# Newsletter

For Friends of the Christchurch Botanic Gardens Inc To Promote, Protect & Preserve No 109, Spring 2017

# **President's Report**

My first year as President of the Friends of the Christchurch Botanic Gardens Committee has been busy and rewarding on many fronts.

#### The Committee

I know you would all like to join me in thanking your hard working Committee who use their collective knowledge and diverse skills to conduct the Friends' business, and activities.

Alan Morgan (Immediate Past President), Don Bell (Propagation leader), Charles Etherington (Minute secretary), Tracy Shui (Treasurer), Penny Martin (Membership secretary), Mary Carnegie (Events coordinator), Graham Chick (Correspondence) co-opted after the last AGM, and Sandi MacRea have all carried out their appointed tasks with enthusiasm for the Friends Society. Unfortunately we accepted with regret Sandi's resignation in April this year.

Our grateful thanks go to John Clemens (Curator CBG, Conservation & sustainable development) our ex-officio committee member. John has played an important role in leading us through the formulation of a Memorandum of Understanding with the City Council Parks Division.

### **Notable Milestones**

A great achievement this year has been the signing of a Memorandum of Understanding (MoU) between the Christchurch City Council and the Friends.



Signing the MoU

This document will put a reciprocal relationship between the Gardens staff and the Friends on a firm basis, as we work together in the future to make the Christchurch Botanic Gardens the best they can be. The Friends will also have clearer guidelines as to how we can best support the Gardens staff in our many volunteering roles.

I would like to thank all the Gardens staff, who have contributed to FCBG activities over the past year. I would also like to thank all the Friends who have volunteered to help with CBG events. Thank you in advance to all the Friends who have offered to help in the Lawrie Metcalf Herbarium; I am sure this offer is appreciated and will be activated in the very near future. This reciprocal interaction that the MoU underpins is what we would like to see more of in the future.

### **Bi-annual Study/Financial Grant**

This year we formalized the sponsoring of a bi-annual study/financial grant for Botanic Garden employees, to be used for the betterment of the applicant and the Botanic Gardens. To date the funding has been taken up by Heidi Connolly for study at the University Cass Field Station. We hope to have more applicants in the next funding round in August.

A grant of \$1200.00 was once again given to the CBG library for books to be purchased.

### Survey

A survey, conducted towards the end of last year, was not hugely successful if you count numbers returned. However, as a result, we have trialled holding our winter talks during May and July on a Friday morning. It has worked well so far. Thank you to those who returned the survey, and my apologies if you have not been contacted individually (see future directions).

# **Speakers and Events**

This year we have increased the level of advertising to include coloured flyers, local newspapers and radio station, and the Visitors Experience Team (CBG) have advertised for us on the TV monitor in the Ilex Centre, Facebook, and the Gardens' website.

Our very successful Friends' Christmas party was combined with Andrew Rutledge (Head of Parks) and Alan Morgan (Immediate Past President) presenting five Lifetime Awards; Helen Constable, Jim Crooks, Adrienne Moore, Neil O'Brian and Faye Fleming for their services to the Friends over the years.

Our monthly talks, have attracted double the number of Friends with an increasing number of the general public. I would like to thank Janet Begg for her tireless commitment and help with greeting at our meetings and for the many other volunteers who have helped with the phone tree and afternoon teas.

### **Horticultural Autumn Show**

The Friends' stand at the Horticultural Society Autumn Show included an educational display of dry garden plants (thanks to Guillaume Jacob, section curator, for his specialist input), as well as a sales table and guided walks. We made a profit of \$760 and we attracted positive attention, gaining a substantial number of new Friends as a result.

### **Guiding:**

Our Guides are great ambassadors and promoters of the CBG. Even though numbers of visitors guided daily are still relatively low, tour groups have increased and returned good profits. Heartfelt thanks to Faye and her husband Neil Fleming for their tireless leadership, to Pat Whitman for her organization, and the team of guides who show up continuously during the season. It is a huge commitment.

