Newsletter

For Friends of the Christchurch Botanic Gardens Inc To Promote, Protect & Preserve No 104, Winter 2016

President's report

There is an exciting process going on, with the future of our Botanic Gardens as the focus. Two landscape architects from Isthmus Landscape Architecture are working on the "Spatial Plan" which sets out to predict the development of the gardens for the next 50 years with a special focus on the projects embodied in the current 10 year Management Plan, which is now in its ninth year.

A 50 year projection seems a long time and we need to resort to science fiction to imagine what life will be like that far out. But then I reflect that I started my working life in the gardens over 60 years ago and the Gardens haven't changed much in that time. That could be considered a tribute to the solid foundation our pioneers laid for us - the magnificent trees, the diverse plant collections and the timeless features like the rock garden, the ponds, and conservatories and, importantly, the spaces.

The layout has been a puzzle having grown a bit like Topsy, but does have the element of surprise, as well as the opportunity to get lost with the chance of discovery to find a way out.

Most of the development in the last 50 years has been the replacement of existing features including the new Visitor Centre, toilets, bridges, etc. and the only two significant introduced features – the Peacock Fountain and the Peace Bell have come from outside initiatives.

The Spatial Plan coupled with the projects in the Management Plan will allow for a critical look at the layout of the whole gardens, the circulation patterns, sight lines and vistas, plant collection spaces and especially the new developments, the Gondwana garden and its connected neighbour the children's playground and garden. While the Spatial Plan does not get down the detailed design of any of the features, considerable thought is going in to the general concepts and what we are seeing emerging will be innovative and exciting, providing a play/learning experience for kids of all ages.

The Gondwana feature is expected to demonstrate the evolution of not only our plants but our Christchurch/Canterbury landform and as such will have a high level of exploration and play appeal for kids.

The Botanic Gardens Trust which the Friends Committee initiated in 2007, finally forming in 2013 after earthquake and other delays, has been marking time waiting for decisions on a project to launch with. The Trust is not set up to initiate projects that is up to council decision-makers - but we have learnt a lot about the science of fundraising in a country with 27,000 registered charities with an asset base and turnover to rival Fonterra.

Our Spatial Plan consultants have made an early judgement that the Visitor Centre bridges are necessary and the City Council has initiated the process of calling for 'expressions of interest' for suitable designers to design it/them. Watch this space.

Meantime the work of the "Friends' goes on; the guiding finished for the season and the propagators have lots of stock coming on for spring sales. There's a new membership brochure at the printers and a new expanded plant sales stand soon to be installed. Both the committee and the Trust Board are represented on the Spatial Plan Stakeholder Consultation Group which has already clocked up over five hours of workshop time.

Check out the winter programme, especially the AGM on August 20. This will thus be my last president's report; I will be standing down with the belief that we are on a roll to some great progress.

Alan Morgan

Garden News

From Curator John Clemens

Evaluating plant collections

Referring to botanic gardens – "Whatever their background and scope, the one common element to them all is that they grow plants. The cultivation of plants is the universal factor linking all the world's botanic gardens."

That is a fairly benign observation, but the author, Dr David Rae of the Royal Botanic Garden Edinburgh, goes on to discuss the purpose for which the plants were collected in the first place, and how they were collected. When it comes to plant collecting, the 'why' and 'how' can have a big effect on value of the collections for fulfilling a botanic garden's functions.

We do not need to revisit these functions here. The introduction to the Management Plan for our own botanic garden (viewable on the Council website at http://www.ccc.govt.nz/the-council/plans-strategies-policies-and-bylaws/plans/park-management-plans/botanic-gardens-management-plan/ shows that a botanic garden's functions are diverse and multilayered. Arguably one of the biggest

changes that has occurred in recent decades has been the emphasis now played worldwide by the plant conservation function.

