



2023

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AAFBG MAGAZINE

Looking Toward our
2024
Conference

Seeking Presenters

on the theme /sub-theme of



AAFBG
Conference 2024

23 - 26 August

Maroochy Regional Bushland Botanic Gardens

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OUR BOTANIC GARDENS HAVE THE OPPORTUNITY TO CONTRIBUTE NATIONALLY TO HELP FUTURE-PROOF PLANTS AGAINST CLIMATE CHANGE

Our botanic gardens across the country, old and new, large and small, successfully continue helping to link people with plants through their roles in education and learning, displaying plant species in various groupings, conserving threatened plant species through living collections and seed banks, providing habitats for pollinators and building a wealth of diverse plant knowledge.

At this time of changing environmental conditions and climate variability our botanic gardens have the opportunity to contribute nationally to help future-proof plants against climate change. Over decades of developing an extensive knowledge-base, and through scientific endeavour botanic gardens hold major amounts of disparate information. As we gradually understand more about plant traits and features and how they function, both in-situ and ex-situ, we are presented with a slightly changing role of our botanic gardens.

Bringing together this accumulating mass of data, particularly from seeds and their germination characteristics, will involve continental-scale research and conservation effort. Detailed analyses will be needed with the aim of predicting how future climates will influence plant species' likely responses to climate variability and appropriate climate regimes, and locations where they will show resilience in the long term.

Now don't be alarmed ... I am not proposing that you as the Friends of Australia's Botanic Gardens community, undertake this proposed intensive collaborative program of investigation running across academic circles, botanic gardens, conservation management and industry, and beyond. However, with botanic gardens coming into their fore, I believe that opportunities will present for Friends groups continuing to contribute their skills and expertise, but across a wider range of activities within our botanic gardens. Some of these may be of a more technical nature than others, and could inspire and expand the capability of the many Friends groups.

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Annual subscriptions are due on 1 April

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We welcome your articles and photographs and important calendar events.

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Contact: Adel at mag@FriendsBotanicGardens.org at any time to discuss your article, ideas, and timelines. We are flexible.

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AAFBG AGM 2024

Hosted by the Friends of
Maroochy Regional Bushland Botanic Gardens



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Friends already undertake extremely worthwhile activities in our gardens, and there is an opportunity to be more engaged in areas such as the following:

- Collecting in the wild and specimen material storage
- Notetaking and recording through digital and photographic means
- Technology-assisted presentation of education information
- Plant propagation techniques, and more ...

Those botanic gardens with research labs – mostly the larger more established organisations – could also attract Friends to be involved with more technical conservation-specific research projects especially around conservation of our seed collections and live plant horticulture tasks.

Some of our gardens are already bringing together their horticulture teams and seed bank researchers to develop a more holistic approach to conservation, especially around threatened species.



Judy West AO
Image: supplied

I see increasing moves in this direction, which will involve building relationships between Friends who may seek some stimulation in working with dedicated staff, who understandably are passionate about their elements of the ex-situ plant management and conservation responsibilities, contributing to both natural and cultural values of our Australian flora. These relationships exist in some botanic gardens and are growing into productive partnerships based on appropriate training and working together. It is important to build on such opportunities by taking small steps and involving 1:1 individual relationships so that others will see the benefits for all concerned, and be attracted to such volunteer activity.

Judy West AO
Patron



Horticulture, history and headlines in Sydney and Southern Highlands - pg 10

Enticing displays at the Herbarium
Image: L Beveridge

A real treat at Fitzroy Falls was the appearance of a pair of lyrebirds although only one was caught on camera. Image: L Beveridge





Special Trees

Originally published in 'Darwin's Botanic Gardens' (publishers: Friends of the Darwin Botanic Gardens Inc., 2019)
Author Fiona Douglas

Magnificent trees are the signature of all botanic gardens and the Darwin Gardens do not disappoint. Many of our huge old trees survived Cyclone Tracy in 1974, although some later became casualties of more recent storms and cyclones. A group of large raintrees *Samanea saman* welcomes visitors entering by the main gate and their shade provides welcome relief from the tropical sun. Several of these trees show evidence of past cyclone damage, but they are survivors and thrive nonetheless. Enough large trees in the Rainforest have survived several recent cyclones to provide suitable habitat for the resident breeding pair of Rufous Owls.

