Mewsleffer

For Friends of the Christchurch Botanic Gardens Inc.

No 37. Summer 1998

INSIDE

- President's Comment
- Botanic Gardens Jottings
- Coming Events
- 3 Recent Events
- 4 Bits & Pieces
- Feature Articles

FCBG PO Box 237 Christchurch

President's Comment

Dear Friends

I have just returned from three glorious days at the Hunters Garden Marlborough Festival. What a superbly organised occasion that was. The links between people, plants, gardens, leisure and education are being challenged all the time. Following along these lines the Friends of the Botanic Gardens have presented a submission to the Christchurch City Council over the future use of the grounds at the Curator's House. If this is successful the skills, energy, funding and time by members will be significant but very worthwhile.

The plant sale is mentioned separately so I will again say thank you to all who helped make it a rewarding day.

Please note the details about the Christmas function and I will make this opportunity to wish you all a festive Christmas. As I am writing this all the summer annuals are being planted in the Gardens and the roses are beginning to bloom. How lucky we are to be in the Garden City.

Happy gardening.

Faye Fleming

Botanic Gardens Jottings

At the time of writing, staff are busy planting annuals for the summer bedding displays, roses are attracting considerable attention, Impatiens in Townend House look superb, the herbaceous border is shaping up for a good summer show and there are so many individual plants throughout the garden worthy of our attention. Yes as I have mentioned previously, we are fortunate to have such an asset as the Botanic Gardens within our city and there is so much of interest for us to enjoy throughout the year.

1999 Intake of Apprentices

Applications are currently being sought from people interested in an apprenticeship in Horticulture and Amenity Turf Management. Subject to there being suitable applicants, it is the intention to employ two apprentices for a 7000 hour contract, commencing in January 1999.

Current Projects

Within this financial year, major capital works include stabilization of the riverbank adjacent to the Botanic Gardens office and nursery, upgrading of steelwork in Cuningham House and a continuation of the pathway improvements from the Rolleston Avenue frontage.

Planning is in progress for a redesigned Azalea garden and the heritage rose garden, as per the Botanic Gardens Management Policy Document.

Curator's House

A total of thirteen applications were received, when tenders were called for the use of this house and garden on the Rolleston Avenue frontage. An excellent submission was made by the Friends of the Christchurch Botanic Gardens and recently talks have been held between

representatives of the Friends and another leading contender, to determine whether an opportunity exists for a combined venture.

We await the outcome with real interest.

In conclusion, with the longer daylight hours of summer, I trust you all have an opportunity for frequent visits to the Botanic Gardens – don't miss visiting the Information Centre, as Wendy and Anne are responsible for some excellent displays.

Warwick Scadden Horticultural Operations Team Leader

Coming Events

In Brief		
Guided Walks		
19 December 1998	Saturday	1:30pm
16 January 1999	Saturday	1:30pm
2 February	Tuesday	9:00am
18 February	Thursday	7:00pm
20 February	Saturday	1:30pm
23 February	Tuesday	7:00pm
25 February	Thursday	7:00pm
2 March	Tuesday	9:00am
Other Events		
4 December	Friday	6:00pm
(see page 6 for char	nge of venue)

Guided Walks

2 February, 2 March

These Tuesday walks begin from the Information Centre at 9:00am and are conducted by a member from the Botanic Gardens staff. Note that there will not be a walk in January 1999.

Saturday Walks

Max Visch is in charge of the Saturday walks. These are:

19 December Buckthorn family: Matagouri,

Tainui and other natives of the

Buckthorn family.

16 January Going native - a look at some

representative species of of NZ

flora.

20 February Climbers, Twiners, and Ramblers,

native and introduced.

These Saturday walks depart from the Information Centre at 1:30pm.

Festival of Flowers Walks

The evening walking tours of the Botanic Gardens on Thursday 18th, Tuesday 23rd and Thursday 25th of February leave from the Information Centre at 7:00pm.

Each is a walking tour through one of the finest Botanic Gardens escorted by the Friends of 'te Botanic Gardens.

