

AAFBG MAGAZINE

No 57 NOVEMBER 2021

THRIVING TOGETHER





AABFG BIENNIAL CONFERENCE 29 April – 1 May 2022

REGISTRATIONS OPEN IN NOVEMBER

On New Year's Eve 2019 fire swept through the Eurobodalla Shire with devastating effects. The Eurobodalla Regional Botanic Garden suffered major damage to infrastructure, the plant collection and sadly much wildlife was lost. The Garden is now returning to life under the hard work of the ERBG management, Friends and volunteers and with the support of our local community. It is through these strong partnerships that we have built our resilience. We hope that next year's conference will provide an opportunity for all delegates to build their skills in resilience and to share their experiences of renewal.

Now is the time to start planning for your opportunity to network with Friend Groups from across Australia at next year's Biennial Conference. Join us for an energising weekend at the Eurobodalla Regional Botanic Garden, Batemans Bay. Registrations will open in November; registration forms will be available at friendsbotanicgardens.org and erbg.org.au.

Conference Highlights

- Keynote speaker Professor Tim Entwisle, Director and Chief Executive at the Royal Botanic Gardens Victoria.
- Skill builder workshop 'How to be (better) Friends'.
- Social activities welcome drinks, conference dinner, breakfast in the garden.
- Optional post-conference tours behind the scenes at ERBG and/or a visit to Horse Island See p.18.





aafbg2022@erbg.org.au





AUSTRALIAN ASSOCIATION OF FRIENDS OF BOTANIC GARDENS

The AAFBG has 68 members all round Australia plus 5 overseas associate members. See our website for a full listing.

Incorporation A0026805Z

Patron: Dr Philip Moors

Office bearers

President: Kate Heffernan, Friend Gold Coast Regional BG

Vice-Pres: Murray Fletcher, Friend Orange

Acting Sec/Public Officer: Elizabeth Gilfillan, Friend Buninyong BG

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Jill Brownlee, Friend Noosa BG Bob Ducrou, Friend Maroochydore BG Neville Page, Friend ANBG Canberra Merrill Schulkes, Friend Ballarat BG.

Admin Officer

Chantal deVere

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Membership

Annual subscriptions are due on 1 April \$50 for up to 250 members \$150 for 250-500 members \$250 for 500-1000 members \$400 for 1000+ members

Eucalypt

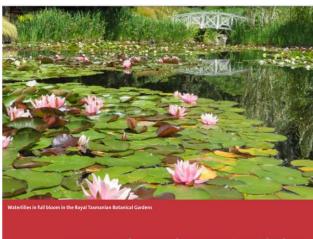
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We welcome your articles and photographs and important calendar events. Deadlines are mid-April and mid-October. Contact Anne at eucalyptar@gmai.com at any time to discuss your article, ideas, and timelines. We are flexible.

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DID YOU MISS OUT IN 2021 NEVER MIND - YOU CAN GO IN 2022



A Botanical Tour of Tasmania with the Australian Association of Friends of Botanic Gardens (AAFBG)

27 February – 5 March 2022

3 nights Launceston – 3 nights Hobart





FULL BROCHURE AVAILABLE ON AAFBG WEBSITE

www.friendsbotanicgardens.org

ARE YOU TURNING FORTY NEXT YEAR?

OR MORE PRECISELY, IS YOUR FRIENDS GROUP
TURNING FORTY?

Sydney, Melbourne and Ballarat are!

We would like to have some sort of celebration to mark this milestone

So let Chantal know if your 40^{th} is coming up in 2022

info@friendsbotanicgardens.org

President's report Kate Heffernan

The AAFBG website has a short video inviting members to attend the Eurobodalla Botanic Gardens Conference in late April 2022. I encourage all members to view this inspiring video which is a testimony to Eurobodalla Friends and Council Officer's 'resilience in the face of adversity'.



'Thriving Together – Resilience and Renewal in a Changing World' will provide the opportunity and perhaps the perfect antidote most of us need after a few horror years.