It is worth picking up a copy of the popular, tiny, ring-bound booklet illustrating some of the Gardens' special trees. The description includes a QR code that enables visitors to discover a unique story about each tree, often told using audio or video. Informative signage is also located near the trees themselves.

Growing on the eastern slope of the native plant area are some *Podocarpus grayae*, trees that are relics of an ancient line. They came from tiny isolated pockets in Arnhem Land where the vegetation resembles that seen in north Queensland rainforests today. These pockets are remnants from the era when rainforest covered a much larger area of northern Australia.

The well-known teapot tree, a specimen of *Adansonia digitata*, has been close to the hearts of Darwinians for decades, as has the Australian boab *Adansonia gregorii* on Heritage Lawn. The often-photographed flowers of the several cannonball trees *Couroupita guianensis* have a strong scent, especially at night. The fruit are large, inedible and become very rancid as they rot. The Mexican calabash trees *Crescentia alata* and *Crescentia cujete* also have conspicuous large fruits borne in clusters.

The deep shade of the avenue of beauty leaf *Calophyllum inophyllum* trees along Gardens Road is very striking. The completely round seeds provide tamanu oil that can be used to treat skin problems. Another tree with medicinal use, the black bean tree *Castanospermum australe*, has beautiful orange flowers in the late Dry season. It is said to have anti-inflammatory and possibly anti-cancer effects.

Many exotic and native trees flower in the late Dry season. The brilliant red of the poinciana *Delonix regia* is particularly stunning because the flowers are produced on bare branches. The saracas and browneas around the lower car park have showy yellow to red flowers and many species have attractively-coloured new growth. Some even have purple seed pods!

In the Africa/Madagascar Garden, flowers of the baobabs, their close relative *Moringa drouhardii*, and the aptly named fried egg tree *Oncoba spinosa*, complement the colourful flowering aloes and euphorbias. On the western edge of this garden is a pair of multi-stemmed toothbrush trees *Salvadora persica*. These have beautiful tangled limbs and masses of unusual very small, white, spherical flowers.

The red-flowered Pride of Burma *Amherstia nobilis* is rare in the wild and is only suited to the humid tropics. Another rare tree, found overlooking the Amphitheatre, is *Baikiaea insignis* with its showy white flowers and drooping, rust-coloured, new growth. Close by there is the large, red-flowered *Brachychiton acerifolius*.

Some special trees have wonderfully scented flowers, again mostly produced in the late Dry Season. The signature fragrance of the perfume 'Joy' is derived from the very small yellow flowers of *Magnolia (Michelia) champaca*. The only specimen of the white-flowered species *Magnolia (Michelia) alba* in the Gardens can be found in front of Eva's Café. The species name of the ylang-ylang tree *Cananga odorata*, gives you a clue that its orchid-like flowers are also highly perfumed.

Well-known tropical flowering trees from around the world are represented in the Gardens, including cassias, tabebuias, poincianas, saracas, frangipanis and lagerstroemias. Beautiful local natives feature too, such as *Cordia subcordata* and *Grevillea pteridifolia*, both of which have clusters of bright orange, but very differently-shaped, flowers.



previous page: New growth of *Browneopsis ucalalina*. Image: Fiona Douglas
top: Autograph tree, *Clusia rosea*. Image: Fiona Douglas
middle: Raintree, *Samanea saman*, in the lower Gardens. Image: Fiona Douglas
lower: *Poinciana Delonix regia*. Image: Richard Bruxton
bottom: Teapot tree *Adansonia digitata*. Image: Fiona Douglas



ELMS UP CLOSE AND PERSONAL

Friends of Ballarat Botanical Gardens

Ballarat Botanical Gardens has a wonderful collection of Elms, including very old specimens planted in the 1880's. For this year's Ballarat Heritage Festival the Friends celebrated the diversity and significance of the Elms with a variety of events that took place throughout May.

This was a collaborative project with the Friends of Buninyong Botanic Gardens. The inaugural event was the opening of the exhibition 'Elms Up Close and Personal' in the Statuary Pavilion, Ballarat Botanical Gardens on Friday, 5th May. Preparation for the exhibition began more than a year before when six artists from the Botanical Art Group selected a specimen from the 25 mature Elms in the Central Gardens, to observe and depict through the four seasons. The finished artworks were scanned and the printed images used on display panels that included interesting facts about each tree. Several other panels provided additional information about Elms, including their identifying characteristics. The panels were also displayed at the Rotunda in the Buninyong Botanic Gardens.

