

Veronica lavaudiana Sun Hebe Endemic to Banks Peninsula Christchurch

Newsletter

PRESIDENT'S REPORT WINTER 2022

Welcome to our winter newsletter, and I hope you are all coping with the ups and downs of the changeable winter weather? Also it's good to see some colour still around in winter such as the *Kniphofia* Winter Cheer' in the Gardens herbaceous border.

It is with great sadness that we lost Neil Fleming in mid-June. He died suddenly at home with Faye beside him. The 'Neil and Faye' team had been a huge influence on the training and leading of the Gardens Guiding team for many years, with both using their vast teaching experience. They only stepped back from this role about 18 months ago. Our thoughts are with Faye.

Susan Lawrence, the current Guides coordinator has written about Neil later in the newsletter.

Nedra Johnson has also written a poem about Neil which is included later in this newsletter, remembering his great sense of humour.

The Friends have been busy over the last few months, with various projects on the go. These include some major replacement work of potting up benches for the propagating team, and a new compost mix bin has just been built, which will be far more effective for the team working here. The Propagating team have had a month's break from providing plants for the plant stall, given it's a slow growing time of year. The plant stall reopens on 23rd July.

The Guides have continued to have their regular monthly meetings and Susan Lawrence has implemented an ongoing Guides training scheme with current guides acting as a buddy for trainees. So, if you have always wanted to be a Guide but are worried about whether you will know enough, contact Susan to find out what the role involves, and know that there is great support in place and that this is a wonderful way to increase your knowledge of the Gardens, it's history and plants.

The Kiosk has been busy with the school holidays programme. Many thanks to all those of you who volunteered to come and help out with this. We hope you had as much fun as the children!

We've had some great talks and visits over the last few months, organised most efficiently by Mary Carnegie, who is sadly stepping down from this role.

The first talk was by Dr Terry Heiler, a civil engineer who has had 40 years direct experience with large scale water resource developments associated with irrigation around the world. His talk on where water comes from (80% is from over a border with another country), outlined how water access is a huge challenge, with wars affecting land use, and politics not always counting the human costs for decisions made around use of water on a big scale. A most thought-provoking talk.

A visit to Texture Plants in June allowed us the chance to see how this



Kniphofia 'Winter Cheer' (red hot poker)



Helleborus sp flower

wonderful specialist plant nursery is expanding to allow us all to find lots of interesting plants beyond the 100 or so commonly used by landscape designers. Texture Plants has now moved into landscape design and propagate many of their plants, so if you haven't been there recently, I recommend a visit!

Finally, our July talk was by Associate Professor Chris Winefield from Lincoln University. He talked about the unstable genome — a story of mobile genomic elements driving genetic diversity. Pattern variations, not always planned, but watched carefully by plant scientists such as Chris, can be used to produce new varieties of plants to increase yields, disease resistance, colour variation, etc. It was a fascinating talk from Chris who is obviously passionate about this area of work.

If you would like to join our committee and be part of the team who organise talks for the Friends, come along to the AGM on the 28th of August or get in touch with me, <u>janechbythesea@gmail.com</u>.

Finally, a big congratulations to our past president, Jeanette Christensen, who was recognised for her leadership skills and sharing her knowledge of horticultural skills with a John Taylor award presented by Alan Lawrence, at the CHS' 160th Anniversary Celebration. John Taylor was an outstanding local and overseas trained horticulturist who was also very involved with the Horticultural Society in his later career. This award was a huge and well-deserved honour for Jeanette, so our congratulations to her!

Jane Cowan-Harris
President of Friends of
the Christchurch Botanic Gardens



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Tulipa sp

The photographs on the right were taken by Carolyn Collins, who has written an article on flower photography for the 'non technical' enthusiast.



NEW INTERPRETATION PANELS FOR THE PALM COLLECTION



Above and to the right are two of the new interpretation panels for the Gardens palm collection

You may have noticed that there have been new interpretation panels installed in the palm collection recently. This has been part of a wider program to improve the visitor experience at the Botanic Gardens. The purpose of this is to help connect people to the plant specimens and collections enabling visitors to understand the significance of these plants.



