

# Newsletter

*For Friends of the Christchurch Botanic Gardens Inc  
To Promote, Protect, & Preserve*

*No 90, Summer 2012/13*

## **President's Report**

I am very pleased to be able to report to you that the Friends' nursery has now been successfully relocated to Riccarton Avenue, in the grounds of the old caretaker's house. The moving of the glasshouse proved to be a logistical nightmare, but with the aid of many hands, the task was completed. We owe the staff of the Botanic Gardens huge thanks for achieving this goal for us. I would have liked to have seen them negotiate the bridge over the Avon.



*Friends' glasshouse on the move*

The propagation teams are in full production, and happy to be in their new home. If any of you are keen to join one of the teams, there are a couple of vacancies. You will meet some really friendly people, and possibly learn a few propagation techniques at the same time. The vacancies exist mainly in the tree and shrub team. The next plant sale is on Saturday, December 8<sup>th</sup>, between 9am and 1pm. Come and support us and benefit by buying plants for only \$4 each.

The volunteer guides are gearing up for the planning and hosting of the Australasian Volunteer Guides in Botanic Gardens Conference next year. This is the first time that the Conference will have been hosted in New Zealand, and has been planned to coincide with the 150<sup>th</sup> Anniversary of the Botanic Gardens.

The drastic reduction of visitors to our city, due to the earthquakes has stemmed the activities of our volunteer guides considerably. The guiding team is planning to approach hotel managers and motel owners with brochures advertising the daily guided walks. Hopefully this will help reverse the downturn in patronage. Guided walks can be tailored to the interests of specific groups, and some local U3A groups have taken advantage of the guides' skills at a very reasonable cost.

Engineer's reports on the Cunningham and Townend Houses have still not been received. Cunningham House has been noted as a building of particular heritage status which will be factored into any recommendations being made for its future.

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### New Friends' website

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

Friends of the Christchurch Botanic  
Gardens Inc  
PO Box 2553  
Christchurch 8140  
or

[friendsofthegardens@gmail.com](mailto:friendsofthegardens@gmail.com)

### 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 Philippa Graham – phone 348 5896 or email [philippa.graham@gmail.com](mailto:philippa.graham@gmail.com)

*Enquiries about membership should be made to Philippa Graham (phone number above)*

### Contact Numbers

#### Committee

President	Charles Graham	348-5896
Past President	Alan Morgan	384-9976
Treasurer	Dot Noordijk	386-0595
Secretary	Ian Campbell	380-5087
Membership database	Philippa Graham	348-5896
Other Comm. Members	Don Bell	343-6690
	Barbara Clements	382-3213
	Alan Hart	332-6120
	Leith McMurray	337-2008
Ex Officio	John Clemens	941-7589

#### Other contacts

Plant Sale	Helen Constable	980-9358
Newsletter Editor	Bill Whitmore	339-8356
Newsletter formatting	Maria Adamski	
Guide Co-ordinator	Faye Fleming	351-7798

*Enquiries about membership should be made to Philippa Graham (phone number above)*

*Garden Enquiries* Info Centre 941-6840 x 7590

The proposed Botanic Garden Centre has still to receive the final thumbs up. Three tenders have been evaluated and forwarded to an Environment and Infrastructure Committee for comment. The final recommendation will go to the Council on the 6<sup>th</sup> December. The time of completion is still set for the end of 2013. It would be nice to have the building completed during the year of the Gardens 150<sup>th</sup> Anniversary but, with all the delays to date, I am sceptical.

The Friends Committee has developed a "Skills Award" for staff of the Botanic Gardens. It has been designed to provide funding towards a course beyond the level of training received in the Botanic Gardens. There will normally only be one grant accepted in any financial year. Luke Martin has been the first applicant for this grant and his application has the full support of Jeremy Hawker. I am pleased to be reporting that the Friends are funding Luke to go on a "Practical Field Botany" course with the University of Canterbury in January.

Lynda Burns is currently attending the Botanic Gardens Conservation International education conference in Mexico. This has been made possible through the support of the Friends. I believe that the skills that Lynda will bring back will be of great benefit to the Botanic Gardens.