Active programmes of ex situ plant conservation in botanic gardens (integrated with conservation and recovery in natural habitats) now play a part in the experience the visitor receives. Conservation feeds the layout and interpretation of displays, the integration of traditional knowledge, educational programmes and research.

Eminent botanist, author, and founding director of Botanic Gardens Conservation International, Professor Vernon Heywood, came straight to the point when he announced at a recent international conference, that "conservation for botanic gardens is not an optional extra", but a requirement. And it was with conservation in mind that David Rae (the author of the quote above) divided plant collections in botanic gardens into two categories of differing value for conservation: those targeted for conservation, and the rest, which he called "ad hoc" collections.

The following table shows the main distinguishing features:

Targeted collections	Ad hoc collections	
Structured for ex situ conservation	Of possible conservation interest	
Collected and maintained for clear conservation objectives	Not collected for conservation, opportunities not always known, understood or optimised	
Focused collection adhering to strict standards and therefore more useful	Random selection, lacking quality standards and are therefore limited in their use	
Collected recently	Collected over a long time period	
Species represented by reasonable numbers	Small numbers of particular species	
Diverse genetic base	Little genetic diversity	
Of known and documented wild origin	Often of unknown or undocumented origin	

Evaluation of the collections at the Royal Edinburgh Botanic Garden is described by Radford et al. (2003)(http://journals.rbge.org.uk/index.php/rbgesib/art icle/view/155/145). you read As comparisons above, you can see that most plant collections in our own botanic garden fall into the ad hoc collection category. Let's look at the values of these two collection types, "targeted collections" first.

In praise of conservation

The following saying is typically attributed, probably erroneously, to Ernest Rutherford:

All science is either physics or stamp collecting.

Being someone who once thrilled to the sights and frights of the chemistry laboratory, I would replace 'physics' with the name of my favourite smelly and beautiful discipline. However, regardless of whether its physics or chemistry in ascendance, the saying makes the point that physics (or chemistry) is somehow superior, and other science is on par with the lowly activity of stamp collecting. Let's apply this to plant collections. From a conservation perspective, and thinking about David Rae's categories of plant collections, we could say:

All plant collecting is either targeted conservation or stamp collecting.

We can see that in order to conserve threatened wild habitats it might be necessary to mount targeted conservation programmes, bringing threatened species into safe cultivation or storage, and carefully reintroducing these species back into the wild as circumstances allow. This cannot be done adequately in a stamp collecting, ad hoc fashion. Integrated plant conservation can only be successful using the targeted collecting route. One by one, New Zealand botanic gardens are following this path, planned with carefully and executed programmes of ex situ collecting, thereby helping to fulfil a target of the Global Strategy for We have threatened Plant Conservation. habitats and plant species here in Canterbury, some even within the Christchurch city boundary.

Does this mean that plant collecting undertaken now or in the past using a stamp collecting approach is worthless, at least for conservation purposes? Let's look at the benefits we can reap from *ad hoc* collecting of the past.

In praise of stamp collecting

Let's suppose Ernest Rutherford did not intend his stamp collecting aphorism to be taken too My intention is not to denigrate seriously. philately. I have delighted in collecting, handling and studying all sorts of things, including stamps. Without thinking too much about it, my stamp collecting seemed to revolve around the following: collecting as many unique individuals as possible within the resources available to contain them (collection size), focusing on a stamp particular sort of (collection specialization), and striving with meagre funds to acquire the occasional rarity (collection cachet). Collecting was a joy in its own right, and the collection was intrinsically interesting and a delight to pore over, if relatively useless for any wider purpose.

I wonder if this is the way plant collections have historically been amassed in the *ad hoc* fashion: by "stamp collecting" plants from around the world so as to have a large collection of many different species or cultivars, possibly from within a particular family or genus, and perhaps containing some choice individuals rarely found in other collections.

