

Dear Friends

The Arboretum continues to be an exceptionally active place—and much has been happening since our last newsletter in December 2017.

The Friends' Singapore Trees and Gardens Tour went ahead as planned from 5–11 March and what a triumph it was, but see more about that on pages 2–8.

Congratulations to Leigh Taafe, Curator of the National Bonsai and Penjing Collection of Australia, for the successful 2018 Bonsai Week held 19–25 March. The program included live presentations by international guest artists who expertly transformed shaggy trees into bonsai masterpieces. A variety of other Bonsai Week activities attracted much attention from locals and many interstate visitors. Leigh is already in the planning stages of the 2019 Bonsai Week with more exciting international experts booked to come to the Arboretum.

The Universal Penjing Conference will be hosted at the National Arboretum Canberra on 18–20 September 2018. Eight internatonal Penjing masters from China, Europe and South East Asia will be here to share some of their trade secrets and artistic vision from this ancient art form. Conference bookings will be opening soon. Visit <u>www.nationalarboretum.act.gov.au</u> for more information.

Our Annual General Meeting will be held at the Margaret Whitlam Pavilion on Tuesday 8 May, commencing at 5.30pm. Following the AGM, at 6.30pm, our guest speaker will be Chris Davy, ACT ornithologist par excellence, and this will be a gold coin event. I would like to remind you that nomination forms for Friends' Council positions are available on our website at <u>www.arboretumcanberra.org.au</u>. This year there will be several vacancies to fill: Deputy Chair, Treasurer and Newsletter Editor, as well as general Council Member positions. You are encouraged to consider these opportunities to contribute to the future of the Friends. All nominations are required to be received prior to the AGM. We are also keen to receive nominations for the 2018 Volunteer of the Year and Sterling Service Awards. These forms are also available on our website and Council will be taking your nominations into consideration when determining the winners. Award winners will be announced at the AGM.

Recently, the 2017 Jake Keller Scholarship holder, Jayne Roberts, has been at the Arboretum working with Owen Bolitho, Senior Horticulturalist and the Horticulture Team. Jayne's special project is the innovative blasting of holes prior to planting to get trees off to a good start, rather than digging or auguring holes. This method will be trialled in further plantings in the English oak forest (Forest 82). A recent Thursday Working Bee was invited to observe this blasting technique and some of us even had a turn at pushing the plunger!

Congratulations to Bronwyn Halbisch and her dedicated team who produced a wonderful array of jams, chutneys, dried and other goods to sell at Market Day at the Arboretum on Saturday 14 April, all sourced from the bounty at the Arboretum. Despite horrid weather, this Market Day was a huge success with sales exceeding \$2000! The next Market Day will be held on Saturday 12 May.

The Friends Garden on Dairy Farmers Hill is well underway. The watering system has been installed and planting is nearing completion. A plaque naming this site as the Friends Garden will be unveiled at 11:30 am on Thursday 3 May. There will be more planting that afternoon to complete the process.

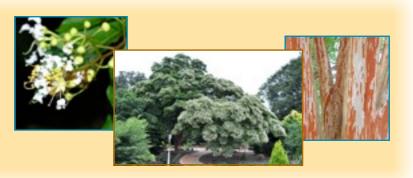
Thank you for all the wonderful work you do in support of the Arboretum. These volunteer hours that you so generously give make the Arboretum such a special place and one that is well on the way to becoming a world-class attraction.

See you there soon!

Trish Keller OAM Chair

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Travelling Friends visit Singapore

BY MAX BOURKE AM

I believe the Singapore trip was a great success, though that is for others to judge.

For me it was a chance to introduce the group to an extraordinary range of places, some not usually seen by tourists, and most importantly introduce them to people who are rarely met by tourists!