You may have seen the advertisements in The Press for the photographic competition we are hosting with the Botanic Gardens. Check out our website for details; just follow the link [www.friendschchbotanicgardens.org.nz](http://www.friendschchbotanicgardens.org.nz). You can start taking photographs now, and register anytime between February and May.

The Friends' Christmas function is being held on Sunday 16 December between 2pm and 4.30pm, at the CHS rooms, in South Hagley Park. You are all welcome to join us for a slice of Christmas cake and a drink. There will be the usual raffle, with prizes grown by our propagation teams, plus a couple of bottles of wine. There will be a light hearted trivial pursuit quiz based on the Botanic Gardens for you to test yourselves. Come and join us for the end of year catch up. Please bring a plate.

I hope you all enjoy a relaxing festive season with family and friends

Charles Graham

## Gardens' News

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### From Curator John Clemens

People go to conferences to learn from other people's experiences and to tell them about our own, to meet friends and make new contacts, and to see the familiar as well as things that we cannot see at home. Getting away and listening to others is also a great way to see our own situation with greater clarity from an external perspective.

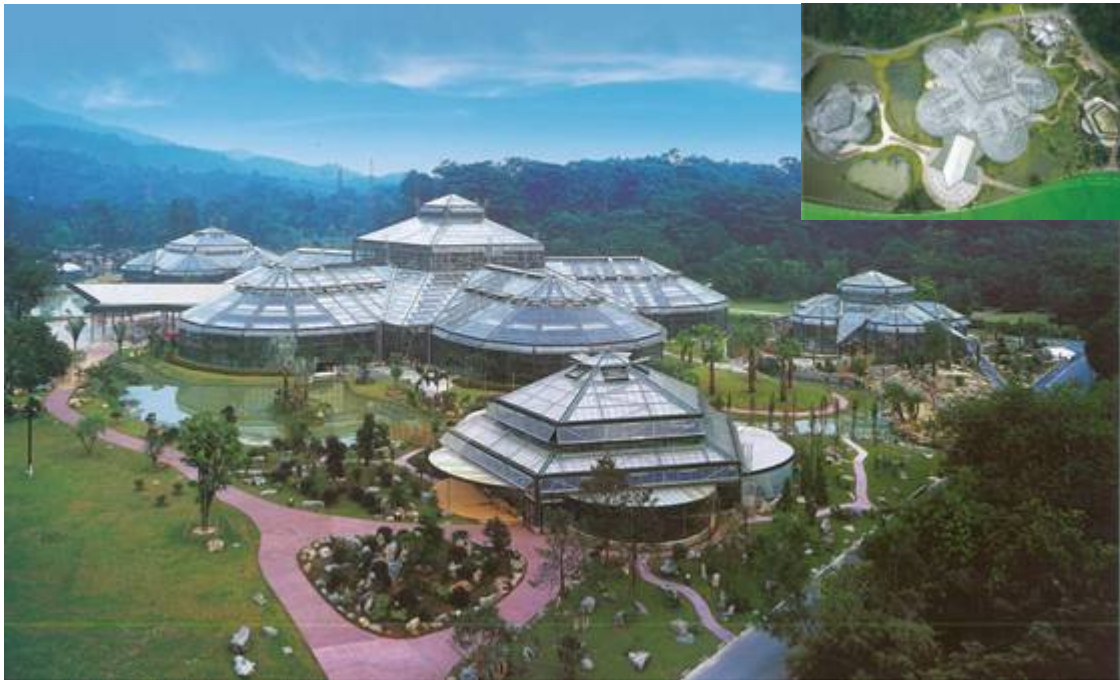
I recently returned from a lightning visit to the 13<sup>th</sup> International Association of Botanical Gardens conference in Guangzhou, southern China. Guangzhou (formerly Canton) is a direct, if long, flight from Auckland. Delegates from botanic gardens around the world met for an intensive three days of oral presentations and workshops. I was also fortunate to have a tour of the South China Botanical Garden

guided by Professor Ying Wang, senior scientist at the Wuhan Botanical Garden, Chinese Academy of Science.

