

Newsletter

For Friends of the Christchurch Botanic Gardens Inc.

No 24, Spring 1995

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President's Notes

As I look outside onto a frosty, winter landscape, it seems scarcely the time to talk about gardens and plants! Trees are bare, some late pruning remains to be done, and there is a lot of bare ground. The main outside activity on our property lately seems to have been scuttling to the woodpile to get yet another load of logs for the fire.

Yet it is valuable to have these times of lesser activity to allow reflection - to be both introspective and to consider a wider view of things. A wider view was certainly present in the results of our first photographic competition for the Friends. The response from members was overwhelming and as hoped, the range of images reflected the diverse ways in which we all look at the world around us. I was personally fascinated that there were places I have walked past many times - yet through the eyes of someone else what to me was mundane becomes fascinating and beautiful, or perhaps challenging.

None of us see the world in exactly the same way. The photographs by our members reflect this, and I have enjoyed looking through the views of people, plants and events and being enriched by

someone else's perception of the same world that I live in.

Recently, the Friends committee enjoyed a vigorous discussion on tourism and the Botanic Gardens. Why do people come to the Gardens, what do they do there, how many come inside the gates, what could enhance the Gardens for visitors, what turns some people away, how can the Friends help - these are the sorts of questions which it is important to consider, even if the answers are not so obvious. A project by Maria Adamski of the Gardens staff will help answer these and many other questions during the coming year. My guess is that there are many reasons for people visiting the Botanic Gardens. While having a focused primary mission, the Gardens must continue to be many things for many people.

The celebration of the diversity of nature - of "biodiversity" is not just reflected in the diversity of plants which the Gardens have accumulated. It is reflected also in the diversity of experiences which the Gardens have always and continue to offer its visitors - whether regular or occasional.

David R. Given

Jottings from the Curator

At the time of writing, it is an overcast winters day and for many people there is little incentive to venture outdoors. However, within the Botanic Gardens there are always plants of interest, even during the depth of winter. Currently in flower are *Prunus mume*, *Prunus subhirtella* 'Autumnalis', *Hamamelis mollis*, *Chimonanthus praecox*, *Kerria japonica* 'Flore Plena', *Camellia sasanqua* cultivars and a selection of alpine plants throughout the rock garden. So often we are attracted by plants in flower, but the form, berry and bark effects of trees and shrubs can be equally as attractive and fascinating as flowers. Needless to say, the Conservatory complex with the tropical plants in Cuninghame House, cool flowering plants in Townend House, alpines in Foweraker House plus cacti and succulents in Garrick House are

an attraction at any time of the year.

Capital Works

As part of the upgrading of the central Rose Garden a pergola is being constructed at each end of the four entrances. This will allow for the inclusion of climbing roses within the collection and provide more of a feature upon entering the Rose Garden. The work is due for completion at the end of August for a cost of \$17,161.00.

Another significant development is the installation of a pop up irrigation scheme within the woodland, south-west of the band rotunda. At a cost of \$30,523.00, this will allow for future planting improvements.

FCBG

PO Box 237
Christchurch

Peacock Fountain

For many years the future of the Peacock Fountain (originally sited on the Archery Lawn) has been in question. Council approval has now been given for it to be sited on the Armstrong Lawn, some distance in from Rolleston Avenue frontage. Measuring 18 metres diameter and 9 metres high, the fountain will provide a tremendous focus at the revamped front entrance to the Botanic Gardens. During December 1995, work is to be done on installing water supply and drainage to the site with installation of the fountain taking place later in 1996.

Botanic Gardens Staff

With the resignation of Geoff Woodley from Section C to take up horticultural work on his own account, the appointment of Richard Poole as gardener for Section C has been made. Richard brings with him a wealth of experience, having had training and experience with the Blenheim Parks Unit, Lincoln University and a short term contract at the Botanic Gardens during Maria Adamski's study tour overseas. We welcome Richard to the staff and know that you as Friends of the Botanic Gardens will find him a helpful person concerning the aspects of Section C for which he is responsible.