Despite wintry weather, on Saturday, 27th May about 50 people participated in a fascinating a tour of the 'Magical Elms in the Ballarat Botanical Gardens'. The stories of 8 different Elms were explored by members of the Guides Group whose personal interpretations gave participants a special insight into the nature of these majestic trees. Next morning a guided walk in the Buninyong Botanic Gardens featured six of its 'Enduring Elms' and a map showed the distribution of more than 60 Elms throughout the town. Both walks were supplemented by informative handouts for self-guided walks.

BotaniKIDS participated in the Elms project on Saturday, 27th May, with a variety of activities at the Gatekeeper's Cottage that explored the theme of 'A Child's Eye View of Elms and Their Beautiful Leaves'. After a walk to collect bark and leaves from some of the Elms in the Ballarat Botanical Gardens for the children to feel and observe, artworks depicting Elm trees were created, with a particular emphasis on the beautiful leaves.

The Elms program was brought to a fitting conclusion on Sunday, 28th May when tree expert John Hawker gave an all-encompassing presentation on 'The Wide Word of Elms'. John co-authored Elms of Australia and his work for Heritage Victoria includes the Registry of Significant Trees. Tribute was paid to the now disbanded Friends of the Elms who formed in 1990 to help develop a co-ordinated response to potential threats such a Dutch Elm Disease. Several past members joined us for a celebratory afternoon tea where the efforts of all those involved in the Elm events during May were acknowledged.



John Hawker Elms Talk.



Buninyong Botanic Gardens Elms Tour.



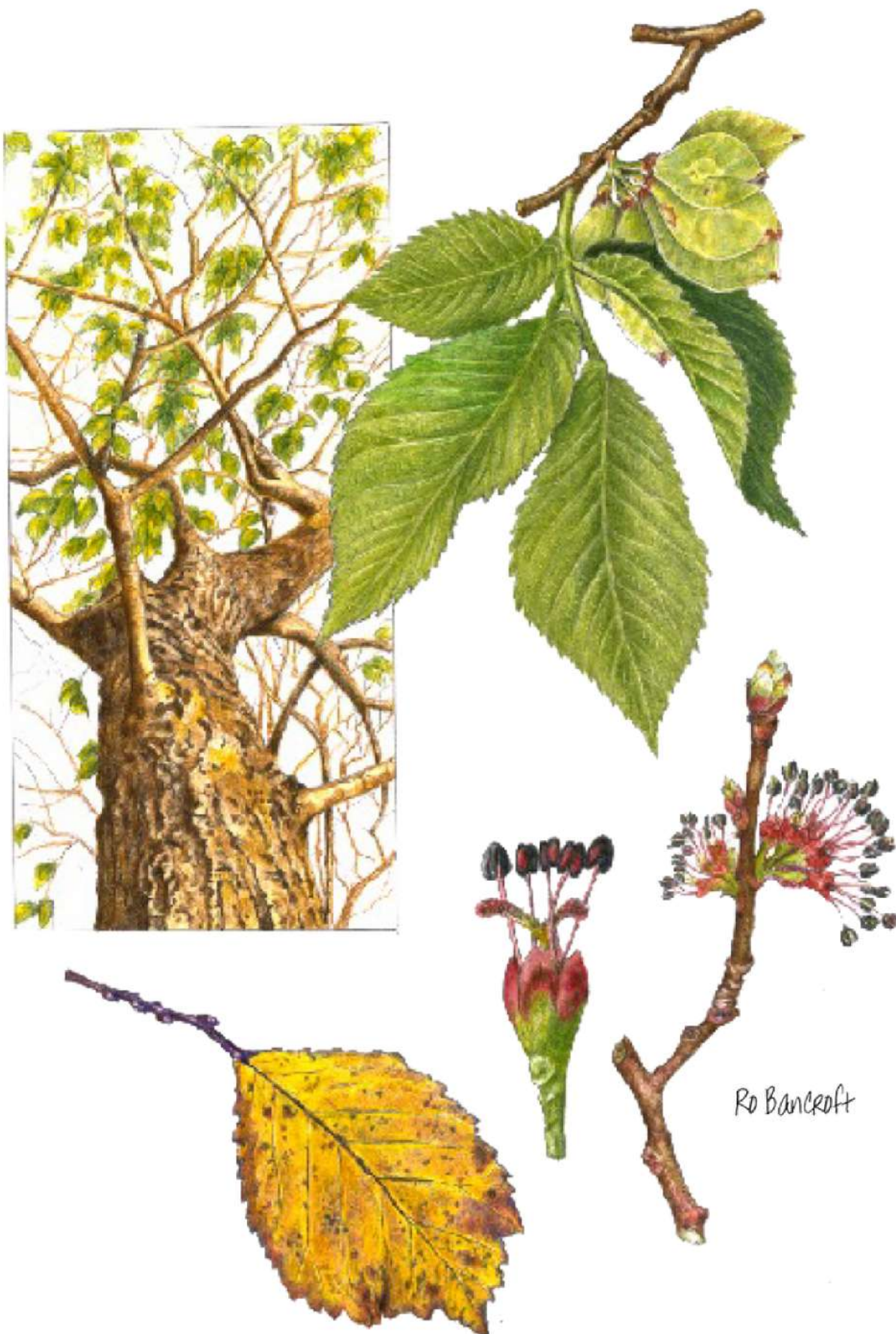
BotaniKids artwork.