Since its foundation in 1929, the South China Botanical Garden has become a world leader in amassing important plant collections, especially of genera native to China and south-east Asia. The total number of taxa (species or varieties) exceeds 13,600, including one of world's largest collections of *Magnolia*. These have become the core ingredient used by plant scientists and horticulturists in research and conservation programmes, projects to develop new commercial products and cultivars, educational activities and displays that make the grounds and conservatories a major tourist attraction.

The largest conservatory complex at the SCBG is the 7.5 ha World of Plants, opened in 2009: “The four conservatories are like four kapok flowers blooming quietly”. They contain tropical rainforest, desert, and alpine/polar biomes, as well as conservation, aquatic, and “exotic” curiosities houses. The central “flower” contains whole forest trees, several high level walkways, gushing waterfalls, and (on the hour) a fogged ground floor to add to the mystery.

Coming from higher latitudes, I targeted the alpine/polar house where Antarctic mosses and lichens are grown at 3-4°C inside a refrigerated cabinet, higher plants of the tundra are kept at 5-10°C, and alpiners are positioned on top of a hill inside yet another enclosure (all inside a cooled conservatory). Then it was back to the hot cacti house where there was enough space for desert trees and a carpet of spiny foot stools.



*South China Botanical Garden World of Plants conservatories (and in plan)*



*Part of the cacti and succulent house, one of the “kapok” flower conservatories*

Highlights of the conference proper were plenary presentations by Emeritus Professor Vernon Heywood (“Botanic gardens are not just places to take visitors, but a key part of national strategy for biodiversity conservation. Conservation is not an optional extra”); Tom Elias of the US National Arboretum who talked on the social and economic integration of botanic gardens into the fabric of society, as well as how to get the President (or the Prime Minister, perhaps Governor General) to pay a visit; the head of restoration ecology at Kew, Bruce Pavlik, who introduced the Restoration Ecology Alliance (endorsed by Prince Charles); and Professor Stephen Blackmore, Regius Keeper, Royal Botanic Garden, Edinburgh, on the crucial significance of plants for human survival (“no forest, no water – no water, no paddy fields - no paddy fields, no food – no food, no human beings”).

Numerous other presentation topics included Daniel Stern on Plant Sentinel projects in botanic gardens (as we have in the Christchurch Botanic Gardens this summer); Nigel Taylor on the history of the Singapore Botanic Garden and the need to train people in school and universities so that they understand the whole plant; and Professor Ying Wang and her co-workers on the taxonomy, chemistry, and health benefits of the genus *Epimedium*. I have the conference abstracts for anyone who would like to know more about these or other topics covered.

The conference concluded with a field trip to Dinghushan National Nature Reserve, two hours drive outside Guangzhou, where a steady and steamy climb led us under a monsoon evergreen broad-leaved and *Pinus massoniana* forest canopy, through a gorge, to a hilltop Buddhist temple.

And on reflection, I felt that our own botanic garden, with far fewer resources in terms of staff and facilities than many of the grander (although not all) botanic gardens does a great job as popular tourist attraction and sanctuary for Christchurch residents. Our educational programme is engaging, imaginative and exciting, making good use of the flower displays, trees and lawns, as well as the enthusiasm of knowledgeable staff.

Our research and conservation effort is being re-born, becoming reconnected to the work being undertaken in the universities and crown research institutes. We need to do more in these areas, and we need to foster ecological restoration in the city and region through *ex situ* conservation and monitoring of restoration plantings.

Documented plant collections are the basis of a (to quote our vision statement) “foremost” botanic garden. As resources allow, we need to develop our existing collections as well as those foreshadowed in our Management Plan along with the facilities that will allow us to use them for research, conservation, education and display.



Gorge route to the temple in Dinghushan National Nature Reserve

# Articles

## Plant hunter – Father Jean Pierre Armand David, 1826-1900

Next time you admire one of the ghost trees (*Davidia involucrata*) in the Gardens spare a thought for the man after whom the tree is named, and who was responsible for the tree's introduction to the west.

Jean Pierre Armand David was born in the small French Pyrenean town of Espellette, one of three sons of the local doctor who was also the mayor and magistrate. His father passed on to each of his sons his own three enthusiasms; to one his love of medicine, to another his love of good food, and to Armand an abiding interest in natural history.