Four new panels have been installed in the palm collection along the main driveway to the Ilex Café. If you are walking from the Kiosk to the Ilex Café, the first panel you will come across describes the Chilean wine palm (*Jubaea chilensis*). This one is a very special palm. Thought once to occur on Easter Island, it is from Chile and is a monotypic genus (meaning there's only one species in the genus). The palm is extremely cold hardy, and will tolerate up to negative seven degrees. The true beauty of this palm is the trunk. When fully mature the *Jubaea* has the largest trunk of any palm in the world! With time hopefully our one will be as impressive as the pictures.

Further along the path, the following panel is a general overview on the collection and the wider cultural uses of palms. This is the largest of the four panels and outlines why humans use palms. It includes a number of interesting facts on the impact palms have on our life and the environment, and it's not all positive...

The next panel is on the corner of the llex lawn. It covers the Guadalupe palm (*Brahea edulis*). This is a rare plant in the wild and considered endangered. The palm only naturally occurs on Guadalupe Island off the coast of Mexico. The population of the palm was heavily browsed by introduced goats, reducing much of the Island's vegetation. The goats are now all but gone from the Island allowing the ecosystem to recover and for seedlings of the palm to survive to maturity.

The final panel is on the Bolivian mountain coconut (*Parajubaea torallyi*). This panel is located on the groundcover border near Cunningham house. In its native Bolivia the palm grows at high altitudes and provides people with an edible seed. The Bolivian mountain coconut is one of the hardier palms and is able to tolerate heat, some frosts and dry conditions. Our specimen is definitely packing on the size making it hard to miss!

I hope the next time you are walking through the Gardens you will take a minute to learn a thing or two about the wonderful world of palms. There's plenty to read!

Matt Beuzenberg



A TRIBUTE TO NEIL FLEMING

Think of Volunteer Guiding in the Christchurch Botanic Gardens and the name Fleming comes to mind —Team Fleming, pioneers of the Guiding work 20 years ago. Neil died suddenly on June 16th, 2022, and it is appropriate in this edition of the Friends Newsletter to acknowledge his important contribution to the work of the Friends, and in particular the introduction of the Volunteer Guiding programme which started officially in 2003.

A recent enquiry into Guiding programmes in other Botanic Gardens in New Zealand has revealed that one particular Botanic Garden made a big effort to introduce a guiding programme a few years back with a good training scheme and much advertising, but with little response from the public. It was subsequently abandoned. This highlights the debt we owe to Team



Neil Fleming at right espousing the wonders of the *Metasequoia glyptostroboides*, (dawn redwood) Michael Lawrence alongside. Photo Laura Jones

Fleming in introducing a Volunteer Guiding Programme all those years ago. Neil was instrumental in establishing and running the four training courses with his teaching expertise and skills honed over many years through different life experiences. Four comprehensive training courses took place over twenty years, and those of us who participated in these were greatly impacted by Neil's input: he was very organised with an eye for detail, a consummate quizzer, a stickler for time and group management; he had a dry sense of humour and a very caring side. He loved to see people grow and learn, and he emphasised the need for Guided walks to be a two-way experience between Guide and Customer, rather than just the sharing of knowledge.

Neil's input into the first Australasian Guiding Conference held here in Christchurch in 2013 was immense. Faye says he has a huge file on this on his computer. It involved much planning and hard work but was a success and a great training ground for the 2012 trainee guides.

Neil did not lead many walks himself — rather, he preferred helping others lead well. He was also involved in recent times in building new tables for the propagating team; he loved helping with projects and was a skilled craftsman. He loved heritage roses and kauri trees.

To conclude, the following piece of verse was composed by Nedra Johnson at the completion of the 2005 training course. Nedra stumbled across it after Neil died, while looking for something totally unrelated. She called it 'doggerel' an old English word relating to something written in an irregular rhythm to achieve a comical effect, but it does lovingly reflect the positive response of Guides who trained under Neil's tutelage.