Have we been stamp collecting in our botanic garden, and what possible conservation interest could such *ad hoc* collections have? There are exceptions, but many of our older accessions are indeed of individual or very few plants, genetic diversity is minimal, planting date was not recorded, origin is frequently unknown beyond the supplying nursery, and collections can lack quality standards and purpose.

Nevertheless, these *ad hoc* collections from the past do have conservation interest, and, despite their weaknesses from an active conservation perspective, they have huge potential for interpretation, education, display and research. They might have arisen through what Vernon Heywood describes as "serendipitous collectionism", and owe "more to the transient interests of individual staff members than to any institutional policy"¹, but we need to cherish and

use them to the best of our ability. The stories we tell about our collections are priceless: stories about the homelands of these plants, about the people who collected them, and about their uses.

Stamp collected or ad hoc collections might also have application in plant conservation and research. Some of the rarest might find their way back into recovery programmes of the future. Recently we discovered several Red List Critically Threatened tree species in the Christchurch Botanic Gardens and Canterbury arboreta. Worldwide, there have been examples of repatriating plants of this kind to their overseas homelands. We also have a few specimens of rare New Zealand plants, such as a Nationally Critical rata, Metrosideros bartlettii. specimens are contributing to research to determine the remaining genetic diversity of this species in New Zealand. Our single (or few) specimens of a great diversity of conifers has been useful for our biosecurity research on aphid feeding preference. And our collections are also useful in pollination research. These and other projects make for good storytelling as well as good science.



Bartlett's rata (Metrosideros bartletii) is extremely rare in the wild. We have a few plants in our botanic garden growing under a dense tree canopy where they shelter from frost that would kill them outright.

Perhaps of greatest importance, these *ad hoc* collections help to shape the landscape and atmosphere that we love about our botanic gardens. They remind us of where we have come from, and about times when conservation was in its infancy.



The conifers in our pinetum have multiple uses: they provide a common garden environment for us to research worldwide biosecurity risks, they contain threatened plants (like the monkey puzzle in the middle), and they tell us about the very long-standing success of conifers worldwide.



O Tane Aotearoa / New Zealand Icon Garden has ones and twos of some Kiwi favourites; not enough to call a conservation collection except as signals to our visitors to look after these treasures and to learn about their benefits.

Plant collecting in reality

Before I get too carried away with the parallel between stamp collecting and plant collecting, let me hasten to add that a quick read of A Garden Century edited by Barnett et al. (1963), or more recent journal articles, such as that by Ginn (2009)² and co-workers at the University of Canterbury, tells a much more complex and realistic story of multiple intentions, straightened circumstances, conflicts and contradictions that have gone into shaping the plant collections of our own Botanic Gardens, all set in the context of global botanical exchange and social turmoil. It hasn't been easy to get where we are today. Yet, let's look forward to the years ahead when we can both respect and enjoy the somewhat haphazard collections of the past as well as assiduously building up collections that can help conserve our own Canterbury plants, habitats, and landscapes.

I have tried to refer you to websites where the papers I refer to can be read. If anyone has difficulty accessing these, or would like to read other articles on this topic, please get in touch.

Reference:

1

https://www.researchgate.net/publication/225131177
The role of botanic gardens as resource and introduction centres in the face of global change
2

http://onlinelibrary.wiley.com/doi/10.1111/j.1745-7939.2009.01146.x/full

Events in the Gardens

From Sue McManaway, Visitor Experience Officer, Parks Unit, Christchurch City Council.

Rose Pruning Workshops

Learn rose pruning techniques with curator of the Central Rose Garden, Susan Sanders. 25 June at Christchurch Botanic Gardens and 2 July Mona Vale. Keep an eye on the Botanic Gardens website or facebook page for more details about the sessions and to find out where to buy tickets.

Kidsfest - Planet Gnome

A fun activity suitable for children aged 5- 10 yrs. July 9 - 23, 10.30am-pm. Begin at the Visitor Centre. More details to come on the Botanic Gardens website and facebook page.