The Director of Singapore Botanic Gardens, Dr Nigel Taylor; the senior officer of the National Parks Board responsible for biodiversity, Dr Lena Chan; and the horticultural chief of Gardens by the Bay were some of the great presenters of their sites and the background to their establishment. There were also visits to the



The Oriental Pied Hornbill (Anthracoceros albirostris) PHOTO: ANDY RUSSELL





Left: Max with Dr Liz Trusswell at the cannonball tree in Singapore Botanic Gardens. Above: Flower detail from tree at left. PHOTOS: KIM RABBIDGE



A Wikimedia photo of the cannonball tree's fruits PHOTO: MOKKIE

offshore island of Pulau Ubin to see old kampongs and spice gardens, time spent in the Mangrove Arboretum at Sungei Buloh, the Dipterocarp Arboretum, the greenest hospital in the world and the extraordinary garden educational facility at Hort Park—just to bring variety!

I was pleased to share and happy it went well. But the two peak excitements for me were:

(1) seeing my first Oriental Pied Hornbill in the flesh. What a sight this was in the Singapore Botanic Gardens, a truly magnificent bird; and

(2) to see one of most extraordinary trees in the world, the so-called cannonball tree (*Couroupita guianensis*), not only in fruit (the cannonballs) but also in full flower. They are superb and so complex.

Our travellers were a happy group of people who also contributed generously to the coffers of the Friends.

BY MARGIE BOURKE

As the deputy leader of this trip, can I say what a pleasure it was to spend a week with such an appreciative, friendly, and punctual group who were eager to experience some of the tropical species, and knowledgeable people we have come to admire on many visits to Singapore?

We were fortunate that the experts were so generous with their time in showing us around their establishments, giving us access not usually available to a commercial tour.



Our tour group with the Director Singapore Botanic Gardens, Dr Nigel Taylor (back row, white shirt). The group is standing in front of a display of the national orchid, a Vanda hybrid.

PHOTO: KIM RABBIDGE

Singapore Biodiversity Index

BY ANDY RUSSELL

Dr Lena Chan

Dr Lena Chan, "Singapore's very own Mother Nature", gave a talk about the Singapore Biodiversity Index to our group at the Heritage Museum Building, Singapore Botanic Gardens, on 9 March.

As the head of Singapore National Biodiversity Centre (just one of her positions), Dr Chan has had a leading role in producing a self-assessment tool to measure up how cities perform in biodiversity protection. In 2008 at the Conference of the Parties (COP9) in Bonn, Germany, (coinciding with International Biodiversity Day) Singapore proposed that this tool be put to international use. Through a set of 23 indicators, ten measure nature biodiversity in the city, four measure ecosystem services and the remaining nine measure governance and management of biodiversity in the city. When put together, these indicators produce a score that enables comparisons between cities.

Major cities that have accepted this challenge include Singapore, Paris, London, Lisbon, Barcelona and New Orleans. In Australia, Jundalup WA appears to be the

PHOTOS: ANDY RUSSELL Dr Chen being shown some Friends' material by Trish, Friends' Chair





only participant while in New Zealand, Hamilton and Waitakere are both listed.

We were most impressed by this presentation.

Sungei Buloh Wetland Reserve and the Australian connection

BY JANET RUSSELL

While much of Singapore consists of the built environment, this reserve was a natural environment which remained as a wetland due to the lobbying efforts of a Malay bird group. It wasn't just because of the number of birds there. It was also recognised as a site of international importance for migratory birds, alongside sites such as Kakadu.

We were taken on a tour by two National Parks staff and shown 11 of the mangrove species native to Singapore growing there, although some have been planted.

I had previously seen mangroves as a rather undifferentiated genus (they had reasonable-sized leaves, were green and lined muddy banks that were often inaccessible). But I was rather taken with the flower of one of these mangroves as I had rarely seen mangroves flowering. I discovered its name to be *Bruguiera hainesii* and learnt that it is quite rare in Singapore. Its Malay name is *Berus mata buaya* (the Eye of the Crocodile) because the pores in the trunk look like crocodile eyes. The same species grows in Australia in the Cairns region of Queensland but it has been identified as critically endangered there.

Walking further along the boardwalk, we saw a large crocodile swimming in the creek. It was *Crocodylus porosus*, the same species as the saltwater crocodile found in Australia. My small camera was not up to the task of taking a photo at that distance but the National Parks officer I was with offered to use his telescope to extend the range of my camera lens and took the photo for me. The crocodile's eye is not easily discernible in the



Crocodylus porosus, photographed by a guide



Bruguiera hainesii mangrove flowering

PHOTO: JANET RUSSELL

ridges and furrows of the tough leathery skin, so the Malay people must have had some very close encounters with the beasts to name a tree pore after it.