The Friends will once again, sponsor a Guide to attend the Australasian Guide's conference in Canberra.

## **Propagating**

Our propagating teams led by Don Bell and Jeanie Gluyas continue to add significant revenue to our coffers. The permanent plant sales stand has seen excellent returns, at least doubling the plants sold compared to the wheelbarrow of the past. Thank you to Brian and Karen (Rangers CBG) who have opened and closed the stand and collected the money daily.

The propagating area has continued to be up-dated and expanded. Many thanks to Neil Fleming for constructing some new tables for us, and to the Garden staff, Nicky Brown, Richard Poole, Lizzie Bristow and Guillaume Jacob, who have worked with us to procure plant cuttings/seeds and help with irrigation and materials.

#### **Newsletter:**

Our Newsletter continues to be a highlight every three months. Thank you so much to Bill Whitmore for editing, Maria Adamski for layout, and Penny Martin for distribution. This is a very large undertaking. Thank you to all who have contributed such interesting articles.

It has been great to see contributions from the section curators and other staff members in the Newsletter again.

### **Future Directions:**

### **Christchurch Botanic Gardens Spatial Plan**

This document is a visual representation of the BG Master plan. It went out for public consultation during May, the feedback has been collated and it has been presented to Council.

#### **Friends**

In the coming year we hope to work more closely with the garden staff. This past year has been one of review and waiting for the staff of the CBG and an outcome has not yet been announced or vacant positions filled. I know that some of you have expressed a willingness to volunteer in different ways and may not have heard back from us. This has also been a frustration for the Committee as we have held off getting back to you until the staff has clearer direction. This will happen and I hope those of you willing to volunteer in the Gardens will be still available.

We need to review our website in the coming year and create a Facebook page to keep up with the times.

In consultation with the Botanic Gardens staff we will work towards providing botanical, horticultural, conservation and scientific information and advice to visitors through the Science & Research Centre Master Plan Project. We will need your help to do this.

Please get in touch with me, or one of the Committee, with any good ideas for the future.

Thank you

Jeanette Christensen (President 2016/17)

This is a shortened version of the Presidents report. Please email Jeanette if you would like a copy of the original report

# **Garden News**

# An update from David Barwick, Collection Curator, Christchurch Botanic Gardens

It's always exciting to do a stint of redevelopment work in a border among the myriad tasks of winter. Some parts of the College Border and the Temperate Asian Border were completely inaccessible and overgrown by large shrubs that were detracting from the overall appearance and value of these areas - all had been planted in the 1970s and many were dying out in their centres (ie. Deutzias), or layering across paths and borders (Cotoneasters) and were beyond saving. Staff and volunteers worked tirelessly over the late autumn and early winter months to clear away the vast amounts of woody debris, opening up new space to plant into.

Decades of fine twigs, leaves and petals had built up into a deep rich leaf mould in the Asian Border which made planting a breeze - *Michelia (Magnolia) crassipes, Loropetalum sinense* and its burgundy coloured cultivars along with the yellow creeping bamboo *Arundinaria auricoma* and the temple grasses *Hakonechloa* 'albo-striata' and *H.* 'Aureola' will fill in the previously bare understorey and provide some winter colour.

A small Acer pentaphyllum that had been pushed

sideways by the Deutzias was transplanted into the space, while divisions of the creeping *Iris japonica* were salvaged from a nearby colony to replace the wasp infested Agapanthus clump. Hopefully the fairy bamboo and *Aucuba japonicas* will screen out (or soften) the severe bulk of the nearby Public Hospital buildings, as well as adding an obviously Asian "feel" to this Geographic Collection.