Ikebana Exhibition

Friday 19 - Sunday 28th February.

The Christchurch Chapter 202 of Ikebana International present "The Art of Japanese Flower Arranging" at the Botanic Gardens Information Centre.

Other Events

December - Information Centre

Forest and Bird Society - Plants to attract birds into your garden and Carter Holt Harvey Project Crimson, saving our Rata and Pohutukawa.

January - Information Centre

The Versatile Herb, a display of fresh and dried herbs along with their uses.

The Big Day at the Botanic Gardens

February 28 - An opportunity to learn from the experts, bringing the best of nature and horticultural wealth together along with live music and children's entertainment 10:30 - 4:00pm, various areas.

Also featured each month, Things To Do In The Garden and information on a selection of conspicuous plants around the Gardens.

Coming Events continued ...

Wednesday 10 March

2:00pm in the Information Centre.

Plant discussion with members and BG staff. Please bring a plant and information about it to share. Afternoon tea.

Enquiries to Adrianne Moore, ph 351-5915.

Reminders about these events appear during the preceding week in the Christchurch Press Weekend Edition gardening pages under the heading of "Cuttings" and in the Christchurch Star "Around Town" columns.

Recent Events

Visit to Magnolia Planting

A visit to the Magnolia Planting at Lincoln University on 5 November 1998. Attended by 35 people. Visit arranged by Deryck Morse.

This was a day to look forward to. An invitation to the 'Friends' to visit the largest collection of magnolias in the South Island, conducted by Roy Edwards whose efforts to acquire the area for the planting were finally successful.

The first plantings were made in 1990, in which year, 57 species and cultivars were planted out. Since then a further 50 or so have been added to the collection.

The land which is at the western end of the University sists of silt loam over sand with some clay.

Rabbits are a constant threat. They burrow to the roots which are fleshy and succulent and feed on them. Constant war must be waged against them – one was spotted by Roy – but they keep coming in from the surrounding area.

Magnolias, we were told, are thought to be among the earliest flowering plants in evolutionary history. Fossil records suggest that magnolias once occurred throughout Western North America, Western Asia and Europe in addition to their present distribution. Their range became restricted because of climate change and glaciation.

Magnolias are pollinated by beetles; themselves among the oldest class, or order, of insects. In New Zealand, moths, bees and other insects are the likely pollinators. In their native areas of growth a large array of beetles has been collected on magnolias.

The structure of magnolia flowers and fruits seems to have changed little over geological time. Because beetles can be destructive pollinators, Roy said, magnolia embryos are protected inside tough carpels that beetles cannot penetrate.

In magnolias the sepals and petals are not easily distinguished and both are commonly referred to as sepals. Also magnolia flowers are produced on short "stems" called peduncles which are often referred to as pedicels.

Not many magnolias were flowering when we viewed them at the beginning of September, and those that were showed signs of frosting. Magnolia sprengeri, however, was in flower, with pink blooms shaped like waterlilies and was an arresting sight.

One of the most commonly grown Magnolias is 'stellata' in its various forms. Roy said that stellata is a variety of Magnolia kobus – stellata differs from the species kobus in having a smaller, more shrubby growth habit. Often its leaves are narrower and its flowers have a greater number of petaloid tepals (12 or more). It flowers at a very early age, one or two years, and is one of the earliest magnolias to flower in spring. White is the usual colour, but this may be tinged with pink. Several very pink forms are grown.

Magnolias do well in full sun but need wind protection. This has been provided by tree plantings which provide some respite from the southerlies and westerlies. Bark mulch or chips insulates the roots from the sun and provides the slightly acid soil which magnolias require.

The closely allied Michelias have also been planted -10 spp. and cultivars to date. M. doltsopa was in bloom. Its creamy white magnolia-like blooms have a greeny tinge near the base of each petal.

In addition to the splendid magnolia collection there is a small collection of Viburnums numbering about thirty, mainly species and cultivars.

The number world wide is estimated at between 120 in 'Handbook of Trees and Shrubs' to 225 in the third edition of 'Hortus Third'.