Max and an ornithologist from the National Parks Board walking to a bird hide at Sungei Buloh



An introduction to the reserve by a National Parks Board staff member

PHOTOS: KIM RABBIDGE



Gardens by the Bay a spectacular botanical feature

BY ANDY RUSSELL

Quite different to the Singapore Botanic Gardens, these gardens (built on reclaimed land) are a 101 hectare horticultural park. The highlights are two massive conservatories, the Cloud Forest and the Flower Dome. There is also a grove of tall tree-like structures (ranging from 25–50 m in height) that are lit up at night. Once again we had the privilege of meeting and being led on our visit by senior members of the gardens staff.

The Cloud Forest is a cool moist conservatory that is a 35 m mountain with the world's tallest indoor waterfall. The mountain is formed by an almost vertical green wall of plants, including ferns, orchids and many other plant species. There is a lift to the top, then you can take the spiral walkway back down to ground level so that the various levels are easily viewed.

The Flower Dome replicates a Mediterranean climate with a display of trees, shrubs and herbs from many countries. An Australian section is included with large



Left: Flowers growing in the green wall

Below: Water tumbles 35 m from the top of the 'mountain' PHOTOS: ANDY RUSSELL



Flora of the Australian section

PHOTO: ANDY RUSSELL

grass trees, grevillea, everlasting daisies, kurrajong and many other species. The host of displays from other countries include a large section of cacti and a group of boab trees from Africa.

Part of the grove of tall tree-like structures

PHOTO: KIM RABBIDGE









Chris Blaxland and Janelle Chalker in the Cloud Forest PHOTO: KIM RABBIDGE

Sculptures built of a variety of materials abound within these gardens.



Above: A sculpture in the Flower Dome Below: Entry to the Palm Garden, Gardens by the Bay PHOTO: KIM RABBIDGE

WIKIMEDIA PHOTO





And the real thing! A male common parasol dragonfly (Neurothemis fluctuans) PHOTOS: SANDY ALSOP





Laurel and Ian Sayers outside the Botany Building at Singapore Botanic Gardens PHOTO:

PHOTO: KIM RABBIDGE

The trip was wonderful

BY IAN SAYERS OAM ED

Laurel and I had been to Singapore six or seven times, but this time we saw things we'd never seen before.

The last time we were there, Gardens by the Bay was under construction but nearing completion, so to see it in all its glory was special. I also especially liked the mangrove arboretum—a different but vital environment.

Personally, the visit to Kranji War Cemetery was very special and very moving. With the help of Chris, our guide, I was able to find the grave of Captain Robert Charles Page DSO, a member of Z Force and Operation RIMAU who was executed by the Japanese in July 1945. I knew Robert's mother and sister from my time in Rabaul. I've sent a photo of his headstone to another family member I met on a return trip to Rabaul last year. Laurel is terrified of heights, but even she managed the tree-top walk at Gardens by the Bay.

It was a wonderful trip, thanks to the superb organising abilities of Max and Margie. If anything ever went wrong, we were not aware of it.

Fascinating and eye-opening

BY JENNIE WIDDOWSON

The content of this tour showed us different facets of vegetation and gardens every day. The efforts of Max and Margie in pre-tour planning, along with additional knowledge from Chris, our local guide, made the trip most enjoyable.

We were given a taste of indigenous vegetation when we visited the island of Pulau Ubin in the channel between Singapore and Malaysia. We walked through lush tropical vegetation with many trees I did not recognise, though some were identified along the National Parks tree trail. One enormous tree amazed us. It produces durian fruit, notorious for its pungent odour. Many coconut palms grow on the island and we all sampled the refreshing juice, directly from the coconuts.