Susan Lawrence

Guides Coordinator

FAYE AND NEIL YOU'VE DONE US PROUD

Faye and Neil you've done us proud, you've settled this unruly crowd. We talked too much and didn't keep, apace with Neil's fast-moving feet.

You've worked so hard to help us learn, we tried so hard to name each fern, And specially important trees, as Metasequoia glyptostroboides.

Native plants, herbaceous border, we couldn't get them all in order. What was that, I beg your pardon? Flowers in the vege garden.

Faye's many skills were quickly found. She willingly shared them all around, Stories, anecdotes and all. She didn't hesitate and stall.

She knows the names of all the plants, she doesn't leave a thing to chance.

She knows what's looking at its best and where to give her guests a rest.

Neil designed a test called VARK, which left us mostly in the dark, Until we did the questionnaire, we knew then how our skills did fare.

Visual, aural, read and write, kinesthetics brought to light, Seeing hearing, touching too. Taking notes, shows what we do.

Botanic gardens need more guides. We'll try to take it in our stride. We'll follow the examples set, by others. Yes we'll get there yet.

It may take time but we will strive, to meet the standard and the drive, Of earlier guides who've helped us too, and told us much that's very new.

So much to think of and remember. We won't start until September. All the winter to prepare. We'll make sure that we'll get there.

Our notes intact, and well researched. Which tree's a beech and which a birch.

How the gardens did begin, we'll know the staff, both fat and thin.

We'll try to manage all the work. From all these duties we won't shirk. Good habits we will try to foster. We'll take our turn to keep the roster.

And now there's not much more to say, but thank you Neil and thank you Faye, For all the work that you have done. It's been worthwhile and so much fun.

You've challenged us and made us think. It's up to us to swim or sink. You've shown us the way to go and just how much we need to know.

We wish you well in all you do.

Nedra Johnson



'FORGOTTEN' NATIVE TREES OF CHRISTCHURCH

Elaeocarpus dentatus var. dentatus. hinau

This is such a wonderful tree when in full flower with large conspicuous sprays of white deeply dissected flowers followed by large purplish fruit. It should be planted more.

Professor Arnold Wall in his book *'The Botany of Christchurch'*, (1935) identifies hinau growing in Riccarton Bush and the book *'Riccarton Bush: Pūtaringamotu'* (1995) edited by Dr Brian Molloy indicates there are several hinau trees there. Ecological Scientist and associate at Manaaki Whenua, Colin Meurk, recently confirmed it still grows there. It is known as the southern-most place where hinau grows naturally.

It is endemic to the North and South Island as far South Westland in the west and Christchurch in the east. A search on iNaturalist shows eleven records in Christchurch, including two in the Christchurch Botanic Gardens, one on the banks of the Waimakariri River (possibly in a private garden) and one at Lincoln University in their plant collection. One of those in Christchurch is in the University of Canterbury grounds outside the School of Forestry building; which was probably planted by the Ministry of Works from their nursery and grown from seed or cuttings taken from the trees in Riccarton Bush. (Personal Communication, Michael Coulter). Eight records are in Riccarton Bush and several of those records may be of the same tree as the GPS data on phones may not always be accurate.

There are no records of it on Banks Peninsula in iNaturalist. Further north it is a common tree of mainly coastal and lowland forest.

Having established it was here in Christchurch early and continues to grow in Riccarton Bush it is surprising that it has not been grown more and planted around the city and Banks Peninsula.

Described by some as New Zealand's most spectacular tree, it is very impressive in full flower in October, November and December and sometimes longer depending upon where it is growing. The flowers are borne on 10 cm or more long racemes with between 8–12 flowers per stem. The 10 mm white, deeply lobed, lacy flowers hang down (reminiscent of *Pieris* spp) and look brilliant. The fruit is purple, oval and between 12–15 mm long.