Over in the College Border, the emphasis is on winter interest whilst the Herbaceous Border is empty and Reddish coloured shrubs including dormant. Hydrangea quercifolia 'Peewee', Pseudwintera 'Burgundy Delight' and Cornus alba 'Elegantissima' are a feature, while Camellia sasangua 'Silver Dollar' and "an oldie,but goodie" Camellia 'Guilio Nuccio' add to the growing array of early flowering Camellias already planted in recent years. Astelia 'Silver Spear', Leucothoe 'Crimson Globe' and Nandina 'Blush' break up the soft yellow drifts of Helleborus argutifolius that enjoy the dry, rooty shade beneath the Douglas fir and holm oak.

Luckily, most of this planting was done in the sunny weather between storms, before the soil got too wet to work - the wet claggy soils will be left to dry out a little before we apply mulching materials in spring.

# **Articles**

# The four genera of southern beech (Nothofagaceae)

The Nothofagaceae (southern beech) is a family of 42 species in four genera, *Fuscospora*, *Lophozonia*, *Nothofagus*, and *Trisyngyne*. Three of the genera are represented in New Zealand: *Fuscospora* with four indigenous species (red, hard, black & mountain beech), *Lophozonia* with one indigenous

species (silver beech), and *Nothofagus* with one introduced species from Chile (Antarctic beech) which has naturalised in at least two locations in the Canterbury foothills. Many other species are also present in New Zealand in cultivation from Australia and South America, but there are apparently none from the Malesian and New Caledonian genus *Trisyngyne*, at least according to Herbarium records.

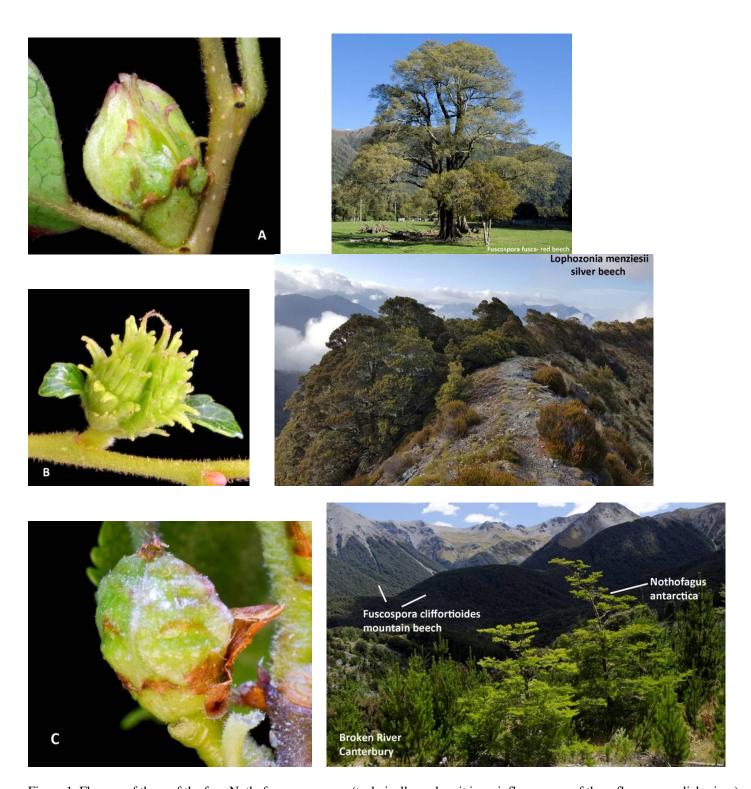


Figure 1. Flowers of three of the four Nothofagaceae genera (technically each unit is an inflorescence of three flowers – a dichasium) of: **A**, *Fuscospora fusca* – red beech; **B**, *Lophozonia menziesii* – silver beech; **C**, *Nothofagus antarctic* – Antarctic beech.

Previously species of southern beech have been classified within the Fagaceae family. However, based on DNA and fossil evidence, it is apparent that the southern beeches are a lineage as old as the

Fagaceae with both evolving from a common ancestor about 85 million years ago. Much of the diversity in Nothofagaceae is now extinct but based on fossil evidence the four surviving lineages, now

recognised as genera, were morphologically distinguishable by 38 million years ago.