Some Viburnums are greatly valued for their perfume. V. carlosii and V. 'Burkwoodii' are especially so. The latter was in flower at the time of our visit. Viburnums figure prominently in

Recent Events continued ...

Christchurch gardens and also the Botanic Gardens in spring time.

For those who want further information on Viburnums or Magnolias, Information Sheets 1. Magnolias and Sheet 2. Viburnums are available for 50 cents each, at the Botanic Gardens Information Centre. Each comprises several pages.

In the Christchurch Press, Saturday, 24 October 1998 under the heading 'The Magical Lure of Magnolias' is a short article on the South Island's largest magnolia collection. It states that Lincoln University has been given \$5,000 from the Brian Mason Scientific and Technical Trust

The grant will be used to buy new plant material and invest in better labelling, says environmental

horticulture lecturer Roy Edwards. He says, "Hopefully next year we will be able to obtain further funding to allow DNA mapping of the collection to staff." He adds, "This will allow a better understanding of the correct placement of hybrid and cultivar material."

Peter Mahan

For Sale

Garden Aprons as used by the Friends at the Plant Sale. Black and white striped fabric. Limited number. Great Christmas present for gardeners.

\$15 from the Information Centre

Bits & Pieces

Subscriptions

For all members who have not paid their new subscriptions, this will be the last newsletter you will receive in this financial year. To renew your subscription, the amounts are:

Family	\$18.00
Single	\$12.00
Associate	\$12.00
Student	\$6.00

If you do not receive the next newsletter, No. 38, then you have not paid your 1997 subscription.

Plant Sale

The annual October sale on the new Hall lawn site was an extremely well organised team effort. All the helpers looked very smart in the new aprons and the area gave space for everything and everybody. Each year we improve on the proceedings and will continue to do so. This coming year we plan to look into labelling and to be tougher on the variety of plants. Thank you to all members who toiled to help boost our funds by \$10,000. We must mention the dedication shown by the Gardens staff who have guided us all year and have insisted on a high standard for us to maintain.

The potting shed team deserves special mention as they worked every week for several months to provide quality plants. Whenever I have called in to see the team it has always been a high-spirited, hardworking group.

There are a large number of behind the scenes people who provided food, lists, directions, support, rosters and money counting so to all who made it a huge success, I thank you for a satisfying and active day.

Faye Fleming

Gardens International Seed Exchange Helpers

Once again I am indebted to the supportive and dedicated capsule of Friends who share in one to of the responsibility of running our seed exchange. From February to May they arrive once a week (sometimes even twice) to sieve, slice and sluice thousands of seeds which are then labelled, packaged and dispatched to virtually the 4 corners of the globe.

Special thanks to Dorothy Croucher for her roster co-ordination through endless telephoning. Many thanks also to Jane Bailey. Why? She shops at Johnson's Grocery Store and feeds through to me a dependable and regular supply of big brown paper bags (minus the provisions!) which are excellent for collecting bulky seed heads in the field.

Thank you all.

Sue Molloy Botanical Technician

Programme 1999 Christchurch Friends of the Botanic Gardens

Thursday 18th 7:00pm)
Tuesday 23rd 7:00pm) Festival of Flowers – Guided Walks
Thursday 25th 7:00pm)

March

February

Wednesday 17th 7:30pm Colin Neal – Grape Expectations

April

Wednesday 21st 7:30pm Geoffrey Tunnicliffe – Birds of the Christchurch Botanic Gardens

May

Wednesday 19th 7:30pm John Thacker – Surveillance plants - what are they, and how do they

affect us?

June

Wednesday 16th 7:30pm David Given - Colour, aroma & culinary delights - A tour of

Mediterranean floras of the World.

July

Wednesday 21st 7:30pm Lyn Heaton – A history of parks.