The leaves are great as well; being between 5–10 cm long and average 3 cm across with a strong midrib and domatia (pouches) along the midrib on the satiny underside of the leaf.



The white lacey flowers of hinau



The immature fruit of hinau



Hinau leaves

Hinau is rather slow growing and may take many years to flower. It likes good soil and will grow well in sun or semi shade. The wait is worth it.

Metcalf (1987) describes ways in which Māori used the fruit for food and bark for a dark blue/black dye. Tane Trees Trust website describes the use of the timber by Māori and its use today.

This beautiful tree should be more widely grown. It makes an excellent specimen tree and should be more widely used in street and public plantings. It is offered for sale, but you will need to track it down. It also grows well from seed so some locally collected seed would be good to use.

Here in Christchurch, I suggest planting it in association with other tall growing natives to give it a little shelter and encourage it to grow tall more quickly. There are existing public places and reserves and larger private gardens where this could easily be planted. Other sites may include some of the lower revegetating valleys along the Cashmere Hills and Banks Peninsula.

For more information on its timber go to www.tanestrees.org.nz/species-profiles/hinau/

Alan Jolliffe 6

SAVING FORESTS: A REVIEW OF THE MAY 2022 EDITION OF NATIONAL GEOGRAPHIC MAGAZINE

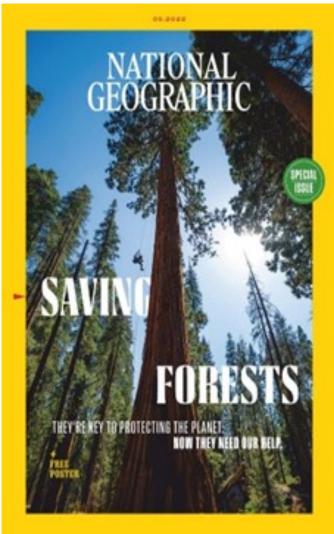
A National Geographic Special Edition this May led with a cover title stridently reading 'SAVING FORESTS: They're key to protecting the planet: now they need our help"

Outlining both the dilemma faced by today's forests and looking to a way forward the stories are told as much by the stunning photography as by the written word.

Opening with a satellite shot of our world — forests shaded in green, showing the more than 15.6 million square miles or one third of the Earths land surface with sylvan coverage.

Skipping across to the feature article by Craig Welch titled 'The future of forests', and subtitled 'Heat and drought are killing our forests, but we can limit the damage if we change course now'. Photographs journal the devastation caused by fires in California, Australia, Russia, and Canada and a diagram clearly depicts the effects of continued extremes of heat thwarting a tree's ability to fend off insect and disease attacks, being weakened to the extent that a strong weather event will blow many trees over or a fire will rip through causing irreversible damage.

All isn't painted as gloom and doom, for example, Welch outlines how by soaking up the higher levels of CO_2 that we are pumping into the air, trees are growing faster, something that has helped to slow climate change. Forests are also expanding out into areas previously too cool for growth — towards the poles and higher altitudes. Satellite images show a global increase of 7% tree coverage between 1982 and 2016.



Still Earth's forests are in trouble, and while climate change is threatening, the greater threat is from man's own activities in forestry and clearing of land for agriculture and cities. Of particular concern are the threats to old growth forests — those which have been around for hundreds if not thousands of years and which sequester by far the highest quantities of carbon, locking that down into the soil below. These ancients are also the hardest to replace.

Initiatives are highlighted in a number of articles following Welch's feature article.

Alejandra Borunda outlines work in British Columbia where stock for new plantings of larch and other species has been sourced further south, even as far south as Oklahoma where the clime is historically warmer and the trees are genetically adapted to higher temperatures. The projects results have been impressive enough that in 2018, British Columbia's Forestry Agency required foresters to use seed from warmer climate zones.

Welch describes plantations of exotic eucalypts in Brazil interplanted with natives. As the eucalypts are harvested, the ground is left to reseed from the natives, which it does effectively. The profit from the eucalypts is then used to help fund the regeneration of the natives.

