefers a moist, semi-shaded situation. Occasional drenchings (2-3 a year) of seawater are said to improve the health of plants greatly. This salt water simulates the coastal salt spray habitat with which this plant is familiar on the Chathams. It is readily

propagated by seed.

Kowhai ngutu-kaka will grow in almost any soil except a heavy clay and once established will tolerate dry periods. Plants should be pruned after flowering. It is readily propagated by both seed and cuttings.

Finally, cultivate the red kaka beak and the blue flowered Chatham Island forget-me-not as well as their hybrids, but remember that care must be taken to ensure that the true species remains in cultivation.

Write For Cash Competition

The following article by Mike Lloyd was an entry in the recent 'Write for Cash' competition run last year.

Student editor.

NO ONE EVEN CLAPPED

by

M. Lloyd

Fueled by a million man made wings of fire, the rocket tore through the sky.... and everybody cheered.

Fueled by only a thought from God, the seedling urged its way through the thickness of black and as it pierced the heavy ceiling of the soil and launched itself up into outer space... no one even clapped.

In the high technological, computerised world in which we live, which is able to send a man to the moon, but doesn't know what we're on earth for, it is easy to look at a plant and find it uninteresting. Personally I have found that our modern way of life should increase our appreciation of plants rather than decrease it.

I didn't grow up with a burning desire to be a horticulturist. Like most young people, I had no idea at all what my career would be, but now, after three years working with plants, I have found an appreciation of our diverse plant life has grown on me (no pun intended).

I started out working for a landscape contractor and as many know, this can be heavy work at times, but also very rewarding. When you arrive at a house and section with the house just having been completed, and see the absolute mess the builders etc. have left you to beautify, it seems like a hopeless task. Gradually, with a lot of hard work, the rubbish is removed, fences erected, paths laid, lawns laid or sown, and finally trees and shrubs planted. The change can be astonishing and no matter how tired and sore you are, it is most rewarding to behold the completed job and then think back to the day you started.

One of the best things about landscaping work is the variety, you never get time to be bored with a job because quite often the next day you will be somewhere else. If that's not good enough, the people you meet can enliven the most tedious job. I have pleasant memories of some of the incredible morning and afternoon teas people would put on for you. Occasionally people would offer to cook you lunch but it was better to politely refuse as you couldn't work on a full stomach. When someone is kind to you they benefit too because you feel more inclined to do an extra good job for them.

After a year in the landscaping business I started work in a small, developing nursery. The type of work you do when new on any nursery is probably pretty much the same anywhere. On my first day the boss said..."We'll start you off on the worst job first". So I spent the next two weeks solid weeding all the stock - they had been untouched over the Christmas break. Like any job, nursery work has its dirty jobs, but generally it is refreshing to be working with plants, perhaps because they are always changing. Flowers come out all through the year, autumn brings the changing foliage colours as does the spring with the freshness of the new foliage, and there are always weeds appearing too.

I find one of the most fascinating aspects of nursery work is propagation. No matter how scientific you make it, even to the extent of tissue culture, it seems miraculous that you can take a cutting off a plant, dip it in some rooting hormone and put it in a rooting media and hey presto it develops into a separate plant. Of course it doesn't always work and it requires a great deal of skill and knowledge to propagate some plants. The horticultural field generally seems to be getting more technological, especially with the development of tissue culture, hydroponics and the like, but I find the most satisfaction in the simple things.

I remember as a child in primary school taking two halves of an egg shell and planting pea seeds in the damp cotton wool. It was very exciting watching over the next few days as the seedlings emerged, and gradually grew too big for their egg shells. There is something creative about growing plants and I believe we all have a creative urge within us. Everyone must get some degree of satisfaction and joy in seeing a seed that they have sown emerge and unfold its leaves and perhaps even grow into a beautiful tall tree.

I put the poem at the beginning of this article because I loved its imagery. The comparison between a seed piercing through "the heavy ceiling of the soil" and a rocket launching into space may seem hard to visualise, but when you look at the respective scales, it is a very good comparison. There are very few places on earth where some form of plant life does not exist and each time a plant deposits seed into its environment that seed's germination and growth is comparable to a rocket breaking free from gravity's hold.

As the poem says "No one even clapped". Jesus asked, "What is the Kingdom of God like? What shall I compare it with? It is like a grain of mustard seed, which a man took and planted into his garden, and it grew and became a great tree, and the birds of the air nested in its branches. Luke Ch.13 v.18.