Below: The group visiting Kranji War Cemetery PHOTO: KIM RABBIDGE





Monitor lizard in Sungei Buloh wetlands PHOTO: JENNIE WIDDOWSON

Next day provided quite a contrast with our visit to Gardens by the Bay and the following day provided yet another contrast when we went to the north side of the island to visit Sungei Buloh wetlands and the mangrove arboretum. It was fascinating looking at all the different shapes and types of mangroves and the wild-life living amongst them. There were crabs, mangrove snails, mudskippers, large lizards, squirrels, wading birds and crocodiles all within this arboretum. Because of this diversity, I found this was probably the most interesting place we visited.

The last days included visits to Hort Park where many of the trees and plants found in streets and parks are grown; a hospital with a vegetable garden and orchard on its roof; a dipterocarp arboretum (rainforest trees with two-winged fruits); and the Fort Canning tree walk where we saw many old trees and a rainbow *eucalypt* (*Eucalyptus deglupta*) that has beautiful coloured bark. This species is indigenous to Mindanao in the Phillipines, but now grows throughout the tropics. Although Singapore has a very high population density (over 8000 people per square kilometre), there were trees and flowers everywhere so the city did not appear to be crowded. Rain trees (*Albizia saman* and *Bougainvillea* plants were everywhere, even on the overpasses

Horticulturalists with Trish Keller and Max Bourke at the Pasir Ris Tree Nursery of the National Parks Board PHOTO: KIM RABBIDGE

What a triumph this trip was!

BY TRISH KELLER OAM

Max and Margie's close discussions with directors, curators and senior staff of the Singapore Botanic Gardens, the Gardens by the Bay and the National Parks Board of Singapore paved the way for our visits to these remarkable places. Consequently experts in the fields of botany, ecology and tree management were on hand to give us a deep understanding of Singapore's rich botanical history.

We learned how, from the early1960s onwards, Singapore had transformed from mudflat to metropolis, beginning with the life's work of Prime Minister Lee Kuan Yew, and we were able to explore Singapore's botanical history right up to the present day.

We were fascinated by Dr Lena Chan's talk regarding the thrusts and principles of the Conservation Master Plan and the Singapore Index. We could have listened to her for hours but our itinerary called us elsewhere. We were given a tour of the Singapore Botanic Gardens' extraordinary orchid gardens and laboratories, by guru of both cacti and orchids, their Director, Dr Nigel Taylor. Dr Taylor had previously worked at the Royal Botanic Gardens Kew for 34 years.

Singapore Botanic Gardens has been developing orchid hybrids since their opening in 1928, and this work kickstarted the now nationally important industry.

The world's largest flower basket

SUNDAY TIMES PHOTO





Many of the tour group visited Takashimaya, a large shopping centre near our hotel, where, as a forerunner to the biennial Singapore Garden Festival to be held in July 2018, they displayed the world's largest flower basket of 27,000 blooms.

Tour participants all paid a surcharge to the Friends of the National Arboretum Canberra. Consequently the Friends' coffers were topped up to the tune of nearly \$11,000. Thank you all participants.

TREES IN FOCUS

Lagerstroemia fauriei 'Fantasy' JAPANESE CREPE MYRTLE

BY LINDA MULDOON

This cultivar is planted in the Arboretum's main car park (Forest 24) where it should provide good summer shade in years to come.

The species name *Lagerstroemia* honours Magnus von Lagerstroem (1691–1759), a Swedish merchant and naturalist who supplied Linneus with plant specimens; and *fauriei* is named after Urbain Jean Faurie (1847–1915), a French priest and botanist. Dr JC Raulston of JC Raulston Arboretum in North Carolina, United States, selected the name 'Fantasy' for this cultivar in 1982.

GENERAL CHARACTERISTICS

A medium-sized deciduous tree, 15 m in height with a spread of 10 m. Its multiple trunks and upright branches form an attractive V-shape. 'Fantasy' has spectacular

peeling bark which is cinnamon-coloured and clearly displayed after the tree has shed its leaves. The simple ovate leaves, 10 cm long and 5 cm wide, are deep-green turning to golden-yellow and orange in autumn. White flowers are produced in profusion in early summer, in 6–12 cm long panicles. The fruits are small woody capsules.