Warwick Scadden

Past Events

Annual General Meeting

This was held on 30 July and was well attended. Jim Crook was confirmed as secretary and Dorothy Lake as stand in secretary. After the business of the meeting Warwick Harris, who was the Friends of the Botanic Gardens first president, introduced a new book 'Techniques and Methods of Ethno botany', co-authored by him and our president David Given.

Warwick explained what ethno botany is, its philosophy and principles and illustrated his talk briefly with some plants used by Maori, e.g. neinei, flax (Harakeke) and golden sand sedge (Pingao). An excellent afternoon tea was presented by the committee and members.

Heritage Week Walks

The Heritage week walks (27 and 30 May) were well attended by the general public and a few Friends. Our thanks to those who supplied the welcome afternoon teas. Donations of \$25 were received and several new members joined up.

Coming Events

In Brief...

1995

Guided Walks

26 August, Saturday	14 October, Saturday
5 September, Tuesday	7 November, Tuesday
23 September, Saturday	18 November, Sat.
3 October, Tuesday	5 December, Tuesday
	16 December, Sat.

Other Events

16 August, Wednesday – Quiz Night
24 September, Sunday – Spring Breakfast
29 September, Friday – Plant Sale ('Friends' only)
7 October, Saturday – Plant Sales
22 November, Wednesday – Information Centre Talk
8 December, Friday – Barbecue in Gardens (details later)

Guided Walks

The guided walks on Tuesday 5th September, Tuesday 3rd October, Tuesday 7th November, and Tuesday 5th December leave from the Information Centre at 9:00am. These walks are part of a series held on the first Tuesday of every month and are conducted by a member of the Botanic Gardens staff.

The following walks all start from the Information Centre at 1:30pm and are conducted by Max Visch.

- 26 August: A visit to the Conservatories in the Botanic Gardens
- 23 September: The Beauty of Heathers and Dwarf Conifers
- 14 October: Spring Flowering Plants in the Botanic Gardens.
- 18 November: Visit to the Murray Ainslie Lawn and Woodland area to view interesting trees and shrubs
- 16 December: Getting to know NZ Trees and Shrubs

Quiz Night

Wednesday 16 August 1995

7:30pm in the Information Centre

Quiz Master Kevin Garnett. Team Competitions. Great fun! Prizes. Supper. DO COME!

No Evening Meeting in September

Spring Breakfast

Sunday 24 September 1995

8:00am in the Information Centre

Celebrating Spring and our first five years. A walk to the Daffodils will follow. Cost \$7.00. RSVP essential to Daphne Banks by 15 September. Phone 355-8399.

Peninsula Garden Visits

30 September — 1 October

Bob Peers is prepared to arrange a weekend trip to Akaroa on Saturday 30 September – Sunday 1st October. Gardens would be visited in Little River, Springston, Lincoln and on the Lyttelton side at Allandale and Governors Bay. Accommodation on Saturday night would be at Akaroa. If you would like to go, phone Bob at 351-6776.

No Evening Meeting in October

Talk on the Daisy Family (Asteraceae)

Wednesday 22 November 1995.

7:30pm in the Information Centre
Sales Table.

Fund Raising

Plant Sale for Members of Friends only

Friday 29 September 1995

10:00am – 12:00pm in the Shade house area near the Botanic Gardens offices.

Botanic Gardens' Plant Sale

Saturday 7 October 1995. If wet Sunday 8 October 1995.
Cancellations on 3ZB.

9:00am – 4:00pm outside the Information Centre

Plants from the Botanic Gardens, Mona Vale and members' own gardens.

Contributions to the Friends' Stall at the plant sale will be welcome e.g. gardening books and magazines, tools, produce, baking, preserves, crafts (wood turning etc.).

The proceeds from the Botanic Gardens' plants go directly to the Gardens, whereas the proceeds from our own plants and other sales goes to the Friends funds. Please bring your plant contributions for the sale to the Friends' glasshouse the week prior to the sale on 7 October, and other goods early on 7 October. Enquiries to Adrienne. Phone 351-5915.

From the Treasurer

Thank you to the members who have already renewed their subscriptions. Early payment is much appreciated. Receipts will be given on request, and remember that donations are now tax deductible.