PRUNING - OR HOW TO BUTCHER YOUR PLANTS

by
A.G. Jolliffe

There has often been much written about how to prune all types of plants, particularly shrubs. However pruning is one of those garden arts which must be practised - and practise makes perfect - hopefully.

I would like to offer a few observations and principles which may help people make a better job of pruning. It must also be said that pruning is, in some respects, becoming a lost art. Hopefully it will be revived.

Firstly make sure that your pruning tools, be they secateurs, loppers or saws, are clean and sharp. This makes the job quicker and cleaner and reduces the chances of frustration leading to poor pruning.

Always start by pruning from the top down. One of the most common mistakes is to remove the weaker shoots at the bottom thus creating a clear stem sometimes several feet off the ground. (These are then 'standard'shrubs). Starting at the top allows the pruner to shape the plant much more easily. It also lets in light to lower branches and shoots giving the plant a chance to grow lower down and not become drawn-up.

Look for what I call an 'inner shape'. On many shrubs it is possible to see an outline of foliage etc, smaller than the existing shrub. Removal of material back to this inner shape is quite an easy matter.

Once cut you cannot put plant material back on the bush so don't always cut too far back. It is just as easy to come back and take some more material off rather than be disappointed.

One of the hardest things to do is to hide the pruning cut - impossible well maybe. But the visual impact of many cuts can be lessened dramatically by changing the angle of the cut and the position of the cut. If possible always make a cut beside an existing shoot so the end doesn't look like it has been cut off. Try to face cuts upwards or towards the centre of the plant or to the back of a border.

Pick thoseflowers. The easist pruning anyone can do is to pick the flowers for indoor display or to give away. This way flowers can be appreciated in the garden and inside the house. Cutting flowers off at a currect pruning position will save additional pruning later

Confusion often reins about the time to prune many plants. A simple rule is this; "prune after flowering". There is no need to always remember which plants need pruning in what months. Pruning after flowering means that dead flowers

are removed, unwanted fruit is not produced and new shoots are encouraged to grow. This is a general principle which has its exceptions so when approaching pruning this way, always consider the individual plant and all its character.

Not all plants require pruning and the same plant growing in different places may require different pruning. If you do not like pruning choose plants that don't require any.

People often regard pruning as a once a year activity. Don't be fooled by the fact that other people use pruning as an excuse for a mid-winter or spring clean-up. Think of the plants - they are individuals too and require individual treatment.

The only way to become a competent pruner is to practise pruning, observe the results, corrrect your techniques and practise. Remember, practise makes perfect.

"A THING OF BEAUTY IS A JOY FOREVER"

- I BEG YOUR PARDON MR. KEATS?

by Alan Fielding

A person who plants a tree plants a thing of beauty, of shade and of serenity - focus of cool sanity in an often paved and noisy world.

They enhance the oxygen supply of their environment - two largish trees in a garden change the air every twentyfour hours.

A person planting a tree conserves moisture, prevents erosion, enriches soil, provides shelter, makes food, creates privacy, attracts wildlife, absorbs noise, produces colour, offers perfume, enhances property, adds value and is an inspiration to all.

BUT how far should we go?

This question has already arisen in relation to exotic forestry in this country - particularly in relation to the implications of monocultures: economic, ecological, and visual. With present ardent efforts to engulf the northern coastline of the country in Pohutukawa, the time has arrived to ask that same question in relation to coastal plantings.

We have already greatly altered the natural distribution of Metrosideros spp. and in some places we have, by the planting of these coastal trees, greatly modified biological communities. Whilst we can sing loudly the praises of this tree: its magnificent blossom, its changing leaf textures, and its fascinating gnarled forms; we might also ponder the effects of a monoculturous belt tied around the shore.

The visual effects are immediately obvious: a lack of variety of colour, texture and form. A brilliant, unforgetable flowering, more or less all at once and then ... nothing for another vear.

Where the trees are planted rather too close - say 2-3metres apart, and this is all too common, or the same sort of distance from buildings, roads and power lines, they become somewhat susceptible to the various mutilations of being 'topped', 'forced up', 'thinned' or simply felled - after all, "there are plenty more where that came from". The slightly more fortunate may have been topiared!