Recent taxonomic changes breaking up the genus Nothofagus s.l. (in the broad sense) into four genera has been a little controversial. However multiple lines of evidence from pollen, DNA, anatomy and morphology (Figure 1), all suggest that the new genera are easily on a par with others in the Fagales, for example, with well-established genera such as Fagus (northern beech), Quercus (oak), Betula (birch) and Juglans (walnut). The treatment of southern beeches as a single genus until recently has partly been an artefact of early European based taxonomy, but mostly because of errors in taxonomy, and most of all because of the name itself becoming so well known in Southern Hemisphere biogeography. Southern beeches featured largely in an early distributional conundrum highlighted by the famous botanist Joseph Hooker in his "Introductory essay of The Botany of The Antarctic Voyage" (1853). He wrote about the widespread and disrupted Antarctic flora of South America, New Zealand and Australia and

listed genera in common to these locations, including *Nothofagus* (known to him as *Fagus*), a plant group apparently not capable of long-distant dispersal, and significantly this was before the theory of plate tectonics. This was only the start of southern *Fagus*, soon to be *Nothofagus*, being a key genus to solving Gondwana plant biogeography where much ink and digital bytes has been spent.

Resistance to what should be progress in taxonomic and nomenclatural is understandable with both ornamental and scientific favourites. Another example of resistance is the name *Acacia*, which based on nomenclatural rules (following a taxonomic change), should have been restricted to the Americas. This was thwarted by a vote in the nomenclatural session of the Botanical Congress in Vienna in 2005 down to vigorous lobbying. A future example of such resistance to change could be the spectacular water lily Victoria amazonica that based on nuclear DNA molecular analyses falls within *Nymphaea*.

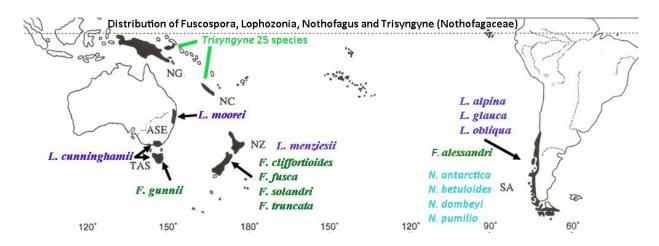


Figure 2

Similarly the break-up of the taxon *Nothofagus* is somewhat unpopular due to the restriction of the name *Nothofagus* to southern South America. However, treating the four subgenera of *Nothofagus* at the rank of genus has illuminated the obvious differences between them and the interesting phylogeographical relationships evidenced by their present-day distributions (Figure 2). It is now easy to see that New Zealand's silver beech (*Lophozonia menziesii*), rather than being closely related to

black, hard, mountain or red beech (all species of *Fuscospora*), is more closely related to myrtle beech (*Lophozonia cunninghamii*) and to Moore's beech (*L. moorei*) of eastern Australia, and three other species of *Lophozonia* from Argentina and Chile.

Kerry A Ford Allen Herbarium, LandCare Lincoln

### Re-christened

In a previous newsletter (Issue 104, Winter 2016), Bill Whitmore described *Illicium majus*, one of my favourite small trees in the Botanic Garden. However, as my own young trees have flowered for the first time, I find no mention of *majus* in my references, but an identical description, and photograph, of *Illicium anisatum*. I asked David Barwick, curator of the Asian border, and he said *majus* would be the name the seeds of the tree had been identified when they arrived in New Zealand, and were grown on and distributed as such. The three trees in the Asian border are a glorious sight in mid-August and so sweetly perfumed.



Illicium majus or anisatum flowering in the Asian Border

I planted my seedling trees in large tree pots, but David advised me to plant them into the ground now; after three years in pots, they will do better in the ground. He said to mix the heavy clay soil with compost, half and half, so the trees can adjust to their clay foundation. David is a plantsman who enjoys sharing his horticultural knowledge. I've learned a lot from him.