NATURAL HABITAT AND HISTORY

This species of *Lagerstroemia* is only found on Yakushima Island, Japan, where it is limited to riverbed sediments and the footslopes of small watersheds. The

Flowers in profusion in early summer at JC Raulston Arboretum





The structure of the tree, as revealed in winter at JC Raulston Arboretum



Above: 'Fantasy' has spectacular peeling bark

Above right: the simple ovate leaf

Right: the fruits are small woody capsules





seeds from which this cultivar was developed were collected from Yakushima Island by the United States National Arboretum and planted in JC Raulston Arboretum in the 1950s.

Now it is a popular tree for gardens because of its hardiness, its attractive bark and elegant form.

TRAVELLING FRIENDS

Yet another trip to tempt you! Autumn colours in eastern USA

11-29 OCTOBER 2018

Following on from their successful tour of Chile and Argentina in October 2016, this is a second trip being organised by Jan Morgan (member of the Friends who runs the U3A courses on Arboretum tree species) in association with Travelmakers Pty Ltd.

The tour has been designed to enable participants to experience the spectacular 'fall' in north-eastern USA and to see most of the 22 Arboretum species endemic to North America along the way. Some 13 of these species are native to the east and they plan to show us some of these growing in their natural environments.

While mainly focusing on trees, the tour will also include visits to some of the better-known sites of the region.

HIGHLIGHTS

The coastal landscapes of Maine and New Hampshire The White Mountains and Mount Washington Arnold Arboretum and Mount Auburn Cemetery, Boston Historic Philadelphia, Bartram's Garden and Morris Arboretum

The autumn colours of the Appalachian Mountains The spectacular drive along the Blue Ridge Parkway Biltmore Estate, Ashville, North Carolina The Cradle of Forestry Centre, North Carolina The great old trees of the Joyce Kilmer Memorial Forest

Appalachian Mountains



Blue Ridge Parkway

Note: Our tour departs from Boston, a coastal city in north-eastern USA. Those arriving directly from Australia on the preferred flights will be met at the airport. Those who choose to arrive early, to explore Boston before departure, will be collected from the city centre. We can arrange accommodation and make tour suggestions.

COST

\$8375 per person *excluding* airfares (Australia to Boston and Altanta to Australia), travel insurance and US visa or visa waiver fee. This price is based on a minimum of 12 people (maximum 16) and is based on twin-share accommodation. Single supplement is available for an extra \$2135. This price is based on 0.75 AUD/USD. Currency fluctuations above 3% will affect final price.

Price *includes* 3–4 star accommodation with private facilities, all meals, land and air transport within US, entries to sites and group tips.

BOOKINGS

\$1000 deposit is required. Final payment is required 75 days before departure.

FURTHER INFORMATION

Contact Jan Morgan (0412 062 423 or janmorgan2@me.com); or Chris Carter (0412 001 586 or info@ruins.com.au) for further tour details.



FOREST TALK

BUSH TUCKER GARDEN PLANTED IN STEP

A Bush Tucker Garden is being created within Forest 20 as part of the Arboretum's commitment to the Transport Canberra and City Services (TCCS) and Chief Minister, Treasury and Economic Development Directorate (CMTEDD) Reconciliation Action Plan. On Sunday 11 March, members of the Friends helped plant the native flora traditionally used by the Ngunnawal people. A very tasty sausage sizzle got underway at 11:30 am and then it was back to work—as the very bountiful tube stock beckoned.

Calling all knitters!

WARM TREES 2018

The Friends of the National Arboretum Canberra seek knitters and crochet workers to help with our amazing annual tree art installation

All we need are donations of scarves in bright colours to create an exciting design for families and all visitors to enjoy throughout July

For more information go to www.arboretumcanberra.org.au or email contact@arboretumcanberra.org.au or ring mob 0407 176 163

Contact us as soon as you can







Volunteers arrived to find hundreds of plants laid out in the desired locations—awaiting their attention



But first we assembled in the classroom and Suzanne Orr MLA (front row, centre), the Member for Yerrabi, formally open the garden—and stayed on to do quite a bit of planting herself



Accompanied by Scott Saddler, Roszanna Madden, the Arboretum's indigenous horticulturalist cadet, gave a practical demonstration on how to plant—and then we all got to work changing the landscape!