So we may in the long run end up with anything but a beautiful coastline. For the sake of 'opening up the view' the view may in many places become one of hideous hackings. This is already common in some areas. Perhaps fewer trees much more carefully thought out in their placement is a better way to go?

The ecological implications of this Pohutukawa ribbon include the exclusion of other tree and shrub species, the encouragement of specific pests and possibly diseases also, and the 'narrowing' of a wildlife food source to a 'feast or a famine'.

Well, what are the alternative species for coastal planting, providing us with a desirable diversity? Here are a few possibilities:

Acacia longifolia Acacia longitotta
Acer pseudo-platanus Araucaria heterophylla + Leptospermum ericoides Arbutus unedo Banksia integrifolia + Cordyline australis + Corynocarpus laevigatus + Myoporum laetum

- + Dodonaea viscosa
- + Dusoxulum spectabile + Entelea arborescens
- Eriobotrya japonica Erythrina X sykesii Eucalyptus botryoides E. ficifolia E. leucoxylon rosea
- Eugenia smithii Grevillea robusta
- (+ = indigenous species)

Hakea laurina Koelreuteria paniculata Lagunaria patersonii

- + Melicope ternata
- + Melicytus ramiflorus
- + Meryta sinclairii
- Paulownia tomentosa
- + Pittosporum Spp.

 - + Plagianthus divaricatus + Planchonella novo-zelandica Prunus cerasifera Quercus ilex
 - + Sophora microphylla Tamarix Spp. + Vitex lucens

 - + Weinmannia racemosa
- + Griselinia littoralis + W. silvicola

To sum it all up: Dr. Samuel Johnson (1709 - 1784) "The great source of pleasure is variety".

HOOP PINE

Araucaria cunninghamii

by

W. Dalgleish

I first noticed the Hoop Pine (Araucaria cunninghamii) while driving through the fertile Currumbin Valley, part of the Gold Coast hinterland (Queensland). Initially I mistook the trees for Norfolk Island Pines (Araucaria heterophylla) displaying a different form in the warmer climate compared with New Zealand specimens — i.e. a different phenotype. The two species are similar but the foliage of the Hoop Pine occurs in tufted bunches at the very ends of the branches.

A majestic timber tree, it once occurred in great abundance in Northern New South Wales and along the east coast of Queensland. Obtaining a height of 60 metres, with a stout, slightly tapering trunk and branches in whorls, the Hoop Pine is a dominant member of the rainforest and has a strong vertical accent as a landscape specimen. The trees do best in a mild climate with a minimum rainfall of 800 millimetres, a deep soil is also necessary. It should do well in many of the warmer coastal areas of New Zealand and would also make an interesting specimen in a Botanic Garden. Seedlings show considerable variation in tuftiness of foliage and openness of branching habit.

With the seemingly universal plantings of Norfolk Island Pines at seaside resort areas, as well as the problem of disease attacking the trees in some localities - e.g. Sydney beaches it would be advantageous to use other trees for this coastal planting to give a varied character to different beaches. Pohutakawa (Metrosideros excelsa) gives dramatic effect clinging to cliff faces in the Bay of Plenty and East Cape region, Pandanus (screw pine) which is like a rounded and compact Cabbage tree (Cordyline) with a more succulent foliage and spiny margins. It has unusual aerial roots eminating from the trunk and low branches. This plant gives accent to the sub-tropical and tropical areas of the East Coast of Australia. The Hoop Pine although similar to the Norfolk Island Pine is different enough to give an area a distinctive character. would be adventurous and very rewarding if Local Bodies used the Hoop Pine in seaside planting projects. In Northern New South Wales and Queensland the tree is obviously suited and would impart local character, but it has potential for New Zealand situations also, the evidence of this is yet to be realised.

THE ARAUCARIAS

In the Australasian and near Pacific area there are a small number of trees belonging to the Araucaria family. In the Araucaria genus there is the already mentioned 'Hoop Pine', the 'Norfolk Island Pine' (A. heterophylla syn A. excelsa) which comes from Norfolk Island and in places on the island grows in stands. The 'Cook Pine' (A. cookii) comes from New Caledonia and the New Hebrides and is similar to the Norfolk Pine but it is more columnar in habit. A. bidwillii (the 'bunya-bunya') comes from Queensland and in the wild state is localised to only two areas in the state. The Bunya Mountains (160 kilometres north-west of

Brisbane) and another area a few kilometres north of Cairns. It is found in parks in New Zealand, distinctive with its dome shaped crown of foliage, with two-thirds of the trunk being branchless. The edible seeds of this tree were favoured by Aboriginals living near the two areas where the plants are found.