Lorraine Powell & Merrill Shulkes

Golden Wych Elm, Ballarat Botanical Gardens.

Photos by: Warwick Sellens,
Raoul Dixon, Susan Pilbeam and
Merrill Shulkes



Ulmus glabra has the widest range of the European elms stretching from Ireland to the Urals and from the arctic circle to Sicily and Iran at altitudes up to 1500m. It is the only indisputable British native elm, and is fast growing reaching a height of 40 m. it is often used as a rootstock as it produces few suckers. The world's oldest Scotch Elm, located at Beaulieu Priory near Inverness, Scotland, fell recently, finally succumbing to Dutch Elm disease having limped through its last decades with only five per cent of living tissue. It was over 800 years old. Our tree may yet live to that age.

Ulmus glabra
 Planted 1989
SCOTCH ELM,
 syn **WYCH ELM**

Painting of Scotch Elm by Ro Bancroft

Whatever happened to the Day Basin?

Friends of Wombat Hill Botanic Gardens

In 2018 major work was completed on the entrance to Wombat Hill Botanic Gardens. The area had been described by Andrew Laidlaw as looking like the entrance to a minor work station, rather than to an impressive and charming, heritage registered botanic gardens. With advice from Heritage Victoria and from Laidlaw and Laidlaw, a new fence, gates, trees and lovely plantings were introduced. Really, all that was left of the particularly unattractive parts of the Gardens that needed serious consideration was the abandoned and derelict Day Basin at the entrance pathway from the carpark and Tower area.

In 2020 the Friends approached GbLA landscape architects for help to get a detailed, “shovel-ready” plan completed that could be used as the basis for an application to the State Government for a share in the funds that were offered to LGAs as the Covid lockdowns continued. By March 2021 we had a grant of \$500,000 from the Victorian Government, \$180,000 from Hepburn Shire and we contributed another \$200,000 to the pot. \$880,000 with which to restore the Day Basin, rejuvenate the landscaping around it and the Tower, complete repairs/rebuild of the Tower toilets and the begonia house and maybe even repair the pumping system in the nearby Rustic Cascade. So where are we now?

Parts of the project have been completed. New steps have been built to connect the new pedestrian path with the east-west path from the carpark to the Café via the Alf Headland Conservatory. The Conservatory has been repaired. But no work has begun on the Day Basin or the area around it. The final plans have still not been approved by the Shire, so tenders have not been called for or let. Final approval has also not been sought from Heritage Victoria – plans not finalised. How has this come about when almost three years have gone by since the money was allocated?

A bit like *Alice through the Looking Glass*, it's hard to know where this story starts and where it ends – certainly where it ends!

The wheels of local government turn very slowly. While initial tenders for landscape design were let after a lengthy period, there were in turn, another few months before tenders for the work came in. Covid had a hand in this, as, counter-intuitively, there was a mountain of work being undertaken across the state as people focused on what could be achieved in a world where normal activity was so limited. It was very hard to organise construction of any kind and working from home slowed down so much of administrative output.