Several decades of involvement in and visiting botanic gardens has shown me some of the challenges that Friends groups have always met head-on with persistence and commitment. Resilience is the keyword, again and again for Friends groups everywhere and through everything from drought to flood, fire and storms, lack of funds, indifferent councils, and much more. I have found attendance at conferences quite grounding, learning how other Friends groups face and overcome similar challenges. Conferences have also meant new contacts, and as importantly, new friends. I urge you to attend.

I first became acquainted with the Australian Association of Friends of Botanic Gardens in 2006 when I attended the Friends of Royal Botanic Gardens Cranbourne Conference with three other members of Friends Gold Coast. The theme was Evolution, Ecology and Environment. The Conference was just what four people committed to growing a botanic garden in the heart of the bustling Gold Coast needed as additional inspiration. Surely many thought us crazy given the reputation of our city as glitter and high rise, especially when the intent of our Botanic Garden was to showcase our region's native plants and not swaying palm trees.

At the time of the September Conference at Cranbourne, Gold Coast Friends had been established for just eight years, and plantings at our Botanic Gardens were just entering their fourth year following the first Community Planting Day in July 2003. Fast forward to 2021 and Gold Coast Regional Botanic Gardens received Botanic Gardens Conservation International Accreditation after demonstrating the Botanic Gardens met the global standard. It was measured against a long and stringent set of criteria.

Accreditation is not a prize at the end of a journey though, in fact, it has shown Gold Coast's Botanic Gardens to be still only at the beginning of its journey. Like most Friends, the role for us at Gold Coast has been ambitious – and we still aspire to achieve the lofty goals that led the four of us to Cranbourne.

It is through Friends' Conferences that we gain new skills, sharpen our knowledge, hear and share ideas, and stay connected with friends and colleagues. My last visit to Eurobodalla Botanic Gardens was in 2008 for the NSW BGANZ Conference and I'm looking forward to returning and I hope to meet you there.

Acting Secretary's report

Elizabeth Gilfillan



Welcome back Kate Heffernan who has enthusiastically taken the role of your AAFBG President. Many of you will already know Kate and everyone else soon will appreciate Kate's knowledge and enthusiasm for botanic gardens and supporting organisations. We are looking forward to working together.

Throughout the last almost two years it has been heartening to receive news of our AAFBG members who continue to work together for the benefit of their botanic gardens. Our gardens have provided much solace during difficult times: by taking relaxing walks when possible; by sharing photographs of their Gardens to give inspiration; and partaking in interesting online Zoom activities connecting people. We are fortunate that technology has enabled us to do this virtual meeting. I agree with Prof. Tim Entwisle '...our Gardens are places where nature, culture and science not only coexist but interact and create new opportunities'.

Finally we are planning to meet face to face once more. Never has a conference title been more appropriate; 'Thriving Together – Resilience and Renewal in a Changing World'. It is my sincere hope that as many members as possible will attend the conference, make new friends, meet old ones and I look forward to meeting many of you there.

Partner organisation Botanic Gardens Australia and New Zealand President, Chris Russell, will present the latest BGANZ news and our two organisations will refresh the Memorandum of Understanding.

Anniversaries and birthdays coming up; 2022 will see Sydney, Melbourne and Ballarat Friends celebrate 40 years since formation. In the following year, 2023, it will be the 30th year of your Association Peak Body AAFBG. There will be much to celebrate.

In some states over the past year the importance and necessity for our Members to have a Memorandum of Understanding with administrative bodies, rather than an Advisory Committee, has been highlighted. Whilst an MOU is not a legal document it brings two parties to the table and should be renewed on a regular agreed basis.

It is time to consider Handbury awards. This prestigious national recognition of exceptional contributions to Botanic Gardens highlights the support and advocacy undertaken throughout Australia. Application forms are available from the website, or contact Chantal, AAFBG Administrative Officer. Recipients will be awarded at the AGM Eurobodalla Conference in April.

Whilst at first it was disappointing that NSW and Victorians could not take part in the Tasmania Tour those who were able to attend had a marvellous time and it has enabled a second Tour to be arranged for those who missed out and a few lucky extras!