Genetic modification is also offered as a way forward, Sarah Gibbens writes about DNA 'tweaking' trials with the American chestnut tree, a magnificent tree, all but wiped out by an introduced fungus in what is arguably America's worst ecological disaster. The chestnut is now 'on the path to resurrection' and lessons learned could be applied further afield: sudden oak death, Dutch elm disease, walnut canker to name a few.

In Germany, which 'thinks of itself as a forest country' Andrew Curry writes about a growing movement amongst foresters to what is termed 'close to nature forestry'. The aim is to replicate the ecosystem of wild forests by leaving behind dead wood and harvesting only the most mature trees. One photo depicts a man hauling logs in a German forest with horses to avoid damaging the forest floor.

One final note, governments worldwide are setting up emissions trading schemes that allow carbon producing companies to purchase forests in lieu of reducing their own companies emmisions. This strategy may protect a forest in the short term from being logged or the land cleared for other uses, however it cannot protect our forests from the effects of climate change — we need to 'cut emissions at the smokestack'

Annette Burnett

BEAUTIFUL BLOOMS

I am a very late bloomer, only really getting into photography ten years ago, in my mid 60s and I'm gutted that I didn't "get the bug" when I was young.

I'm not into fancy gear; I have only a bridge camera but am generally very happy with the results I achieve. A bridge camera is the stage between a "point and shoot" pocket camera and a DSLR. It is a cheaper and lighter option than a DSLR which needs interchangeable lenses. The camera I use is a Panasonic Lumix FZ 1000 but it's already 5 years old and will have been updated several times by now.

Flower photography is one of the genres I love as I make my own cards from my images. When I joined the Friends of the Botanic Gardens in Christchurch about 20 years ago I started visiting the Gardens early and late in the day when the light is softer and more conducive to better images. Also, the earlier, the better, as often this is the calmest time of the day. Wind is the bane of a flower photographer's life. At the moment, I really love the moody look which can be created with computer processing, making the background dark and emphasising the blooms. Another thing I discovered by accident, is instead of adding clarity to make one's images sharper, if you take the slider the other way, the image becomes misty, as if you're looking at it through tissue paper.

I use Lightroom to edit my photos and again there are newer versions which do many more things than I'm able to do. LR is only now available on a monthly subscription but there are other editing programmes which others love and even some free programmes. I find technology challenging, but LR is very easy to use and if mistakes are made it's easy to revert to the original photo. I don't use Photoshop, as technology and I are not great friends.

I intend to make a book of my favourite flower images. I have one canvas and one metal print of magnolias which are one of my top favourite flowers. As I write this, the image of dozens of magnolia blooms and their angular stems, looking like a stained-glass window, is my favourite image. Being large and relatively heavy, magnolias are still easy to photograph in a slight breeze.

Flowers invariably look better with dew or raindrops decorating them so cool mornings or after rain are ideal times to visit parks and gardens. Contrary to popular belief, bright sunshine is not your friend if you want images with the truest colours. Choose flowers in the shade if a sunny day is all you have to work with. Try to make sure you don't have bright spots of sun in your background as well. If the flower you wish to photograph is in full sun, ask a friend to hold up a jacket or even use their shadow to shade the flower.

Even pocket cameras and phones have macro modes which allow us to take close-ups, sometimes just part of a flower makes as good an image as the full bloom.

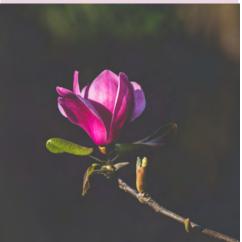
If you wish to follow me, I'm on Instagram @carolyncollins7056 - not just flower images.

Carolyn Collins

Carolyn has also said that she would be happy to lead a group of keen amatuer photographers around the gardens this spring.