August

Sunday 11th 2:00pm AGM – A tour of the Cuningham and other display houses

September

Wednesday 15th 7:30pm Roy Edwards / Adrianne Moore / Kevin Grant – Annual Quiz

October

Saturday 2nd 9:00am 9:00am 9:00am 9:00am Dr Noel Porter – Use of healing oils from plants

November

Wednesday 10th 7:30pm Roy Edwards – Observations on magnolias at Lincoln

December

Friday 3rd 5:00pm Xmas Function

The Least Successful Explorer

Thomas Nuttall (1786-1859) was a pioneer botanist whose main field of study was the flora of remote parts of North-west America. As an explorer, however his work was characterised by the fact that he was almost permanently lost. During his expedition of 1812 his colleagues frequently had to light beacons in the evening to help him find his way back to camp.

One night he completely failed to return and a search party was sent out. As it approached him in the darkness Nuttall assumed they were Indians and tried to escape. The annoyed rescuers pursued him for three days through bush and river until he accidentally wandered back into camp. On another occasion Nuttall was lost again and lay down

exhausted. He looked so pathetic that a passing Indian, instead of scalping him, picked him up, carried him three miles to the river and paddled him home in a canoe.

Thomas Nuttall's name has been honoured in *Nuttallia cerasiformis*, a member of the Rose family and related to *Prunus*. He is best remembered for his discovery of the exquisitely beautiful Pacific Dogwood *Cornus nuttallia*. The tree was named after him by the famous bird painter John James Audubon, a close friend of Nuttall. The bright red/orange berries of this dogwood tree are the favoured food of the Bandtailed pigeon and in his Birds of America, Audubon represented the bird and the tree together.

Max Visch

Times for Botanic Band Concert Series

January 31st	11:00am - 12:00pm 1:00pm - 2:00pm 3:00pm - 4:00pm	Tranz Rail Brass Band, Archery Lawn Band of the Second Battalion, Young Person's Play Area L J Hooker Kaiapoi Brass Band, Daffodil Woodland
February 7th	11:00am - 12:00pm 11:00am - 12:00pm 1:00pm - 2:00pm	Christchurch Metropolitan Band, Young Person's Play Area New Zealand Fire Service Brass Band, Archery Lawn Christchurch City Salvation Army Band, Young Person's Play
	1:00pm - 2:00pm 3:00pm - 4:00pm 3:00pm - 4:00pm	Area Christchurch Metropolitan Band, Daffodil Woodland Riccarton Districts Highland Pipe Band Inc, Archery Lawn Tranz Rail Brass Band, Daffodil Woodland
February 14th	11:00am - 12:00pm 11:00am - 12:00pm	Riccarton Districts Highland Pipe Band Inc, Young Person's Play Area New Brighton Silver Band, Archery Lawn
	1:00pm - 2:00pm 1:00pm - 2:00pm 3:00pm - 4:00pm 3:00pm - 4:00pm	Linwood Salvation Army Band, Young Person's Play Area Christchurch City Salvation Army Band, Daffodil Woodland Sydenham Salvation Army Band, Archery Lawn New Zealand Fire Service Brass Band, Daffodil Woodland
February 21st	11:00am - 12:00pm 11:00am - 12:00pm	L J Hooker Kaiapoi Brass Band, Young Person's Play Area The Canterbury Caledonian Royal Stewart Pipe Band, Archery Lawn
	1:00pm - 2:00pm 1:00pm - 2:00pm	Linwood Salvation Army Band, Young Person's Play Area The Canterbury Caledonian Royal Stewart Pipe Band, Daffodil Woodland
	3:00pm - 4:00pm 3:00pm - 4:00pm	Sydenham Salvation Army Band, Archery Lawn Band of the Second Battalion, Daffodil Woodland



This year's Christmas Function is a combined function with the Friends of the Canterbury Museum.

Date:

Friday, 4 December 1998

Venue:

Upstairs in the Museum

Visitors' Lounge

Time:

6:00pm

Please bring a plate of suitable food and enjoy a social time with 'friends'.

Feature Articles

The Golden Rain Tree

On the Paulownia Lawn in The Christchurch Botanic Gardens just west of the Ranger's Cottage stands a small group of Golden Rain Trees Koelreuteria paniculata. Visitors frequently comment on these mature trees which are among the largest of their kind seen anywhere in New Zealand.