Pass the word! Your peak body, the AAFBG committee, works hard to spread news and unite its Members. It is very important for you to add our Logo and website details to your publication pages to indicate your affiliation and give strength to your own organisation. Please contact us for any support you may need especially in matters of advocacy.

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AAFBG website: https://friendsbotanicgardens.org

Administrative Officer's report

Chantal de Vere



Dear Friends,

Another six months have flown past and we have all accomplished so much despite the fortunes of our new Covid lives. It has been impressive the ability for so many Friends groups to keep the faith and keep moving forward with all the projects that had been on hold.

Here I have been keeping busy reading your newsletters and creating the e-news which I am happy to say I can see an increase in readership. A couple of the groups have found that a link is preferable to be able to send through their own email system. Let me know if that is preferable for you too.

I appreciate the extra photographs coming through as well as I enjoy putting them onto our AAFBG Facebook pages. Sometimes what you see every day can be taken for granted but it does bring others joy seeing what you have in your gardens.

We will all be at the Conference next year held in Eurobodalla and I really do hope that should you be coming along you will say hello to me. I am very much looking forward to meeting more of our Friends and I know how much hard work has gone into making the Conference remarkable.

Your committee works extremely hard at producing materials which help advocate and educate on behalf of all the Friends groups and as always I am extremely proud to be able to work for AAFBG.

Yours sincerely, Chantal de Vere

Reflections on gardens in Tasmania

Kate Heffernan President and Tour Leader





The homestead at Strathmore; Native garden at the Royal Tasmanian Botanic Garden; and below Inala gardener Bori, introducing participants to the start of the Jurassic Garden. Photos by Kate Heffernan.

According to many of the participants, the highlight of the AAFBG Tasmanian Garden Tour was the diversity of gardens and the places of interest. Each day brought something quite different, from the veteran trees and Dutch Garden at Launceston's City Park to the dry-stone walled, gorgeous perennial gardens at Old Wesley Dale and the wildflower walk at Cataract Gorge. Some of us quietly meditated along the riverfront labyrinth path at Wychwood, calmed by the sound of flowing water. One gardenfilled day finished on the sweeping lawns under the majestic conifers at Culzean, following a walk around its acre wide lagoon covered in water lilies, lined by irises and complete with a bankside platypus burrow. The brilliance of two volunteer-led gardens, the Rhododendron Collection at Emu Valley and the vast tree collection at the Tasmanian Arboretum inspired us all.

The beauty of 170-year-old Strathmore Estate and its fascinating convict-built heated wall, rambling but well-ordered gardens, as well as the first foxgloves of the tour, set the scene for a remarkable day. More history at beautifully restored Tasmanian Heritage-listed Patterdale – brought back from the brink of ruin and surrounded by the rural landscapes painted by artist John Glover. Some of his paintings reminded us that history is also sadly tinged with the displacement of First Nation Tasmanians and the mistreatment of convicts. It was fitting that in the fine wool country known as Glover Country, our 21st century coach was held up by a mob of sheep and a trustworthy sheep dog!

Surprises at Hobart when we called at the Edible Precinct and were treated to the colour, fragrance, and flowers of fruits, vegetables, and native bush foods flourishing in raised wicking beds. It is so well-loved and respected by locals that even in its busy harbor-side position it is unfenced! Our fellow Friends at RBG Tasmania led us on a tour of their magnificent plant collections and related the site's long history as the second botanic garden in Australia. A compact and professionally designed garden in suburban Hobart showed amazing plants-manship and horticultural prowess while another home garden on a suburban acre greeted us with its street-front planting of rhododendrons of every hue – and inside the gate a wide variety of plants including potted orchids and bonsais.

Not every day has perfect weather but neither does every day reveal two incredible, unique gardens. Our last day took us to the wild and beautiful Bruny Island where flora, once part of the ancient continent of Gondwana, is logically and beautifully displayed at the Inala Jurassic Garden. Finish the day and the tour in the gardens and studio at the heart of Sprokkelwood Art Garden and we could not be anything but content knowing that six days had been well spent! I mustn't mention the wine, gin, and whisky tastings and several superb meals, as well as home-style cooking, lest our AAFBG group be thought idlers. Or how sad I am that I must do it all over again.