Botanic D'Lights

We're turning on the lights in the Gardens again this winter - a dazzling light show not to be missed! Keep an eye on the Christchurch Botanic Gardens website for more details closer to the time. 3 - 7 August.

Articles

Look at that plant – *Illicium majus*

There is a shrub growing in the Christchurch Botanic Gardens that I had never noticed until Diana Madgin pointed it out to a group of Gardens guides. It is one of her favourite plants and I can see why. The shrub is *Illicium majus*

and you will find it not too far from the West Bridge (the one near the tennis courts in Hagley Park) growing among the collection of magnolias. The flowers will be appearing during the winter. It is worth seeking out.

The specimen in the Gardens produces creamy white flowers as shown in the photograph. I

understand however that the flower colour can sometimes be red. It is easily identified even when not in flower because it produces star anise-like fruit capsules. Whatever the colour the flowers are very sweetly scented.

Illiciums are ancient – they first evolved in the Cretaceous period around 100 million years ago, while dinosaurs still roamed the earth. They are related to the magnolias and include around 30 species of small trees and shrubs from North America, the Caribbean and Asia. *Illicium majus* comes from an area covering South China, Myanmar and Vietnam. Though it grows into a good-sized tree in its native Himalayas, it does not seem to get so big in cultivation.



Illicium majus

I couldn't find a great deal of information about *I majus;* the related species *I. verum* tends to hog the limelight because it is the source of star anise so popular in eastern cuisine. A word of warning – just because *I. vera* is used in cooking the same does not apply to *I. majus* and indeed the fruit and bark are poisonous!

Bill Whitmore

Glycyrrhiza glabra

lan Oxley describes this plant which for him has nostalgic memories.

When I was growing up as a child in London during WWII, there were many scarcities, and what there was was rationed. This went on for years after the war. A vivid memory for me was going to a sweet shop on a Saturday morning, with my ration coupons, to get some sweets. Favourites were a small packet of sherbert with a liquorice straw, and "Spanish wood". This last

was so named, I presume, because it came from Spain. It wasn't actually wood but the root of a plant. When chewing it there was eventually a sweet taste. It could be chewed for hours, then put on the windowsill overnight, and then chewed again the next day for more flavour. So, lasting a long time, it was economical too and a continuing enjoyment. This was certainly not a new use for it.



For thousands of years Glycyrrhiza glabra has been of benefit to mankind.

It comes from the Mediterranean, across the Middle East and Asia. A member of the Fabaceae family, the tropical part of the Legumaceae or pea family, which is the third largest. (As an aside, what are the two largest families?*)

"Glycyrrhiza" from the Greek means sweet root, glabra means black which is the common colour for the confection, so the common name for the derivative from this plant is liquorice root. Up to 50 times sweeter than sugar, extracts have been made by many cultures as a sweetener, and health and medicinal benefit.

It grows to 1.5m and is one of 18 species of these herbaceous perennials. It can be propagated from seed or a portion of root. The root can grow well over a metre deep and harvesting is done after 2 to 5 years.

The Chinese have used *G. uralensis* as an antiinflammatory for centuries and as a guide drug to enhance the effects of other remedies and guide them to where they can be of most benefit. Hence it is their most used herb. G. rubra is the most used Western herbal medicine. There are a huge range of benefits: anti-depressant, healing ulcers, boosts the immune system, relieves pain and stress, coughs and sore throats, aids the immune system, useful for acid reflux, leaky gut and adrenal fatigue. It also helps ease PMS symptoms and helps prevent heart disease. It has also been found to help skin complains and help prevent tooth decay. Other uses are flavouring of tobacco and beers. cosmetics and industrial uses, and as a delicious thirst quenching tea. Although of such wide ranging benefit, the side effects of having too much can be high blood pressure, low potassium, chronic fatigue, water retention, and headaches.