Koelreuteria is a small genus of deciduous trees native to East Asia and belonging to the largely tropical family of the Sapindaceae - which also includes two well known New Zealand natives, the Akeake and Titoki.

rate best known is the Golden Rain tree, a native of China where it inhabits hot, dry river valleys. The first European to discover it was the French Jesuit priest Incarville who sent seed of it to Paris. The species also occurs in Korea and has been cultivated in Japan for centuries.

The short, sometimes multiple trunk supports a wide spread, domed canopy. The large pinnately compound leaves are made up of 11-15 coarsely and irregularly lobed and toothed leaflets.

Flowering occurs in late summer and the snowy clusters of bright yellow flowers are borne in large upright panicles at the ends of the branches. Soon these are followed by much inflated, papery, pinkish brown to yellow brown capsules - each containing shiny black seeds. The capsules remain on the tree for a long time and are not only beautiful but also very distinctive of this tree.

At one time rarely seen, the Golden Rain Tree is now being widely planted in parks and gardens, on river banks and along streets and avenues. It is a tree that loves the sun and provided drainage is adequate is tolerant of a wide range of conditions, growing equally well in alkaline and acid soils. It is very hardy - withstands cold winters as well as hot dry summers.

A fairly quick growing tree of fine form it provides welcome shade in the garden and in the cooler climates of New Zealand where night frosts are not infrequent, the foliage changes to a glorious golden yellow in autumn which delights the eye.

In China the tree was often planted to mark the tombs of feudal princes. A yellow dye was obtained from it and the flowers are reputed by the Chinese to have medicinal properties. Necklaces were made of the black seeds by stringing them together.

The generic name *Koelreuteria* honours Joseph Gottlieb Koelreuter 1733-1806, professor of Natural History at the University in Karlsruhe, Germany and Curator of the Botanic Garden in that city. Koelreuter was the first botanist to carry out large scale experiments in the hybridization of plants.

During the years 1761-1766 he published detailed descriptions of the male and female parts of flowers. He showed that in many plants, pollen is carried from one flower to another by insects and in others by wind. He explained that insects are attracted to flowers by colour and scent and that the nectar flowers produce is to "reward" these creatures for their labour in bringing about pollen transfer and thus ensuring successful fertilization and the production of seed.

Koelreuter laid the foundations for the work of both Mendel and Darwin.

Max Visch

Spring Walk with Friends of Christchurch Botanic Gardens

19 September 1998

It is not always the most colourful of the spring flowering plants that draw our attention in spring. Many other special features such as perfume, leaf forms and textures and bark are prominent then, as well as flowers.

The flowering notes cover some of the plants we discussed with conspicuous spring effects. The route covered the river bank near the Western Bridge, Magnolia and Azalea Garden, the Water Garden, New Zealand Garden, the Rock Garden and Rhododendron Gardens. Guides were Max Visch, Peter Mahan and Adrianne Moore.

On the river bank near the Western Bridge is *Acer negundo var. violaceum*, Box Elder, Acenaceae, from North America. Notable for the long pendulous tassels of the male flowers which bear the pollen.

In the Azalea Garden – *Prunus laurocerasus*, Cherry Laurel, Rosaceae. This adaptable plant is usually

Feature Articles continued ...

seen as a hedge but the specimen in the Azalea Garden had a spectacular display of flowers on a handsome tree. Upright racemes of small sweetly scented white flowers sit above the shiny bright green leaves.

In the Eastern Azalea Garden and near the water garden *Betula utilis var. jacquemontii*, "Silver Shadow" Betulaceae. "Himalayan Birch". Notable for the white bark—named after the French naturalist Victor Jacquemont 1801-1832.

Arctostaphylos manzanita. Bearberry Ericaceae from California. From Arktos – a bear, Staphyle – bunch of grapes, manzanilla – Spanish word meaning small apple. This evergreen shrub is allied to Rhododendrons, likes acid soils but loves the sun. The leaves are adapted to heat by sitting with the leaf edge upright not flat. The pink or white flowers are pitcher shaped arranged as spikes. The reddy brown bark is a feature on mature specimens.