The only other genus in the Araucaria family is the Agathis. Most plants of this genus are from the southern hemisphere with only a few representatives in the north. Agathis australis is well known in New Zealand as the 'Kauri', at one time important economically for its timber and gum. Confined originally to the Northland and Auckland provinces its numbers are greatly reduced today. A. robusta is the 'Queensland kauri-pine', it is similar in ways to the 'Kauri", with a heavily branched spreading crown on top of a trunk which is unbranched for two-thirds of its height. It produces a soft timber and resin as well. North Queensland has two other species of Agathis which are similar to the above.

All members of the Araucaria genus come from the Southern Hemisphere, other countries with members of the genus are; Brazil, which has the 'parana-pine' (A. angustifolia). This tree covers vast areas in the southern part of the country and extends into Argentina, Paraguay and Uruguay. It has a clear trunk with a flattened crown and is the country's most important timber tree. A. araucana (the 'monkey-puzzle') is a popular planting in parks in New Zealand, it has an unusual criss-crossing of foliage and a dominant form. It grows on both sides of the Andean divide between latitudes 37 and 40 degrees south, its specific name comes from the Chilean province of Arauco.

The similarities amongst a number of the above mentioned trees could be through an earlier parental sameness, with individuality evolving in isolation of each other.



Araucaria A. A. A. hidwillii heterophylla cunninghamii auracana

bunya-bunya hoop pine monkey puzzle pine Norfolk Island pine

INTERESTING EXOTICS

Alan Jolliffe

Botanical Name: Vestia lycioides

Family: Solanaceae - potato family

Country of Origin : Chile

It is uncommon in gardens throughout New Zealand yet it is a very attractive shrub when in full flower in September and October. Masses of lemon-yellow tubular flowers are borne along the branches of last year's growth. The 30mm long flowers look even larger with their protruding stigma and stamen and the reflexed terminal petal lobes which open to about 20mm across.

It is a hardy, quick-growing evergreen shrub reaching about $2\frac{1}{2}m$ in height. Its narrow shining deep-green leaves about 50mm long have an unpleasant - typical Solanaceae - smell when crushed.

In spring it flowers profusely all along its arching branches. It is an amazing sight and in autumn yellow berries appear. It is easily propagated by cuttings.

To keep this shrub presentable in any garden, it is desirable to prune it quite hard as soon as it has flowered. This will encourage new growth during summer, ready for next year's flowers.

Botanical Name: Cantua buxifolia (C. dependens)

Common Name : Peruvian Magic Tree

Family: Polemoniaceae

Country of Origin : Andes of Peru, Bolivia and Chile

One of six species of South American shrubs renowned for the beauty of their large flowers. The rest of the plant is rather untidy and twiggy with small narrow leaves.

The large flowers, when open in late spring, are bright rose in colour fading a little in colour towards the calyx. Borne at the tip of long branches, the 75mm long tubular flowers make an impressive and unusual sight.

When not is flower the shrub often goes unnoticed. It grows to about $2\frac{1}{2}m$ and can tolerate quite dry situations. It propagates easily with cuttings taken from good young growth, which is sometimes hard to find on older bushes. It should be pruned after flowering to encourage new growth and spectacular flowering.

WELCOME: to the following new members

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EXAMINATION COSTS

At a recent meeting of the Examining Board concern was expressed at the cost to students of travelling to Levin to attend Oral and Practical examinations for Schedules II and III. After considerable discussion, the Board agreed that Levin would be retained as the Schedule II and III examination centre in 1984, pending changes in the N.D.H. prescription and that students be advised of the possibility that monetary assistance may be available from employers to meet the cost of travel and other associated examination expenses.

R.N.Z.I.H. ANNUAL JOURNAL 1984

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WELLINGTON A.G.M. & REGIONAL CONFERENCE 1984

THEME: URBAN SPACES - A GREEN APPROACH

VENUE: WELLINGTON BASIN RESERVE

R.A. VANCE STAND

DATE: FRIDAY 18 - SUNDAY 20 MAY 1984

TIME: FRIDAY 7 p.m.