*Illicium verum*, commonly known as Chinese or star anise, also grows in the Botanic Garden. Its seed is used in Chinese and Vietnamese cuisine.

Diana Madgin

### **Commemoration at the Peace Bell**

About 100 people gathered at the World Peace Bell in the Gardens on 6 August to commemorate 72 years since nuclear bombs were dropped on the Japanese cities of Hiroshima and Nagasaki.



Gathering at the Peace Bell

Kate Dewes shared the wonderful news about the successful negotiations for a Treaty to Prohibit Nuclear Weapons in the United Nations on 7 July when 122 UN member states voted in favour of the treaty. Among other things the Treaty prohibits use, threat to use, production, manufacture, possession, acquisition, stock-piling, transferring, testing or deploying nuclear weapons.

The United States, Britain and France have arrogantly said they "do not intend to sign, ratify or ever become party to (the new treaty)." From now on, however, all nuclear weapon states and their

allies are on the wrong side of international law because nuclear deterrence is effectively banned. Each state which signs on to the Treaty will have to adopt legislation similar to New Zealand's. The treaty will be open for signature on September 20 at the beginning of the UN General Assembly and will enter-into-force once 50 States ratify.

Kate Dewes

# Tribute to W R (Bill) Sykes, MA, ONZM, FMLS

On a rainy August morning, four Friends of the Botanic Gardens met at Bill Sykes and Peggy Kelly's home at 115 Packe Street, St Albans. We were there for President Jeanette Christensen and Ex-President Alan Morgan to present a Life Membership Award to Bill for his very long service as Honorary Botanist to the Friends. The award reads:

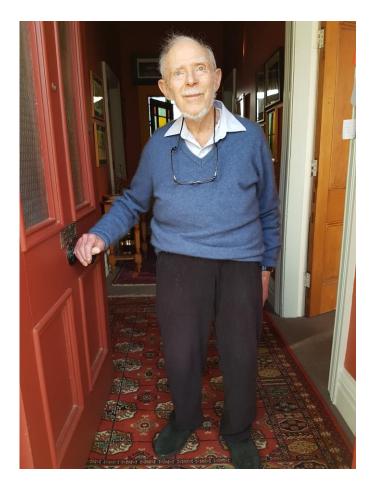
"16 July 2017

Bill Sykes has been awarded the status of life membership for extraordinary service to the Friends of the Christchurch Botanic Garden.

Bill was on the founding committee, serving for 3 years, and was instrumental in the formation and development of the Friends. He was appointed "Friends Honorary Botanist" and has retained that status until the present. Bill is generous with his expertise and helpful advice and has made many contributions to the Friends Newsletter, walks and talks, and help on plant sales days. This award also recognizes his lifetime contribution to botany, particularly his work on the Pacific Islands' flora."

Both Bill and Peggy were very moved, indeed we all were. Bill is frail now but his botanical mind is still alert.

Over tea, date scones and madeira cake, we were treated to Bill's recent prestigious honour, that very day mounted and displayed on the living room wall already filled with Pacifica botanical art and large black and white photographs taken in the Eastern Himalaya. The recent accolade is from the



Bill Sykes at his door.

venerable Linnean Society, inscribed in Latin, and bestowing on Bill the title of Foreign Member of the Linnean Society, a distinction only 50 foreign recipients enjoy at any one time. It was awarded for Bill's major opus *The Flora of Eastern Polynesia*, launched at Landcare, June 2016, and in late August to be launched in Rarotonga. Bill's son Julian will represent his illustrious father. The material for the 1,000 page tome was collected and collated over the last thirty years. The citation, in ancient formal Latin, has been translated into a somewhat quaint English. It reads:

"The Linnean Society, on the basis of the majority of votes, wishes the learned and deserving man W. R (Bill) Sykes

to be among its members for expanding knowledge excellently....By order and in the name of our society, we testify that he was elected according to proper procedure.... We wrote a single original document, and on this document we add the seal of our society."