Amelanchier lamarckii Rosaceae from Europe but thought to have originated in North America. A large shrub or small tree – deciduous – of spreading habit with coppery red silky young leaves which change to green then red in autumn. White flowers followed by edible fruit. Named after Chevalier Jean Baptiste de Monet Lamark (1744-1829), a distinguished naturalist and author from France, who also wrote on evolution prior to Darwin.

On lawn east of Te Puna Ora towards Water Garden – *Viburnum x burkwoodii*. Hybrid between V. carlessii and V. utile. This very large specimen was most impressive in full flower (pink buds, white very fragrant flower). Original raised in 1924 by English nurserymen Messrs Burkwood and Skipworth. Behind this magnificent Viburnum is

Illicium anisatum. Chinese Anise. Illiciacea from China and Japan and allied to Magnolias.

A seldom seen evergreen shrub with glossy deep green leaves and pale yellow scented flowers with strap like petals. The bark and leaves are aromatic. Illicium is from Latin meaning allurement, inducement from enticing aromatic scent. Worthy of planting in association with Rhododendrons.

Beside Illicium is *Prunus serula*, Birch bark cherry from West China. Introduced to Britain by 'Chinese' (E.H.) Wilson. The new bark is red brown mahogany like, and polished.

Back past Te Puna Ora turning left into the Water Garden to Osmarea burkwoodii, now known as Osmanthus x burkwoodii. Oleaceae, Sweet Olive hybrid from Messrs Burkwood and Skipworth in UK about 1930. Large bushy evergreen shrub with small oval leaves – shiny dark green leathery and toothed. Smothered in spring with small tubular highly scented white flowers. Name from Greek 'osme' – fragrance and 'anthos' – a flower.

Gordonia axillaris. Theaceae, China and Taiwan, named for James Gordon (d. 1781), correspondent of Linnaeus and nurseryman of London. Camellia like shrub – evergreen. Large leathery dark glossy green shrub, usually with some red leaves. Camellia like white flowers with papery petals and yellow stamens in spring. Rarely flowers in Christchurch. Much used in Sydney, NSW as a street tree flowering in winter. Flowered in Christchurch Botanic Gardens this spring for the first time for some years.

Just before the large macrocarpa beside the Water Garden is *Elegia capensis* from Cape of Good Hope, South Africa. Rush like plant with clump of green stems with feathery tops, and prominent bronze bracts at the nodes. Likened to horsetails but not invasive. Useful in floral art and for architectural form.

On the path between the Cockayne Memorial Garden and the Rock Garden is *Carmichaelia williamsii*, Distinctive New Zealand broom. Named after Captain Dugald Carmichael, (18th-19th century), Scottish Army Officer and botanist. This species named after Bishop Williams who discovered it at Hicks Bay. Mature plants have flattened branches which function as leaves, and yellow purple veiled drooping flowers.

Rock Garden Area

Enkianthus perulatus Ericaceae, from Himalaya to Japan. Name from Greek 'enkyos' – pregnant and 'anthos' – a flower. Small deciduous slow growing shrub with small white urn shaped flowers in spring which emerge with new leaves. Spectacular red early autumn foliage.

Enkianthus campanulatus, Red Vein Bell Flower from Japan. Taller growing deciduous shrub with dull green leaves that are bright red in autumn. Creamy bell shaped flowers with red veins.

Beneath the Davidia involucrata at the eastern end of the Rock Garden, is another Osmanthus worthy of planting –

Feature Articles continued ...

Osmanthus delavayi, from Yunnan in China. Introduced to Britain in 1890 by Abbé Jean Marie Delavay – a French missionary botanist. A slow growing small evergreen shrub with fragrant white flowers borne profusely in spring.

Most of these plants are suitable for use in home gardens to add interest and variety amongst the more usual feature plants in spring.