There are more of Kate's photos on the back page.



Life goes on

Friends of the Orange Botanic Gardens Orange, New South Wales



Despite restrictions on some of our regular, more social, activities, we have been able to continue with others. Every first Sunday of the month our intrepid bird walkers have continued throughout, except during periods of stay-at-home orders which have been relatively short compared to those in the major cities. Keeping suitably socially distanced and led by experienced birder, Neil Morrow, the bird walkers usually see around 35 different species each month with fewer during winter when some of the more sensitive species head to warmer climes. Every now and then a new record for the gardens or a species not seen for a number of years adds a feeling of discovery to the walks. This year, the highlight was a pair of White-fronted Honeyeaters, a desert species, usually restricted to western NSW, so seeing the species in Orange was most unusual. A flock of Yellow-tailed Black Cockatoos has established itself in Orange in recent years and is regularly seen feeding in the mature pines around the gardens.



Propagator Richard Landon with some of the FOBG tube stock and above bird watching [Both photos: Libby West]

Our plant sales held in spring and autumn each year are a valuable source of income for the Friends but also a valuable activity for our Handbury Award winning Propagation Group. The operation of the sales has been modified to fit Covid rules with buyers limited in numbers at any one time and the area redesigned to allow one way traffic throughout. The availability of electronic payment has also avoided the need to exchange cash. The species propagated are ones which do well in Orange gardens and we aim to provide species and varieties that are not available in local commercial nurseries. Many are propagated from the species collections within Orange Botanic Gardens. Recently, we have undertaken contracts to supply plants for a new Women's Shelter in Orange and we are in discussion with Orange City Council's Parks and Gardens staff about a proposed new project to propagate plants suitable for planting along street verges throughout Orange. Preference is for low growing hardy native species which will not impede pedestrian traffic along footpaths.

Heritage Fernery in the Ballarat Gardens

Friends of Ballarat Botanical Gardens Ballarat, Victoria

During Ballarat's Heritage Month in June the Friends of the Ballarat Botanical Gardens were treated to an afternoon of presentations about ferns and ferneries. Three Friends, Lorraine Powell, Jock Gilbert and Merrill Shulkes, and our patron, Professor Tim Entwisle of the Royal Botanic Gardens Victoria (RBGV), shared insights into the popularity of fern collecting, the historical context of landscape design and the display of ferns within structures and outdoors.

Lorraine described the early 19th century as a great time of discovery and scientific advances that gave impetus for people to create their own wonderlands of botanical exotica, to demonstrate their worldliness and wealth. In 1840 Nathaniel Bagshaw Ward's invention of the Wardian case provided a portable greenhouse for the worldwide collection of plants. (See *Eucalypt* no.56 May 2001 for an article about the Wardian case.) The 1851 Great Exhibition at the Crystal Palace exposed millions of visitors to plants from throughout the British Empire. Hundreds of Wardian cases were featured with at least two hundred filled with ferns and orchids.

Jock discussed the ways that botanic gardens became scientific repositories of collected plant species, arranged largely according to theories of beauty and the picturesque, arising from aesthetic debates and painting styles. The establishment of grottoes and ferneries facilitated the display (often in idealised 'natural' settings) of ferns and cool climate plants from around the world, often contrasting the gardenesque context that the botanic garden had become. Critical to these fernery landscapes was the sense of experience; they were defined by transition and threshold, by plays of light and shade, by dankness and by a sense of awe and unease.