Donate a picnic set or seat



Remember special events & life moments & support the National Arboretum Canberra Inc Donations are tax deductible. Picnic sets and seats are acknowledged with a personalised plaque. Contact Colette on 0418 412 640 or email colette@arboretumcanberra.org.au for more information.

Tree people at the launch included Friends and Arboretum staff



John Langford speaking at the launch. See far right the round clock he was presented with for this occasion. The surround had been made from a tree planted by Weston and recently felled in Dunrossil Drive.

LAUNCH OF CANBERRA TREE WEEK 2018

The launch of Canberra Tree Week was held in the English Garden in Weston Park, Yarralumla, on 30 April. This was a very fitting setting as the launch included the formal handover of historic documents from Charles Weston's personal collection (the Weston Family Papers) to the ACT Heritage Library. John Langford (Weston's grandson) had travelled from Melbourne for the occasion. He told of how his father was an unlikely candidate to achieve so much in life, having left school at 13.

John's mother had spoken of the family's first arrival in Canberra and how they caught the train from Sydney to Queanbeyan, arriving at 4:00 am. From there they travelled by horse-drawn stage-coach but had to negotiate five rabbit-proof gates along the way.

FRIENDS' MEMBERSHIP FEES TO RISE

If your membership fees are due now or soon, pay them now—and you could save yourself some money!



MEMBERSHIP APPLICATION FORM

Please complete this form, *OR* go to www.arboretumcanberra.org.au where you can join online and make a secure payment.

Yes. I/we wish to join the Friends of the National Arboretum Canberra Inc.

1. TitleFirst name			
Last name			
2. Title First name			
Last name			
Postal address			
		Posto	ode
Email address			
l agree to receiving notices by email YES/NO			
Telephone (h)			
Please remember to tell us about changes to your contact details			
Date			
Please circle your relevant membership category/parking voucher request:			
Single	1 year \$35	3 years \$95	5 years \$155
Household	1 year \$40	3 years \$110	5 years \$180
Concession	1 year \$20	3 years \$55	5 years \$90
Association or club	1 year \$60	3 years \$160	5 years \$270
Corporate Friend	1 year \$2000	3 years \$5400	5 years \$9000
Friends' annual parking voucher \$26 Reg. No.			
Total payment Please circle your method of payment			

Cash Cheque Direct deposit

(cheques must be made payable to Friends of the National Arboretum Canberra Inc.)

Post membership applications to: The Secretary, Friends of the National Arboretum Canberra Inc. PO Box 48, Campbell, ACT 2612

Direct deposit details are: WESTPAC, Petrie Plaza, Canberra, ACT Account—Friends of the National Arboretum Canberra Inc. BSB No. **032719** Account No. **375379**

(when making a direct deposit, please record your name so that your membership can be verified)







Contact

You can contact us via email at friends@arboretumcanberra.org.au or visit our website at www.aboretumcanberra.org.au or by phone during business hours on 0406 376 711

Office bearers

Trish Keller OAM (Chair) Del Da Costa (Secretary) Richard Bear (Treasurer) Colette Mackay (Donations and Sponsorship Manager)

Council members

Rob Ey

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Cherie McLean (Social Media Manager) Linda Muldoon (Publications Editor) Lainie Shorthouse (STEP Representative) Mike Woolley (NBPCA Representative)

The Council (all of the above) meet on the second Tuesday of each month

Life members

Max and Margie Bourke Roger Hnatiuk Sherry McArdle-English Linda Muldoon Jocelyn Plovits

Honorary member

Jon Stanhope AO

Patron John Mackay AM

Newsletter

The newsletter is published quarterly. Please contact Linda Muldoon, the editor, by email on **lindaon@grapevine.com.au** if you would like to contribute an article, news or photos. Decisions regarding what content is published are determined by the Chair.

The Friends thank the ACT Government, ActewAGL,CanberraNet, Ginger Catering and Elect Printing for their support

NOTE: this page may be photocopied