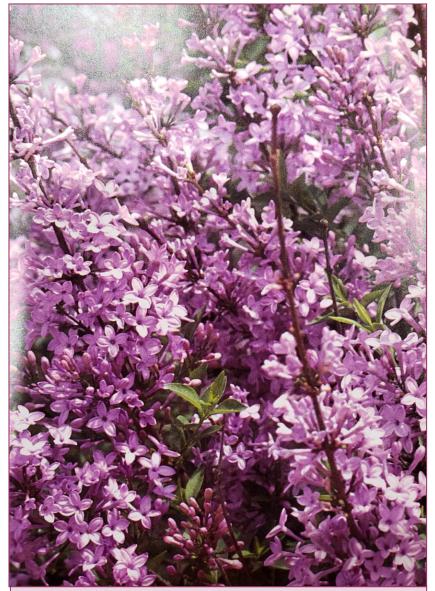
The photos to the right are a selection of Carolyn's work. Starting from the top: *Pulsatilla vulgaris*, (pasque flower); *Magnolia sp*; *Magnolia sp*; *Camelia sp*.











A lilac in the garden of the Imperial Summer Villa Chengde



Syringa x persica and S laciniata; in Zhongshaan Park Beijing



Syringa meyeri; in Behai Park, Beijing

LOVING LILACS

On a radiant autumn day, I'm drinking good coffee and thinking about lilacs. I can smell them as many reading this article can smell them, their perfume is so evocative. When I'm guiding in the Christchurch Botanic Gardens, I always take Americans to the lilac corner opposite the Curator's House because 'Lilac Time' is celebrated widely down America's East Coast and has been since at least the 1800s. In Boston, I found a postcard of horse-drawn carriages slowly wending their way along Lilac Drive in their own Botanic Gardens.

Lilacs are native to both North China and Eastern Europe through to Turkey. Their existence depended on whether or not the last Ice Age missed their place of origin. In North America the ice rolled southwards towards the Equator looking like three big fat fingers on a map, but the Chinese lilacs were centred around Beijing and extended northeast to Chengde and on to Korea. The old town of Chengde is where the Emperors retreated during the summer months to escape the stifling heat.



Syringa oblata; lavender form; in Zhongsan Park, Beijing

The Pleistocene, (what we call the last ice age), ended about 10,000 years ago. It stopped just on the southern boundary of what we now call Mongolia. China's entire flora was thus protected including, of course, its *Syringa* species. *S. laciniatia* was discovered in 1915 up near the Gobi Desert by Frank Meyer of Meyer lemon fame. He was a plant collector for the U.S.A. Department of Agriculture; he managed to get the plant home to the East Coast where it is still growing well.

Lilacs like sunshine but they don't like to dry out. They're in the *Oleacea* family of plants which includes forsythias, olives and privet. I remember a small woody shrub growing in a large rockery in Yu Yuan, the most venerable historic garden in Shanghai. I wondered why privet was planted and as an ornamental, it being the bane of our sinuses if you have an old privet hedge. But of course, it wasn't privet, it was one of the Chinese lilacs! Chinese gardeners strike cuttings from the bare wood and from suckers. They also graft cuttings to privet root and then plant quite deeply for a very sturdy root stock.

The original name in Greek for *Syringa* is syrinx, meaning a pipe or a tube, the reference being the long slender tube-like corolla. About 30 species belong to this genus. The French were the first in Europe to begin creating new plants, mostly using the common lilac, *S. Vulgaris*. The search was on, and remains, for new varieties with increased depth of colour — rosy pink, rosy purple, white with a pink edge — the trials go on. More recently, the centre of lilac cultivation in the West has moved to the North-East coast of America, where, as mentioned, it has become a much-loved celebration of spring.

Harvard's Arnold Arboretum in Boston established a comprehensive collection of lilacs under director Charles Sargent in the late 1800s. Described as "Bretschneider's Chinese lilacs" in 1889, the arboretum reported *Syringa villosa* as an "ornamental plant of the first class." It flowered late in the season on pyramidal heads of white or pale mauve and was strongly fragrant. A few years on, in 1891, Sargent reported the flowering of *S. pubescens* as "one of the most beautiful species of lilac in cultivation, a delicate rose colour and deliciously fragrant." Emil Bretschneider lived in Peking for 13 years. He was an eminent botanist and horticulturalist and he recognised that conditions in Boston were ideal for the lilac seeds he sent from Peking.