In 1954, when Bill was only 24; this aspiring young botanist was chosen by Wisley to join a plant hunting expedition. There was a second expedition three years later. Many years later, in 2005, and by now working in New Zealand in Landcare at Lincoln, Bill received the ONZM (Officer of the NZ Order of Merit) for services to botany, in the Queen's Birthday Honours. An article "Plant collector – 'Botany Bill' Sykes", giving details of his expeditions and later achievements, appeared in an earlier Newsletter – No 102, Summer 2015/16.

Bill will be 90 1n October 2017.

Diana Madgin

# The Sir Joseph Banks Society Horncastle, Lincolnshire.

The last Newsletter included an article by Bindy Barclay on Sir Joseph Banks. She now follows this up by telling us about the Sir Joseph Banks Society and various Banks related happenings this year.

The Sir Joseph Banks Society aims to stimulate interest in Banks' life and achievements through education, research, publications and events, and by strengthening Lincolnshire links with Australia and New Zealand.

The Society's achievements are a testament to the commitment of a small group of highly able individuals keen to see Bank's legacy recognised. It has close links with the institutions that hold Banks collections, specifically Eton College, The Natural History Museum and Kew Gardens, regularly hosting talks from scholars from these institution as well as farther afield. With the Lincolnshire Naturalists' Union, Lincolnshire Wildlife Trust, the Society has embarked on an important project to collect and profile the botanic life of the region. Using volunteer collectors specimens will be housed and catalogued by the Natural History Museum and augment the existing collection of the Lincolnshire Naturalist Union. The University of Lincoln hopes to study the genetics of the specimens once they have been catalogued and scientists will be able to study changes over the last three centuries, dramatically

improving the understanding of the natural history of Lincolnshire and informing future environmental decisions.

Housed in a heritage-listed building, restored by the Society to the highest standards, a craft shop raises funds for the society's work. A reading room displays a research collection together with Banks memorabilia. At the rear, the Society maintains the Sir Joseph Banks Tribute Garden. To the New Zealand eye it is a curious place to visit. Our native species are nurtured with mix of South African. Chinese, Japanese and African. A eucalypt has become a gangly oversized problem while plants which we would leave to fend for themselves, must be lifted and potted for protection from the bleak Lincolnshire winter before planting out again in spring. Transplanted and mingling, hardly elitist, simply celebrating botanic diversity and very much in the spirit of Banks.



The Sir Joseph Banks Tribute

The 250<sup>th</sup> anniversary of Cook and Bank's voyage and the 200<sup>th</sup> anniversary of Banks death in 1820 pose significant opportunities for collaborative projects. The Society is keen to foster links with New Zealand and our own Banks collections. Two



Garden and View of the Sir Joseph Banks Tribute Garden

of its committee visited last year and met with the curator of the Banks and Solander herbarium at Te Papa, while the chair has corresponded with the Allen Herbarium here.

If you happen to find yourself in Horncastle (well worth it for antiques), make yourself known. You will be warmly welcomed.

Join at : <a href="http://www.joseph-banks.org.uk/membership/">http://www.joseph-banks.org.uk/membership/</a>

# Banks in 2017 – redefined?

Joseph Banks, Science, Culture and the Remaking of the Indo-Pacific World

Bank's influence on the Indo Pacific is the topic of a series of workshops, culminating in a conference in September 2017. While many scholars have studied Banks' activities in specific regions such as China, Australia, or India, this project will develop a more integrated vision of Joseph Banks by locating him in this history of the remaking of the Indo-Pacific world. Workshops to date have encompassed representations of Banks from feminist, literary and art history perspectives as well as from those of scholars of maritime and exploration interests. The ultimate goal is to examine the transformative influences of Banks on his period and beyond with view to develop a major grant application that will be able to absorb a more integrated and complex vision of Banks, in the build-up to the 200th anniversary of his death that will take place in 2020.