No further mail will be sent to non financial members after 30 November, and financial members only may have discounts at the plant sale.

Bits & Pieces

Obituary

Members will be sad to hear that Dick Kerr (Richard) has died recently. He was a very supportive member and helped as a volunteer in the Information Centre.

New Members

A warm welcome is extended to recent new members:

- Sally, Richard and Jonathan Allison
- David and Mrs Bates
- Helen Browne
- Joanna Browne
- Christopher Cook
- Melva Finney
- Lola Fraher
- Lucy Hollows
- Seung Jin Kim
- Diana Madgin
- Roger and Jenny Mountfort
- Joan Powell
- Pamela Richards
- Reg and Charmaine Smith
- Graham Sparks
- Brenda Shepherd
- Kelvin Taylor
- Lorainne Thompson
- Fiona and Garry Wakefield

Apologies to Paul Brierton for spelling his name incorrectly in our previous newsletter.

Raffle Winners

Daphne Midgley was the winner of 'The Garden Century', and Barbara de Lambert won 'Botanic Gardens and Parks in New Zealand'. Both of these books give good historical background to the Gardens.

A request from Wendy Bell at the Information Centre

Wanted for display purposes – any magazines or books that pictures can be cut out from – for use in collage display. Listeners, womens magazines, gardening magazines and airline magazines. Or any other suitable material. Please bring into the Information Centre Receptionist and give it to Wendy or Richard Doyle. Your ideas and time would also be appreciated in the compilation of displays. Please help if you can.

There is still space in our glasshouse for Friends to propagate plants for the plant sales on 29 September and 7 October.

Thank you Chris Christie for your sterling effort to give the newsletter a new look. Your work has been greatly appreciated.

Feature Articles

Excerpts from a talk given by Susan Molloy on the 'Christchurch Botanic Gardens International Seed Exchange'

17 May in the Information Centre

To explain the International Seed Exchange we need to cover:

1. Why do we operate a seed exchange?
2. What is the seed exchange we call Index Seminum?
3. How does this affect our Botanic Gardens?

Botanic Gardens throughout their history have served as major influences on the style of planting gardens, the practice of gardening and the study of plants.

In our Botanic Gardens we have a large range of plants to study and learn from. By and large, these have come from overseas sources. Before the seed exchange, plant material was imported in the form of cuttings or as live plants. Today we import by seed.

When the gardens were established in 1863, all 3 forms of plant material were imported. Originally most came from England. But how did the plants survive the journey when a ship's voyage from England could take 3-6 months?

Dormant bulbs, corms and tubers would normally survive because of their resilience to the effects of salt spray. Seeds were packed in sugar inside glass jars to keep out prowling ships rats and mice. Plants were packed inside two styles of boxing. One a wooden case with broken glass spread amongst the plants to again keep out rats. The other was a container

Help Required – Visitor Survey 1995/96

Maria Adamski from the Botanic Gardens Staff is planning a survey of visitors to find out more about who uses the Gardens, why they use them, and what part plants play in their visits.

Volunteers will have a training session on Saturday 26 August (time to be arranged).

The survey will be taken for a week in each of spring, summer, autumn and winter seasons. The spring survey is to be during the week of 4/10 September inclusive. Numbers of visitors will be taken during the whole day i.e. between 7:00am and 6:00pm. Surveys will be from 7:30/8:30am, 10:30/11:30am, 1:30/2:30pm, and 4:30/5:30pm. Three gates will be used, so approximately 12 people will be needed each day, plus people to do the visitor counts. Please respond if you can give some time to assist with this special project.

called a wardian case. This was a wooden-sided box with a removable glass pitched roof - rather like a miniature travelling glasshouse!

It has been established that during the time when John Armstrong was Curator (1867-1889) he introduced over 4000 different plant species. In 1881 he made the first exchange of seed with Tasmania and Europe.

Between 1900-1930, the importation of plants dropped dramatically. Due to the shortage of finances, seed became a less expensive option. During the 1930's many seeds were exchanged with overseas gardens. The earliest record we have indicates our commencement of involvement in the international seed exchange was 1940. The exchange is titled Index Seminum which is Latin for seed exchange or the catalogue. Over 600 gardens around the world are involved in the exchange.