Merrill explored the architectural styles of the Ferneries that have been part of Ballarat Botanic Garden since the late 1870s. A shade house for camellias was built by Head Gardener George Longley in 1877 and significantly extended from 1879-1885 into a vast Victorian Gothic Batten Fernery with several ornate entrances. The perishable nature of the timber batten construction necessitated ongoing restoration but it fell into disrepair and was demolished. A smaller and more rustic Fernery designed by Valentine Lohse was built in 1955 and again featured timber battens. By the late 1990s the structure had deteriorated badly and in 2013 was partially demolished. A new Fernery in the Victorian Gothic Style was commissioned in 2018 and construction began in 2020. The new entrance to the Fernery was completed in May 2021 but is yet to be opened to visitors.

Tim concluded with an illustrated walk through the wonderfully revitalised Fern Gully in RBGV Melbourne. Beneath the canopy of mature trees, visitors can enjoy a relaxed stroll on a meandering, elevated walkway that protects the extensive collection of ferns and encourages visitors to explore new areas within the Fernery.











Left: The ultimate fernery, the Crystal Palace in London, and above the progression of the Ballarat Fernery.

Heritage Giants in the Ballarat Gardens

Friends of Ballarat Botanical Gardens Ballarat, Victoria



In the Ballarat Botanical Gardens, we have a spine linking north, central and south gardens. It is an avenue of *Sequoiadendron giganteum* that were planted in the 1860s and 70s and is now on Heritage Victoria's Register of Significant Trees. They are impressive and awe-inspiring trees and a treasured part of the Gardens. They excite the imagination as the branches trail like hungry dragons and it is not hard to imagine the cathedral effect created when it's misty and foggy as you wander down the avenue.

The millennium drought tested their resilience, and the struggle continues. We now have trees with extensive browning and dead branches are pruned. The struggle is likely to continue as Ballarat weather becomes more variable and drier. We need forward-thinking conversations about the future for these trees and about plans for their health and possible transitions ahead.

The City of Ballarat Heritage Festival from 7 to 30 May provided the opportunity for Friends of Ballarat Botanical Gardens (FBBG) to generate these conversations. We developed a range of events: a children's activity, 'Baby Giant', run by Friends Botanikids group; guided tours; an exhibition; and talks from a range of speakers.

It was very much a collaborative event for the many Friends' groups: artwork panels by our Botanical Artists interspersed amongst information panels; photos from the Otways, Warburton and California where redwoods are found; History and Guides groups developed 11 large informative panels for our exhibition; Gardens' staff gave us information to use in the panels and gave talks; our newsletter editor used digital skills to produce the exhibition panels; super enlarged tree images by our Membership Officer grabbed attention at the entrance to the exhibition; a new Office volunteer worked on the artistic layout of our panels; and in these Covid times our catering group was challenged to provide individual food packets for our catered events.

Involvement extended also to Wombat Hill Botanic Gardens in Daylesford. We had some photos of tables produced from fallen timber in the Ballarat Gardens in the 1980s; Wombat Hill had a more recent interesting story of the felling and milling of one of their giants, and of the timber used for guitars and a seating pavilion.

It was very much a combined effort and brought many parts of our organisation together on a common task. The tours and the talks generated the engagement and interaction we were hoping to achieve and the exhibition with displays of concentrated information allowed people to quietly ponder on these giants. Next year the Friends are thinking about Oaks as our focus and contribution to Ballarat heritage festival.

Conservatory turns 80

Friends of Royal Tasmanian Botanic Garden Hobart, Tasmania



HM Rawson

To mark the 80th birthday I interviewed Joan Dudley, the daughter of Ira Vincent Thornicroft, who in 1935 was the newly appointed Superintendent of the Gardens, the time of the Conservatory's planning and construction. Joan was only four when her father began designing the Conservatory, but as an only child who spent all her time with adults, she was very aware of what was going on around her.

She recalls the conflict her father had with the Trustees, who oversaw the Museum and the Gardens. They were a very conservative bunch with whom her father had to fight for what he wanted: eight arches, the central fountain, different coloured paving around the fountain. The Trustees objected to these 'unusual things' and the extravagant cost; 'surely a monotone paving would suffice?' However, Thornicroft won and spent considerable time and effort sourcing his multi-coloured paving stones. Due to his efforts, we have that beautiful building today.