Once when in Queensland on holiday my wife, Irene, and I visited a liquorice factory in a Brisbane suburb to see the process for producing confections. We also went to a nursery that grew liquorice root so I had to buy some for old times' sake. I also bought some seed which I brought back to New Zealand, (declared to Customs) so now when I want to go down memory lane I can chew a piece of my own "Spanish wood".

Art in the Gardens: Marble statues of female figures (the Scott statues).

In about 1880 Christchurch resident and businessman Mr George Scott shipped eight, or possibly twelve, marble statues from Italy. The statues were of female figures and set up to line the drive of his Opawa estate "Compton".

George F. Scott (1850-1930), together with his brother John, and another brother had established the Atlas Foundry in 1871. By the early 1900s, this had grown to become a large and important firm employing 120 men and manufacturing "Peerless", "Victor," and "Record" ranges, as well as undertaking general engineering work of every description, including all kinds of steam-engines. It is possible that George served a term as a Domains Board member - a G. Scott is recorded as one of the

Domains Board members who planted a tree in the Domain to mark the members' final term of office on 20 July 1911. (The Domains Board was responsible for administering the Gardens at that time.)

On selling his property, Mr Scott gave four statues to friends and donated four to the Domains Board in April 1924.

Unfortunately the friends' statues were stolen in the 1920's. The shattered remains were dumped on the Port Hills Summit Road which was being constructed at the time. They were unable to be salvaged as the road passed over them.

The four statues presented to the Gardens were placed in the newly constructed Cuningham House; two positioned on either side of the foundation stone at the entrance and the other two at the opposite end of the building.



It is unclear why the statues were placed in Cuningham House, or the Winter Garden. The usual convention would have dictated their placement as talking points along one of the main walks but the potential for vandalism as well as changing attitudes and the perceived "menace to public morals" of the least clothed statue may have influenced this decision. Despite their location in Cuningham House, however, the statues were subjected to occasional acts of vandalism. One of the four sustained major damage and was placed in

storage under the Bandsmen's rotunda in the 1980s. At that time both the head and body were stolen; however the head was returned to the Botanic Gardens in 2001 where it is held in storage.



The statues stand at approximately 1.4 metres tall. All three figures are posed in draped garments and are symbolically linked somehow by animals around the base.

Prior to the Christchurch earthquakes one statue was in the Cuningham House and the other in Townend House. The earthquakes were not kind to the two ladies; both lost their heads but these have now been re-attached. One of the repaired statues is again on public display, this time in the new Visitor Centre.

Sources:

- 1.. Faye Fleming and Barbara Brailsford.
- 2 Christchurch Botanic Gardens Conservation Plan.
- 3 Sue Molloy.

Plant hunter – Frank Nicholas Meyer (1875-1918)

Born Frans Nicholas Meijer in Amsterdam, by the age of 14 he was working as a gardener's assistant at the Amsterdam Botanical Gardens under the direction of the eminent botanist Hugo de Vries. During his eight years at the Gardens, interrupted in his nineteenth year for mandatory

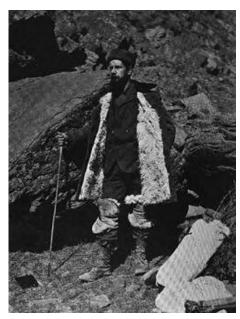
military service, he rose to Head Gardener in charge of the experimental garden.

Gripped by an overwhelming wanderlust, Frans Meijer wanted to see the gardens and plants of Western Europe, so he set out on a personal journey of discovery - on foot. He travelled through Belgium, Germany France, Switzerland, Italy, and to Spain to see the orange groves, and eventually back home - if such a lost soul can ever be said to have a home. For several months he wandered across Europe, using maps and a compass as guides. Once he almost lost his life in a blizzard when he crossed the Alps in an area where there were no roads. In an October 1901 letter to a friend he wrote "I am pessimistic by nature, and have not found a road which leads to relaxation. I withdraw from humanity and try to find relaxation with plants. I live now in expectation of what will come."