While Jean Pierre Armand David spent his childhood studying and collecting objects of natural history he chose as a vocation to be ordained as a Lazarist in the Order of St Vincent de Paul, thus joining or maybe starting a long tradition combining the professions of "the cloth" and natural history, particularly plant collecting and breeding. He had an abiding desire to go to China to work but his superiors had him teach science at Savona College in Italy for ten years.



*Father Armand David*

By the time he was sent to China at the age of thirty-five he already had a high reputation in the scientific community in both France and Italy and a high level request to his employers allowed him to combine his skills and knowledge as a collector with his religious duties. He was at that time prin-

cipally renowned as an ornithologist but he was also a first class geologist, mineralogist, geographer, hydrographer, ethnographer, zoologist and of course a botanist. In those days professional specialisation did not seem to be considered relevant.

His collections sent back to Musee d'Histoire Naturelle in Paris were of such high standard that the French government asked his superiors to release him to lead expeditions to Mongolia, Tibet and other areas of inland China. He proved to be a meticulous hunter and was the first to use the process of "systematic collection" rather than the random techniques used by others.

What Father David's scientific journeys meant for botany may be inferred from the fact that he collected and processed over 2000 species of plants, sending them back to France. No less than 52 new species of rhododendron were found and about 40 *Primulae*. The Western Mountains of China furnished an even greater number of hitherto unknown species of gentian.

His most notable plant "discovery" was of course *Davidia involucrata* known variously as: Dove tree, Ghost tree or Handkerchief tree, named for its conspicuous white bracts prominent here in November. It is a botanical curiosity requiring a family of its own, *Davidiaceae*, its closest relative being the Genus *Nyssa*. There's a fine young specimen in Mona Vale near the gazebo and three in the Botanic Gardens.



*Dove tree*

Many other species carry the David name including: *Acer davidii*, *Viburnum davidii*, *Photinia davidiana* (syn *Stranvaesia davidiana*), *Buddleia davidii*, *Metapanax davidii*, *Sophora davidii*, and for a change he used his Christian name for *Pinus ar-*

*mandii* and *Clematis armandii*. It's useful to note that plants with the David connection all come from China.

As well as collecting plants he simultaneously made collections of insects, molluscs, fishes, reptiles, birds and mammals. He was credited for being the first westerner to describe the giant panda (apparently also called "David's bear") and for the introduction to Europe of the David deer, *Elaphurus davidianus*.

Largely based on information from Alan Morgan

### **Look at that tree – Monterey cypress *Cupressus macrocarpa***

One of the most notable trees in the Botanic Gardens is the Monterey cypress – or macrocarpa, as it is commonly called in New Zealand.

Macrocarpa means "large fruited" and alludes to the relatively large cones of this species of cypress.

The largest specimen of the Monterey cypress in the Gardens grows about 100m east of Cuninghame House. It's huge size and strongly fluted trunk always draws the attention of passing visitors. The low wide-angled branching makes it easy for youngsters to climb the tree and find a perch on the massive branches for a chit-chat.

The Monterey cypress has possibly the most restricted range of any conifer in North America. In the wild it is known only from two small groves at Carmel Bay near Monterey, California. As a strictly coastal species – always occurring within half a mile of high tide level – the trees are much battered and shaped by the prevailing western wind that blow in from the Pacific Ocean. The ancient trees, often centuries old, closely hug the coastal rocks in their wind-swept habitats and are remarkably picturesque.

The earliest known introduction of the Monterey cypress into New Zealand was in 1864 when J. B. A. Acland planted some at his Mt Peel Station. The two largest macrocarpas in the Christchurch Botanic Gardens must have been planted soon after, but the exact date is not known.

After *Pinus radiata*, the Monterey cypress is the most important conifer introduced into this country. It has been much planted throughout New Zealand in shelterbelts, for hedging, shade and as a plantation grown timber tree. On account of its high tolerance to salt wind it has been much used in coastal plantings. It stands up well to frequent clipping and thus makes very good tall hedges – often seen on farms and around homesteads. These hedges are always a wonder to our American visitors.