Each garden annually publishes a list of seeds which have been gathered throughout the previous season/s. The list, or Index Seminum is then sent to all the participating gardens free of charge. Orders are then returned to the originator of the list and these are dispatched (also free of charge) until supplies are exhausted. Basically it remains first in first served. Most gardens either collect some or all seed from the wild. Some are fortunate enough to go on special expeditions, for example China, to collect rhododendron and camellia seed. Our collecting season runs from November to June. After we collect the seed it is refrigerated and cleaned. Most of the cleaning is done by a happy bevy of Friends, who also package and label the seeds ready for the spontaneous dispatch.

The exchange is the primary means by which we can obtain new or unusual plants, or simply to even obtain plants. However sometimes the rare and unusual do have their problems - finding reference material can be a real problem. We need references to obtain information on germination requirements, growing techniques and correct plant names, or nomenclature. Correct nomenclature is essential for the information to go on the labels to be read by the public. Today we correspond with many overseas book companies in an effort to build up our international collection of floras.

Although the City Council grant is a modest annual vote of money for the purchase of books, we also receive a most generous annual donation from the Friends of \$1,000.00.

The International Seed Exchange is the lifeblood of the Gardens. Through this we can retain and encourage public interest and curiosity in plants.

Susan Molloy
Botanical Officer

Trees of the Botanic Gardens

This is the first in a series of articles looking at trees which are not included in the pamphlet "Historic and Notable Tree Walk", a copy of which can be obtained from the Information Centre. If space permits, a tree will be dealt with each season.

Few trees indeed have the interesting story of the Dove tree, which is the subject of this first article.

The Dove Tree (*Davidia involucrata*)

Apart from the ginkgo, no other tree has caused as much wonderment as the *Davidia*. The French missionary and naturalist Armand David, who first reported the giant Panda, spoke in 1869 of a beautiful new tree in the mountains of Western China. He told of huge white flowers hanging like handkerchiefs, or in a breeze fluttering like doves from the branches. Nearly thirty years later in 1897, another missionary, Father Farge, collected seeds of the tree and sent them home to France to the tree collector Maurice de Vilmorin. Of the 37 seeds sent, one germinated and flowered in 1906. It was propagated by cuttings and by layering.

A young man Earnest H. Wilson who was destined to be a foremost collector of plants in China was engaged by Veitch's nursery and given the job of collecting seed of *Davidia*. When Wilson set off for China in 1899, his only information about the tree came from Dr. Augustin Henry; he was an amateur botanist who had lived in China for about 20 years. Wilson's first task was to reach Henry who was in Yunnan in the south-west. With Henry's instructions, Wilson had to travel 900 miles to central China to find a single tree in an area the size of Wales. A formidable task indeed! When he found the tree, its stump was standing by a house which had been built from its timber. He combed the area and eventually found a grove of *Davidias*.

The fruit of *Davidia* is a green ball containing a single hard, inedible nut. E.H. Wilson brought enough of these back from China to pay the costs of his expedition. He was disappointed when he returned home to find that de Vilmorin was already growing the tree in his collection.

Examination revealed that there were two distinct varieties. Earnest Wilson's form was the same as that found by David in 1869. It had soft white down on the underside of the leaf and is entitled to the Latin name *Davidia involucrata*. The second variety found by Farges and sent to France in 1897 has the underside of the leaf shiny and smooth. This second form, var. *vilmoriniana*, is much more common and usually of greater vigour than the type. It is the form most often seen.

The mulberry shaped leaves are larger, and are broad-ovate drawn out to the tip (acuminate). The leaf margin has coarse, triangular teeth and there is scarcely any autumn colouring. The true flowers are tiny and purple in bud, opening yellow and clustered in a globular head on a long stalk hanging between white bracts.

The bracts or 'doves' or 'handkerchiefs' grow along the whole length of the long branches in late spring. Mingling with the bright green they make a most arresting sight. One bract is twice as long as the second. The larger bract is 20cm long.