He travelled to England and found work in a commercial nursery near London, but was soon to feel the need to travel again. He boarded the SS Philadelphia, and sailed for New York in October 1901. Hugo de Vries had seen great potential in this young man and had helped him gain an education in French and English, and the sciences, all in hopes of inspiring young Frans to settle down to a promising career as a botanist. Although that was never to be, his education did prove immensely valuable, as he was able to find work in Washington at the greenhouses of the U.S. Department of Agriculture. There he became Frank Meyer.

During the next four years he visited Mexico, California and Cuba, and as always, he travelled alone, working in nurseries to pay his way.

It was the plant collector David Fairchild who saw the greatest potential in Frank Meyer, and asked him to travel to East Asia in search of plants of economic value for the USDA. He was introduced to Charles Sargent and instructed carefully on what plants had already been discovered, so he could avoid unnecessary duplication. At one time or another, both Sargent and Fairchild had planned to travel to China with him, but circumstances prevented it, and Meyer went to China alone.



Frank Meyer circa 1909

His first expedition (1905-1908), which took him from Shanghai to Hupeh, Manchuria and back again, was a productive one. He shipped back specimens of *Diospyros kaki*, the Chinese persimmon, larger and generally marketable than the native American species. and *Diospyros lotus*, its wild cousin used by the Chinese for grafting the cultivated varieties. Other plants from his first expedition included Juniperis chinensis 'Columnaris', a catalpa Catalpa bungei, Aesculus chinensis, Chinese horse chestnut, and Ginako biloba. The many shipments he mailed back to the United States also included thousands of seeds from Chinese vegetable crops.

"Our short life will never be long enough to find out all about this mighty land. When I think about all these unexplored areas, I get fairly dazzled; one will never be able to cover them all. I will have to roam around in my next life." (Letter from Frank Meyer to David Fairchild, May, 1907.)

His next three expeditions (1909-11, 1912-15 and 1916-18) would be equally productive. He explored as far west as Russian Turkestan and east into Manchuria, Korea and Kansu. Among the great number of plants he collected were many notable crops such as soybeans, new types of grain, fruit, vegetables, bamboos, Chinese cabbage, elms, bean sprouts, bamboo shoots and water chestnuts. He also introduced

to western cultivation many notably ornamental plants like a dwarf lilac *Syringa meyeri*, a silver blue juniper of dense habit *Juniperus squamata* var. meyeri, Chinese elm *Ulmus parvifolia*, the dry-land elm *Ulmus pumila*,the Callery pear *Pyrus calleryana*, Chinese chestnut *Castanea mollisima*, *Rosa xanthina* and Chinese pistachio *Pistacia chinensis*.

He was responsible for some 2500 plant introductions to the US and many of these have played an important role in American agriculture. His collections include plants from alfalfa to Zoysia grass and apricots to wild pears. He introduced 42 new varieties of soybean to America and was the first to suggest tofu as a soybean product for the US market.

He was an industrious collector and this is typically illustrated by his collection of 42,000 stones from an edible red cherry like fruit that particularly attracted him. It was the fruit of *Prunus tomentosa*, but in spite of his enthusiasm this introduction did not result in the establishment of an orchard industry in the US

He also came across the hawthorn *Crataegus* pinnatifida cultivated as orchards near Boshan, in Shandong province and sent fruit to the US with the comment: ""A fine fruit for preserves and a very ornamental tree; is simply loaded in the fall with red berries and keeps its glossy green leaves until late in autumn."

He confirmed the Asiatic origin of the chestnut blight (*Endothia parasitica*) which had earlier devastated the North American species *C. dentata* and introduced blight resistant selections of the Chinese tree into America.