FINISH: SUNDAY 5 p.m.

OFFICIAL OPENING BY

MR KEN PIDDINGTON
COMMISSIONER FOR THE ENVIRONMENT

ENROL TODAY for this Conference. Meet old and make new friends; share horticultural experiences; see the Region's open city spaces. All enquiries to:

SECRETARY: Mrs P. Hammer, 100 Kilbirnie Cres.

Wellington.

PHONE: Wellington 873-644

Programme

10,00 a.m Executive Meeting - No. 2 Committee Room, Old Town Hall 7.00 p.m. Conference Registration & Social – R.A. Vance Stand Basin Reserve 8.30 An Introduction to "Urban Spaces - A Green Approach" in the Wellington Region. chaired by Mr Richard Nanson 9.30 Supper SATURDAY 19 MAY 8.30 a.m Registration continues A.G.M. Conference Business commences 9.00 10.00 Official Opening and Address by Commissioner for the Environment Morning Tea 10.20 10 45 Conference resumes 12.30 p.m. Luncheon (provided at Conference Centre) 1.20 Guided Tour of Wellington Botanic Gardens and Afternoon Tea 5 00 Banks Memorial Lecture — Mr Ray Mole. "Survey of Native Trees and Shrubs in Public and Private Gardens" "Harbour Capital" Dinner - Basin Reserve - After Dinner Speaker 7.30 His Worship the Mayor

SUNDAY 20 MAY

FRIDAY 18 MAY

9.00 a.m	Horticultural Bus Tour – departs from Conference Centre, Basin
	Reserve, for tour of Upper Hutt, Lower Hutt, Wellington's
	Central Open Spaces, and Otari Native Plant Museum
5.00 p.m	Wellington International Airport by bus and return

5.30 Wellington City

MONDAY 21 MAY

9.30 a.m Tours of Michael Fowler Centre, the Thorndon Walk, Teachers' College Plantings, and Percy Scenic Reserve — Petone.

CONFERENCE REGISTRATION FORM

Please detach and return no later than 4 May 1984 to:

CONFERENCE SECRETARY: Mrs P. Hammer

For accommodation suggestions see over -

100 Kilbirnie Cres.

Wellington 2.

TELEPHONE: Wellington 873-644

VENUE: BASIN RESERVE WELLINGTON
FRIDAY 18 MAY – SUNDAY 20 MAY 1984

Names of a Mr/Mrs/Miss	II people in your party attendin SURNAME	g Conference: CHRISTIAN NAME	
ADDRESS:			
Conference	e Fee \$20 each includes Saturday lunch & bus	No. attending	\$
"HARBOU	R CAPITAL" DINNER 19 MAY	After Dinner Speaker, His Mayor of Wellington.	Worship the
	Charge \$20 each	No. attending	\$
SUNDAY '	TOUR — WELLINGTON REGION Charge \$10 each includes lunch & bus	ON 20 MAY No. attending	\$ =
	CHEQUE ENC	LOSED FOR TOTAL	\$
MONDAY	TOUR (subject to 30 participar Charge \$8 each includes lunch Payment on registration at Cor	No. attending	\$
	nsport will be available from th rs arriving on Saturday 19 May		nal Airport
	Advise: Flight Number: Approx. Arrival Time: Number requiring transport:		

ACCOMMODATION SUGGESTIONS

We suggest you book directly with the Hotel/Motel as soon as possible as there are other Conferences on in Wellington at the same time.

Melksham Towers: Single \$42, Double \$48, Three \$54.

Iona Towers: Single \$42, Double \$48, Three \$54.

Belltara Motel: Family Units — Sleep 4 \$40 plus \$7 per person

Twin Units \$38 plus \$7 per person

Clinton Private Hotel Single B.B \$20, Double B.B \$30

Railton Hotel: (Salvation

Army) Single \$21, Twin \$32, Dinner, Bed & Breakfast

(Melksham, Iona, Belltara & Clinton are all close to Venue)

Other Suggestions but further from Venue:

Ambassador Travel Lodge: Single \$30, Twin \$50

Aroha Motel: Twin Units \$48

(All tariffs subject to change before May)

Anyone having difficulty with accommodation Phone — Murray Beattie, Wellington 327-125.

Can we assist you with any special arrangements while in Wellington?
Please indicate requirements —

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