By the time the tenders were put out, prices had gone through the roof and what had seemed a handy amount of money in 2021, was looking like less than two thirds of what was needed to complete the project and things rather ground to a halt. The toilet project was mothballed immediately but still there was a shortfall of at least another \$80,000. Without clear costings for any of the elements of the work, the financial situation has always been a bit of a mystery. Fortunately, Hepburn Shire has increased their contribution to the pot of money, and the State Government has agreed to extend the time where they will make their part of the budget available to the Shire.



Images: all images supplied

In this lengthy period there has been the inevitable change of personnel on the ground up here. The question of exactly how the Basin could be made water-tight, safe and maintain its heritage status was revisited. It was known that it had been used for the purpose of its original design – to hold a day’s water for the town, drawn from the “lake” (reservoir) in the Gardens – as late as the 1980s. Would it still be able to do so? Answer, no. It was filled in May 2023 and emptied itself quick smart. Central Highlands Water explained that as it was usually emptied in a day by normal domestic use, its leaky construction was not an issue. Heritage Victoria, quite rightly, opposed any form of lining that would conceal the weathered and quite evocative brickwork. But they also discovered that there had been a fence around it originally that could be rebuilt in some form to ensure safety and enable the Basin to remain, sensitively repaired, but largely in its original state.

So, literally, back to the drawing board. The features of the refurbishment that remain in place are the construction of a stone rill encircling the top of the Basin. It has been carved to give the water a rippling life that will connect it very well with the Rustic Cascade. The rill will appear to join the Cascade under a mesh area in the east-west path. The idea of the rill was part of the Laidlaw and Laidlaw Master Plan (2017) and the hope is that it will be extended further through the Fernery to another water feature at the bottom of the hill. Around the rill, the Day Basin and the Tower, will be new plantings of water loving bog plants – both local and exotic. The list was initially drawn up using Sangster’s preferred plants from his nurseryman’s list. A number of them are now noxious weeds so quite a bit of revision has been done to the choices of species and varieties. The forecourt around the Tower will also be extended and enhanced.



The idea of a refilled Basin with fountains and floating water plants is now a thing of the past, but we are still hopeful – despite all – of achieving a pleasing outcome in our quest to conserve the best of that part of the Gardens and to give the community and visitors something more to enjoy as they discover the delights of an old and quite unique horticultural environment.





The volunteer guide telling us about the Gadigal people and the first farms of the First Fleet



The woodland and its waterway being regenerated at Southern Highlands Botanic Garden



A recent garden of native plants behind a laid hedge of hawthorn, and regenerative farm on the nearby hillside.

Horticulture, history and headlines in Sydney and Southern Highlands

Linda Beveridge

The AAFBG Southern Highlands Tour, between 29 Oct and 4 November 2023, went to a number of public and private gardens renowned for their collection of international and/or native plants.

Royal Botanic Gardens of Sydney is the oldest scientific institution in Australia and one of its Friends, a volunteer guide, showed examples of the times of the Gadigal people, the first farm of settlers, collecting for 200 years, and the rainforest being one of the first things funded by the Friends.

The gardens have been in the headlines over the years, not only for the Garden Palace exhibition pavilions in 1879, but also when they burnt down in 1882. The area now has the Memorial Pioneers Garden and nearby sculptures of Australian fauna featuring Australian flora.



An eye-catching floriferous whale at the Royal Botanic Gardens Sydney

Camden Park is home of John and Elizabeth McArthur and family, who were known not only for their role in the merino wool industry, but also for the national and international botanic and horticultural work of their fourth son, William. He developed the gardens and produced catalogues of the plants from 1883.

Strong winds caused the walkways close to the summit of Mount Gibraltar to be closed, so we walked in its Bowl bushland where tons of weeds and other rubbish have been removed by its friends; the Mount Gibraltar Landcare and Bushcare Group. Mount Gibraltar is part of the endangered "Uplands Basalt Eucalypt Forests of the Sydney Basin Bioregion". Its quarries of Bowral Trachyte advertised and operated for 100 years to 1986, and are now an industrial heritage site.