Find more information at: <a href="http://www.rmg.co.uk/work-services/what-we-do/learning-partnerships/joseph-banks-science-culture-and-remaking-indo-pacific-world">http://www.rmg.co.uk/work-services/what-we-do/learning-partnerships/joseph-banks-science-culture-and-remaking-indo-pacific-world</a>

<u>The Banks Papers – State Library of New South Wales</u>

Banks' letters are spread across the globe, in part because that is where he sent them, in part because his effects were split when auctioned some time after his death. At the State Library of New South Wales an exciting project invites volunteers to undertake the transcription of over 7000 digitised letters, notes invoices and accounts. After registering, transcribers can work on any selected article, many of which are botany related. Library staff then review and approve this text. The work gives a chance to get alongside Banks and his correspondents and glimpse the minds of the period.

See more and have a go at: https://transcripts.sl.nsw.gov.au/project/Banks%20P apers

## Cook's Centennial:

Watch out for advisories from the Ministry for Culture and Heritage about celebrations planned for the 250<sup>th</sup> anniversary of the Endeavour Voyage.

# Emissaries – Lisa Reihana at The Venice Biennale:

Banks was on the door in Venice- alive and well and introducing the work that recasts the voyages

and the original European "fabrication" of the Pacific to suggest a more complex story.

<u>pavilion-opens-in-venice-with-lisa-reihana-</u> emissaries

See more at:

http://www.creativenz.govt.nz/news/new-zealand-s-

# **Friends News**

### Call for volunteers

The Botanic Gardens is looking for 12 volunteers to help at an event on 14 October as part of Conservation Week. This will be a joint event with DOC and other organisations that will see children and their families carrying out nature-based missions over a period of four hours.

We would ideally love six volunteers to help out in the morning between 9am and 12pm and another six volunteers for an afternoon shift of 11.30am to 2.30pm. The role will involve roaming the Gardens to monitor the crowd, give directions and tidy up. Both shifts will receive a half hour briefing before heading out into the Gardens.

DOC has also suggested that the plant barrow could be filled with plants that are good for backyard biodiversity (natives mostly) and has someone available to stock it up as the large audience should increase plant sales.

We would appreciate all offers of assistance. All willing volunteers please email <a href="mailto:Hayley.luke@ccc.govt.nz">Hayley.luke@ccc.govt.nz</a> or phone 099415498.

#### **Contact Numbers**

Committee		
President	Jeanette Christensen	355 5007
Immediate Past President	Alan Morgan	384 9976
Treasurer	Tracy Shui	0211728515
Minute Secretary	Charles Etherington	355 7981
Membership Secretary	Penny Martin	332 6866
Correspondence Secretary	Graham Chick	385 9264
Plant propagation	Don Bell	343 6699
Events cooordinator	Mary Carnegie	355 8614
Member	Garry Miln	393 1938
Ex Officio, Curator	John Clemens	
Other Contacts		
Guides Co-ordinator	Faye Fleming	351 7798
Group guided walks:	Pat Whitman	384 3475
Newsletter e ditor	Bill Whitmore	339 8356

Enquiries about membership should be made to Penny Martin 332-6866 Graememartin1@xtra.co.nz

0211706375

321 9645

Gardens enquiries Information Centre 941-6840 x 7590

Tracey Haimes

Murray Dawson

### Friends' website

Newsletter formatting

Webmaster

Have you visited the Friends' website? The address is http://www.friendschchbotanicgardens.org.nz/

### **Distribution of Newsletter**

We distribute the Newsletter by email to those members who have given us their email addresses and who have not requested otherwise – emailing rather than mailing the Newsletter saves costs for the Friends. If, however, you would prefer to receive the Newsletter by mail, rather than electronically, please contact Penny Martin – phone 332 6866 or email - <a href="mailto:graememartin1@xtra.co.nz">graememartin1@xtra.co.nz</a>

# Friends of Christchurch Botanic Gardens Inc PO Box 2553 Christchurch

or friendsofthegardens@gmail.com