Many other plants were mentioned and admired including – Magnolias, Hellebores, Prunus, Abies pinsapo, Spanish fir, with the red male cones, and Cunninghamia lanceolata (Chinese fir) with a fine display of pollen, trilliums, daphnes, Mahonias and New Zealand fuschias.

L'ianne Moore

Gardens Library Donations

The past year has been a generous one in the donation of books to our library. Firstly on behalf of the staff, I would like to thank the Friends, again, for their most generous annual book grant of \$1,000. This handsome donation allows us to purchase further specific reference publications beyond the financial allocation which the City Council grants us.

Mr Alan Joliffe donated a considerable collection of books covering many topics within the sphere of horticulture.

Mr Chris Gill (ex Chch) donated numerous volumes one "Journal of the Royal Horticultural Society". They date between 1948 - 1991, and have helped to alleviate many gaps which existed throughout that era within our own collection from the RHS series. Ours date from 1916, so as can be imagined, we still have a few gaps to close!

Finally Mr Arthur Healy donated a most generous and extensive range of scientific journals and books from his own private collection. They include:

"N.Z. Weed and Pest Control Conference Proceedings" 1960-1997 (later became N.Z. Plant Protection).

"Transactions and Proceedings of the N.Z. Institute" 1880-1929.

"Transactions and Proceedings of the Royal Society of N.Z." 1935-1961.

The "Transactions and Proceedings of the N.Z. Institute" is of particular interest for our N.Z. collection. It was published annually from 1869 for two reasons. Firstly, it included the proceedings of the various societies affiliated under the N.Z. Institute Act. Secondly, it consists of transactions of the Institute containing the scientific papers read at various meetings which were considered worthy of being printed *in extenso*.

Many papers are of most important character and all are valuable contributions to scientific literature, particularly those bearing on the natural history and resources of the colony.¹

The main sections in each edition usually covered botany, natural history, chemistry, geology and miscellaneous. Mr Healy's donation has enabled us to complete many decades, or parts thereof, within our own collection. However, there are still many more to track down. I have a list of the missing years and ask if anyone either has, or knows the whereabouts of, "Transactions ..." editions which could be donated or negotiated for inclusion with our collection.

Thank you.

Sue Molloy Botanical Technician

 "Transactions and Proceedings of the N.Z. Institute" Vol. 1, May 1969.

Plants in the Service of People

Last Easter while walking with our family through bush at Point Elizabeth, Greymouth, I developed toothache.

Kawakawa, a small aromatic tree, was growing alongside the track. I had read that the large, fleshy, heart shaped, glossy leaves contained myristican, a substance similar to the pain numbing constituent of cloves. Chewing the leaves had a sound chemical basis for alleviating toothache and I found that it did indeed work.

On arriving back in Christchurch, I made an appointment with my dentist. On the day, he was away and there was a reliever. She asked me, "Which tooth?" and on pointing to my lower left molar she looked inside and used her probe.

"That is the biggest cavity I have seen", she said. "That is the biggest cavity I have seen."

"All right", I replied. "I heard you, there's no need to repeat it."

"I didn't", she said. "That was the echo!"

10 FRIENDS OF THE CHRISTCHURCH BOTANIC GARDENS

Contact Numbers

President	Faye Fleming	351-7798	Committee Members	Maria Adamski	366-1701
Vice President	Dennis Preston	351-4131		Roy Edwards	338-5969
Immediate Past President	David Given	351-6069		Tony Burnett	384-1381
Minutes Secretary	Jim Crook	358-5845		Brenda Childs	382-2451
Treasurer	Colin Neal	359-8080		Lynn Heaton	355-7563
Membership Secretary	Ruby Coleman	355-8811		Cullen Pope	025-280-4429
Newsletter	Peter Mahan	354-1550		Susan Molloy	366-1701
Walks/Guiding	Max Visch	338-2273		Valya Pavluk	388-5755
Garden Tours	Deryck Morse	332-6184			
Ex Officio	Warwick Scadden	366-1701			
	Richard Doyle	366-1701			

Friends of the Christchurch Botanic Gardens Inc PO Box 237 Christchurch New Zealand