In China, perhaps the most common lilac in gardens, street plantings and temple grounds, is the North China Purple lilac, botanically identified as *Syringa oblata* or Huabei Zi Dingxiang. The bloom is compact and the plant is used extensively to create new varieties.



Syringa oblata; white form; in Daguan Yuan, Beijing



A form of *Syringa pubescens*; in Chengde

Juliet Bredon, who lived in Beijing in the early 1900s, wrote glowingly of the 'haze of purple and white blossom, the happy hunting ground of humming birds, moths and black swallow-tailed butterflies.' In our own gardens we can see how butterflies are very attracted to lilacs.

Lilacs in China are known collectively as Dingxiang and their popularity is possibly somewhat subdued because the Chinese character for 'nail' pronounced 'ding' could be construed as implying family strife. It's a plant rarely mentioned in the literature or depicted in Chinese art. Lilacs however, are immediately detected in public parks in springtime with their heavy perfume wafting every which way.

An outstanding volume for general perusal of the discovery of exotic plants and their introduction into North America and Europe from China is Stephen A. Spongberg's 'A Reunion of Trees.'

Other excellent references are from Australian botanist and mycologist Peter Valder. His two books, 'The Garden Plants of China' and 'Gardens in China' make China's plant stuff easily accessible and enjoyable, with excellent photographs. Guiding in China with my husband Bill, I always had Peter Valder with me and in those days, with a more youthful memory, I often knew more than the Chinese guides!

Di Madgin

REFERENCES:

Campbell-Culver Maggie: *The Origin of Plants*. Headline Book Publishing 2001

Harrison Richmond E: *Trees and Shrubs for the Southern Hemisphere.* A.H. & A.W. Reed, Wellington revised 1960

Long Margaret: New Zealand's Lost Lilacs: Were they ever here? The Gardener's Journal Vol 2, Issue 3 No 11 October 2021

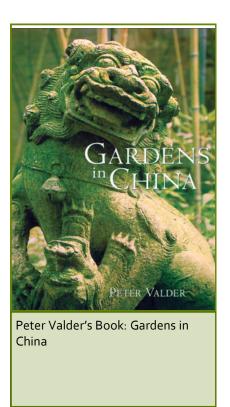
Spongberg, Stephen: A Reunion of Trees. Harvard University 1990

Valder Peter: *Gardens in China*. North America, UK & Europe Timber Press 2002

Valder Peter: The Garden Plants of China. Florilegium, Australia 1999

Photographs are photos from Di Madgin's own copies of Peter Valder's two

books.





FRIENDS CONTACTS

Committee

President Jane Cowan-Harris 021 043 5342 Immediate Past President Jeanette Christensen 021 263 7229 Secretary Graham Chick 385 9264

Treasurer Carol Halstead

Webpage queries Claire Mulcock 027 441 5605 <u>c.mulcock@gmail.com</u>

Penny Martin, Mary Carnegie, Vicki Steven, Nona Milburn, Susan Lawrence, Ray McTeigue.

Other Contacts

Guides Co-ordinator Susan Lawrence 021 120 6258
Group guided walks: Pat Whitman 384 3475

Newsletter editor Annette Burnett dananbur@outlook.com

Enquiries About Membership.

Phone: Jane Cowan-Harris 021 043 5342

Email: friendsofthegardens@gmail.com

Post: PO Box 73036

Orchard Road Christchurch 8154 New Zealand

<u>Gardens enquiries:</u> Information Centre 03 941 7590 Website: https://friendschchbotanicgardens.org.nz/







Mondays during term time 10-11.30am at The Kiosk. All welcome, no bookings required. Gold coin entry per child. Generously supported by Christchurch City Council

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