The Louisa Atkinson Walk in the Southern Highlands Botanic Garden is named for this early Australian writer, botanist and illustrator. She popularised science and wrote for *The Sydney Morning Herald* and the *Horticultural Magazine*.

The Friends of this botanic garden received the AAFBG's Handbury Award in 2023 for their significant contribution. They have been regenerating the native woodland and its waterway, and developing the parterre, which has a mixture of native and exotic plants. Hundreds of daffodils are nurtured for it under the guidance of Tony Davis, who was also a recipient of a Handbury Award.



The Japanese inspired garden at Oldbury farm had many different maple species

The mature trees, perennials and annuals that reflected many years' effort were so attractive at Coombe Wood, Prittlewell, Jeanne Villani's garden, and the National Trust's Harper's Mansion in Berrima.

James and Charlotte Atkinson established Oldbury Farm, where Louisa Atkinson, previously mentioned, was born. Old apple and plum trees have been preserved, and practice of layed hedges of hawthorn has been reactivated. Its garden (registered with the NSW Heritage Office) is a 200-year-old European story, featuring Georgian and more recent styles by subsequent owners.

On our last day we visited the Australian Botanic Gardens at Mount Annan, another of the Botanic Gardens of Sydney. Our guided tour of the outstanding Herbarium illustrated its role in preservation, innovation and action for Australian native plants. The Herbarium had recent headlines about digitizing more than 1.5 million plant specimens, including 800 specimens collected by botanists Joseph Banks, Daniel Solander and colleagues during the 1770 voyage with Captain James Cook on the ship "Endeavour".

We are grateful to the people who organized this wonderful tour and the many enthusiastic horticulturalists, gardeners, botanists, custodians and volunteer friends, who look after these treasures and hosted our visits to them.



Floor art in a Herbarium corridor leading to gardens of plants in peril.
All images in this article: L Beveridge



The Challenge of Change

Discussing Relationships, Volunteering, Climatic Changes and the use of Technology

This will be the topic that the Friends of Botanic Gardens discuss as they come together from around Australia at the end of August 2024 for the AAFBG CONFERENCE.

As we all know, we all need to continue to respond to change and adapt to differing circumstances.

These are some of the topics that will continue to affect Friends groups in their supporting roles in Gardens throughout Australia. To help get some discussion going between our Friends here at MRBBG, listed below are some potential expansions on those initial thoughts and what they might lead us to:

- How can volunteering be made more attractive to draw in and maintain an ongoing range of expertise for Friends groups to thrive?
- What relationships do we need to develop and nurture further – governing bodies, other Friends groups, the local community, and other like-minded community groups; and how best to do this?
- Unfolding climatic impacts will determine future Collections and Maintenance Policies as well as public access to various collections – where do we start?
- What sort of role is there for technology in assisting with education, information and plant material storage, plant propagation techniques and the means for finding new sources of rare/threatened species to add to Collections.

The Conference Working Group is currently looking for suggestions on the expansion of some of these general topics as we look to develop the Conference Programme and appoint an appropriate range of speakers. If you would like to add your ideas and thoughts on this theme please email the friendsofmrbbg@gmail.com and mark it: Attention Conference Conveners.

Lynn Vlismas,
President, Friends of MRBBG Inc.

Maroochy Arts & Ecology Centre, MRBBG
Image: Friends of MRBBG

AAFBG Conference

Fri 23rd – Sun 26th
August, 2024

“

What are Friends for if not to get together for a chat, to put our heads together, share our collective ranges of experiences and knowledge, and to come up with a positive way to respond to the ongoing need for change.



The Challenge of Change

Relationships - Volunteering - Climate - Technology



AAFBG
Conference 2024



23 – 26 August 2024

Maroochy Botanic Gardens

Discussing Relationships, Volunteering,
Climate Changes, and Technological
Innovations



www.FriendsBotanicGardens.org

Enjoy a taste of subtropical Queensland just in time for the start of Spring 2024 - come and experience our wildflower season; you'll get to meet new Friends as well as the friendly and knowledgeable locals...

**Keynote speaker: Dale Arvidsson,
Curator, Brisbane Botanic Gardens**

Pre and Post Conference tours of Sunshine Coast Gardens
Twilight Welcome Drinks
Conference Dinner at Mooloolaba Beach

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