When botanists first examined the *Davidia* they believed it to be a member of the dogwoods because the large white flowers turned out to be bracts which are leaf-like structures below a

flower or flower cluster. Where the dogwood has four equal ones, the *Davidia* has two bracts which are unequal in size. The *Davidia* was not a dogwood but it was a close relative and so was given its own family of *Davidiaceae* (now *Nyssaceae*).

Two specimens may be seen in the gardens. One is in the corner formed by the Cuninghame and Townend houses. The other is close to the rock garden on its north side.

P. Mahan

The Watergarden

The watergarden area of the Botanic Gardens near the west bridge was originally a shingle pit. The shingle was quarried to help finance the building of the curator's residence. This left a huge hole in the ground which made an ideal site for a group of ponds. The ponds are fed by a 60m deep artesian bore which can be seen in the smallest pond at the north end of the watergarden. The outlet of the pond flows into the river from the western most pond. The Te Puna Ora spring built in 1992 also feeds off this bore.

The main pond has been choked with the growth of the water lily *Nymphaea* and *tuberosa*. Over the past three summers areas of this waterlily have been removed to make way for new lily cultivars. These are being grown on in the Nursery and will be planted out in November.

Waterlilies should be grown in mud and do not tolerate compost. A specially formulated aquatic fertiliser called 'lilygrow' can be used but I have found it unnecessary.

Around the edge of the ponds a collection of water loving herbaceous perennials can be found. These perennials are lifted and divided on a rotational basis once every three years, lifting a section at a time. Compost is added before replanting and in spring a mulch of pig manure and sawdust is applied. Lots of new species have been planted over the last few years including *Ligularia*, *Lysimachia*, *Hostas*, *Rodgersia*, *Rheum* and *Iris*.

The borders surrounding the ponds contain some interesting trees which are notable for their winter bark. *Prunus serrula*, the Birch Bark Tree has shiny mahogany-brown bark. This tree will grow to a height of 15m. The bark colour is best in younger specimens as with *Prunus maackii*, the Manchurian Cherry. This tree grows to a similar height as *P. serrula* and has a lighter golden-brown coloured bark. *Acer griseum*, the Paperbark Maple, has cinnamon coloured underbark. The peeling bark of both *Acer griseum* and *Betula serrula* when back lit by the sun gives an effect as if the branches are ablaze. *Betula utilis* var *jacquemontii* has dazzling white stems and looks well in groups, or reflected in water. It grows to a height of up to 18m.

The border adjacent to the western lawn has recently been planted in native plants to enclose the western lawn which marks the start of the native section. On the western lawn itself can be seen some young saplings of Kauri, *Agathis australis*. The largest kauri on this lawn is a specimen from seed collected from Tane Mahuta in Waipoua forest. You can see from this specimen the very straight trunk which made the kauri such a valuable timber tree in the past.

Dean Pendrigh

6 FRIENDS OF THE CHRISTCHURCH BOTANIC GARDENS

New Committee - Contact Numbers

President	David Given	351-6069 (pvt)	325-2811 (bus)
Immediate Past President	Roy Edwards	338-5969 (pvt)	325-2811 (bus)
Vice President	Faye Fleming	351-7798 (pvt)	
Minutes Secretary	Jim Crook	358-5845 (pvt)	
Treasurer	Colin Neal	351-8676 (pvt)	379-4100 (bus)
Catering	Daphne Banks	355-8399 (pvt)	
Walks	Max Visch	338-2273 (pvt)	
Info Centre Helper	Jane English	355-5289 (pvt)	
Sales Table	Adrienne Moore	351-5915 (pvt)	
Editor	Peter Mahan	359-8767 (pvt)	
Committee Members	Chris O'Sullivan	332-6564 (pvt)	
	Tony Burnett	384-1381 (pvt)	
	Susan Molloy	348-1077 (pvt)	366-1701 (bus)

Other Contact Numbers

Membership Secretary	Ruby Coleman	355-8811 (pvt)
Deputy Minutes Secretary	Dorothy Lake	342-5318 (pvt)
Tours Away	Bob Peers	351-6776 (pvt)

W. Scadden

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