As the construction was undertaken during the great depression there was a workforce at the ready among the unemployed. Thornicroft selected those who possessed the necessary masonry skills for the task. Joan recalls the building being a lengthy process which probably stretched over two years. Finally, in August 1939, four years after Thornicroft took over, the Conservatory was opened.

Due to the labour shortage caused by WWII women were employed to maintain the Conservatory. Despite the Trustees making it difficult for them they proved to be a great asset to the Gardens and in 1943 two of the women, Cath Waymouth and Mylie Peppin, helped Thornicroft mount a display that thrilled the whole population of Hobart. Each of the eight arches was set up to represent a European country highlighting their different growing methods. The exhibits were made accurately and to scale using innovative methods and products to achieve authenticity. Thornicroft was, however, very particular about the regular displays; they had to be always about flowers, and moveable. He wanted a mass planting of potted plants, with pots hidden by surrounding foliage. The only exception to this rule was if there was a spectacular specimen in a large pot; then the pot could be seen as a 'look at me' statement.

The Conservatory today still has featured plants in large pots together with moveable displays. A tropical feel is created with permanent displays of lush foliage including palms, ferns and canna lilies that are complemented by colourful seasonal exhibits. Some two thousand potted plants are periodically moved in and out to showcase begonias, orchids and bromeliads.

Thornicroft's ideas continue to influence plantings in the Conservatory and when Joan recently visited the Gardens she was delighted to see her father's vision living on.

Winning BGCI accreditation

Friends of Gold Coast Regional Botanic Gardens Gold Coast. Queensland

Botanic Gardens Conservation International (BGCI) is a membership organisation representing the largest global network of botanic gardens and institutions in conservation. Membership is around 600 plus botanical institutions in more than 100 countries around the world. The process for meeting the standards for BGCI Accreditation as a Botanic Garden is based on stringent criteria.

Gold Coast Regional Botanic Gardens (GCRBG) Curator Paul Cockbain and I thought assembling evidence for an application for accreditation would, at the very least, provide a set of benchmarks to work towards. As we worked through the multi-page



Councilor Hermann Vorster , Kate Heffernan, Cr. Tom Tate, Mayor City of GC; Wendy Lamp, Senior Horticulture Project Manager GCRBG and Curator Paul Cockbain

application and sought documentary evidence in GCRBG's and Friends records it became clearer that we might already meet the criteria! We lodged our application and waited, and waited some more, knowing that British lockdowns would inevitably delay the process. After a long wait we were advised that the scanned short extracts and versions of documents were good but insufficient and full documents would be necessary. As we had assembled and previously prepared the documentation and copied extracts that had been carefully filed all in one place, sending the additional documents wasn't difficult.

Soon after receiving the long versions BGCI advised that our application was successful. Quite an achievement for a young botanic garden and demonstrating we are heading in the right direction. (But always with more work to do, and always with the caveat that we could do better with more funds allocated to meet GCRBG's key objectives.)

The accreditation places a high value on the unique skills and knowledge as well as data held in botanic gardens. Some of these themes are highlighted below.

- Planning and establishing an extensive in-situ plant collection primarily featuring regional flora displayed in ecologically zoned landscapes.
- Conserving regional species, including Commonwealth and State listed threatened species through propagating and distributing for ex-situ planting projects across the city.
- Collaborating and partnering in plant research with tertiary and vocational institutes, traditional language groups, industry and national organisations.
- Being part of an affiliated network of national and international botanic gardens, including holding leadership roles, and attending and presenting at Australian and overseas conferences.
- Engaging at the Botanic Gardens and externally with schools, vocational institutes, disability groups and the wider local community and visitors in nature based educational activities.
- Developing site interpretation signs, plant labelling and interpreted trails throughout the plant collections to engage and inform locals and visitors of the region's unique flora and wildlife.
- Having policies and procedures, operating within sustainability guidelines and maintaining continuous improvement.

GCRBG's Friends hard work and commitment made a significant contribution to the evidence necessary to achieve accreditation, through their members roles on the Steering Committee, Advisory Group (previously Project Control Group), Horticulture Reference Group and by individual Friends members as well as all the volunteer working groups.