He is probably best known for the introduction of the Meyer lemon, *Citrus* 'Meyeri'. When about to leave China from Beijing in 1908 he found a curious citrus tree growing as a potted plant. Meyer obtained a specimen and returned to America with it. It is believed to be a hybrid between *C.* limon and *C. reticulata*, the mandarin orange. It is sweeter than other lemons and its flavour is considered to be the gourmets' choice. There was even a special vodka distilled once a year with Meyer lemons. One of its biggest advantages is that it can tolerate temperatures down to -2°C. Whilst it does have a fruiting

season, fruit and flowers can be seen on the tree at the same time.

Meyer is also remembered as the first foreigner to see the maidenhair tree *Ginkgo biloba* growing in the wild. Other introductions include, a semidouble rose, and *Sorbus pohuashanensis*, the mountain ash. This latter tree was found in the Wu Tai Shan, a range of mountains southwest of Beijing in the Shanxi province. Meyer didn't particularly like this part of China as he found the people unwelcoming. He was quoted as saying that when he entered villages "children cried and dogs barked". However having found this tree he returned later to collect seed.

By 1918 the political situation in China had deteriorated to the point where travel of any kind was dangerous, if not impossible. Frank

Meyer was planning to return to America and in June of 1918 was a passenger on the Japanese riverboat Feng Yang Maru, destined for Shanghai. He fell overboard into the Yangtze River. His body was recovered but the circumstances of his death will always remain a mystery and source of speculation.

He has been described as a fanatic walker, a natural traveller, a trained botanist, a gardener and a Buddhist.

Honoured the world over for his contributions as a plant explorer Frank Meyer's work touches us all every day.

Bill Whitmore

Friends News

Friends Propagating Group

This group of industrious Friends, ably led by Don Bell, have been busy over the last few months as they grow and prepare plants for sale. This involves taking cuttings from the Gardens, sowing seeds, potting on, weeding and labelling. Two groups of Friends meet once a week. A trees and shrubs group, including natives, meets on Tuesday morning, and a perennial, annual, and succulent group on a Thursday afternoon.

A plant sale is held in autumn, spring and early summer each year. This year our autumn sale was held in conjunction with the Horticultural Society's National Chrysanthumum Show in a large marquee outside the llex Centre. Members of the group and helpers manned the stall over two days. The sale was very popular once again with plants selling for \$5.00 each or five plants for \$20.00.

In March we went to visit the DOC Native Plant Nursery at Motukarara and spent an interesting morning with one of the staff, learning how they collect and store seeds and grow native plants from all over Banks Peninsular and surrounds. This is an impressive operation.





Every week the plant sale wheelbarrow is restocked by two of our committed team and the money collected and banked. This is quite a feat. After an uncertain future and much negotiation with Garden staff, a new-look, state-of-the-art stand is now being constructed. This stand will be housed permanently outside the Old Information Centre. Plants will still be sold on an 'honesty box system' but the stand will be able to be closed and locked so that it does not need to be moved each night.

Selling plants from the Friend's Propagation Nursery at our tri-annual sale and from our plant stall, has proven to be an excellent way of raising funds for the Gardens.

Jeanette Christensen - for the Propagating group

Designing for the 2022 FIFA World Cup.

Look out for this illustrated presentation on Sun 10 July by landscape architect Chris Glasson, Christchurch of the design for the public space, parkland and ancillary buildings for the 2022 Football World Cup stadium in Qatar, Middle East. It will be held at 2pm in the Old Information Centre.



Al Bayt Stadium

AGM

The AGM for the Friends of the Botanic Gardens will take place at 2pm on Sunday 21 August in the old Information Centre.

The Committee will be sending you the formal notice of the meeting together with the agenda.

The formal meeting will be followed by a presentation by Dr Trevor Partridge on "The Botanic Gardens in Nature – Making a Connection".

Contact Numbers

Committee		
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Information Centre 941-6840 x 7590 Gardens enquiries

Friends' website

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. If you would prefer to receive the Newsletter by mail, rather than electronically, please contact Penny Martin - phone 332 6866 or email graememartin1@xtra.co.nz

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