Grown individually the Monterey cypress branches very strongly, but well-managed plantation-grown



*Macrocarpa* in Botanic Gardens

trees produce straight, clean trunks and yield excellent durable timber that requires no preservative prior to usage. It is a good all-round building timber – useful for framing, flooring weatherboarding and boat building.

Max Visch

### **Art in the Gardens: The sundial in the central rose garden**

Prior to 1936 there was a small circular pool in the place where the sundial now stands. The dial is made from local Halswell stone and has a top of polished black marble with a bronze shadow marker set in an octagonal stepped stone base. The inscription says “Memory of Thomas Stevenson of Papanui, Christchurch, Sept. 23<sup>rd</sup> 1954.”

Thomas Stevenson was born in Ayrshire, Scotland. He lived in Papanui and died at the age of 85 years in 1952 and was listed as a retired gardener.

Barbara Brailsford and Faye Fleming



### **An invitation**

The Friends Christmas Social is a chance for members to get together, socialise and have a bit of fun. It will be held between 2 to 4.30pm on Sunday 16 December at the CHS rooms in Riccarton Avenue, South Hagley Park. It is a “bring a plate” affair but drinks and Christmas cake will be provided. A variety of plants grown by our propagation groups and a couple of bottles of wine will be up for grabs in the raffle.

The Party will include a short trivial pursuit quiz based on the Botanic Gardens - so visit the Gardens and brush up on your trivial - and not so trivial – knowledge.

We look forward to seeing you there.



## Friends News

On Tuesday 28 August eight newly trained Botanic Garden Guides received their graduation certificates and their guiding badges at an informal evening "ceremony" at the home of Neil and Faye Fleming. The Flemings were responsible for the design of their 45-hour training which included guiding skills and knowledge, geographical, geological and historical knowledge of Christchurch City and Canterbury, introductory botany and a detailed knowledge of the Christchurch Botanic Gardens. The training was ably assisted by the staff of the Botanic Gardens and a number of already-trained

guides plus the expertise of Roy Edwards of Lincoln University and St John (First Aid). The eight new guides are now integrated into the existing cohort of guides and will be a valuable resources not only for this seasons guiding that starts on September 15 but also for the forthcoming Australasian Guiding Conference next year. The training was funded by the Friends of the Christchurch Botanic Gardens and the certificates were presented by their president, Charles Graham and John Clemens, Curator of the Christchurch Botanic Gardens .



*Trainee guides out in the Gardens*



*Graduation ceremony for new guides*



*At the graduation ceremony*

## Events in the Gardens

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From Lynda Burns, Visitor Services Team Leader. 941 7585 or 027 559 0181.

### **Ingham Lazy Sundays.**

Every Sunday from 6 January to 10 March, 3 – 4.30pm (if wet, postponed to 17 or 24 March).

A free concert of local music on the Archery Lawn. Includes on Sunday 24 February a “Flower Power” themed concert from 2.30 to 5.30pm as part of 150 year commemorations.

### **Tip Top Busker Kid Pitch - World Buskers Festival.**

Friday 18 to Sunday 27 January, 11.00am to 3.00pm, on the Weather Station Lawn.

### **Be a Busker competition – World Buskers Festival.**

Friday 18 to Sunday 27 January, 3.30 to 4.30pm, on the Weather Station Lawn

### **Sunday Bandstand.**

Every Sunday from 3 February to 24 March, 12.00 – 1.30pm.

A free concert of big band music on the Daffodil Lawn.

### **The Garden City Gorgeous - Festival of Flowers.**

Saturday 16 February to Sunday 3 March

Pick up a brochure from either Information Centres.

### **Wind in the Willows - Anthony Harper Summer Theatre.**

Friday 15 February to Sunday 3 March (no performances 18 & 25 - 27 February).

Tuesdays to Sundays, 6pm & Saturdays to Sundays, 12.30pm.

A free performance by Hallum and Clark Productions behind the children's playground. Cancelled if wet

### **Ellerslie Flower Show**

Wednesday 6 to Sunday 10 March