Saving rare or threatened species

Friends of Sale Botanic Gardens Sale, Victoria



The Sale Botanic Gardens is situated on land previously occupied by the Gurnaikurnai people and is the furthest botanic gardens east of Melbourne. The Gardens were first established over 160 years ago and were laid out by Councillors Robert Topping and John English. Ferdinand von Mueller played an important part in developing the Gardens by sending up plant stock while William Guilfoyle gave advice on the landscaping. Over the years the Gardens went into decline with the land use changing to grazing, having a golf course, tennis courts, bowling greens and a swimming pool placed upon its footprint. Eventually the acreage was reduced from 13 hectares to 5 hectares. All this changed at the beginning of the 21st century, when interest in the Gardens was reignited, a Friends group formed and a conservation plan developed.*

As time progressed, plans for a garden bed to showcase Rare or Threatened Species (RoTS), endemic to the Wellington Shire, was developed in partnership with Botanic Gardens Australia New Zealand (BGANZ)**. The purpose of the bed was to help preserve rare or threatened species from disappearing from the Shire and to provide a feeding source for the bees, birds and insects which rely on them. The bed was initially planted with varieties of heath, native orchids, banksias, wattles, grasses and other species from dry and lowland forests. The bed showcased a wonderful display of flowering plants and shrubs.

In 2020 the garden bed was redesigned by Andrew Laidlaw and in 2021 was replaced with larger beds linking two paths in the Gardens. The plants were chosen by John Arnott and were grown at the Royal Botanic Gardens Victoria at the Australian Botanic Garden in Cranbourne. John and Andrew had planned to assist with the planting, but unfortunately restrictions prohibited them from doing so. Instead, a drawing was produced, which the Wellington Shire outdoor staff and a band of Friends of the Sale Gardens followed to plant up the bed.

The new beds have been planted up for approximately four weeks, and the plants appear to be settling in. I can't wait to see them in another twelve months' time!

Dianne Honey

^{*}Sale Botanic Gardens Management Plan 2015-2020 Shire Council

^{**}This article was first published by BGANZ

A walk among camellias

George Tindale Memorial Garden Sherbrooke. Victoria



George surveying one of the pathways during the initial development of the garden

Nestled in the Dandenong Ranges just out of Melbourne, The George Tindale Memorial Gardens contain an eclectic collection of cool climate plants and bulbs. Formerly the residence of George and Ruth Tindale, it was gifted to the people of Victoria in 1980, following the death of George. The gardens have a long history of friends helping create and maintain the garden. Each one of the myriads of paths in the garden is named after someone who helped Ruth and George create their garden. Now a small but passionate group of Friends gather regularly to help maintain George and Ruth's vision in the garden.

Ruth was an artist and had a large input in the colouring of the garden through her extensive hydrangea, bulb and

groundcover plantings, seeking to have something of interest for visitors in each season. Meanwhile, George, who was a research scientist at the CSIR, now the CSIRO, provided the garden's framework. He planted a huge range of camellias, magnolias and rhododendrons throughout the garden. Each planting was accompanied by a metallic name tag and an entry in a rigorous card file. George wanted this garden to be able to provide a valuable reference to gardeners on what grew well in the area and what struggled. Rather than remove the overhead canopy of eucalypts, he planted the garden in amongst the towering trees, where they provided filtered sunlight. Now decades later, we can see the results of that experiment. Although many of the rhododendrons have died, thankfully the same cannot be said of the camellia collection and we are now left with a garden with a huge collection of nearly 400, albeit largely unnamed, camellias.

For us to have a better understanding of the camellia collection in the garden and its value, work is required to identify the plants in the garden and over the past few years, while the camellias are in bloom, there has been a rush to photograph and identify as many plants as possible. With the help of groups like Camellia Ark and the Camellias Victoria as well as online resources and other publications, perhaps a quarter of the camellias now have name tags. There are numerous seedlings in the garden and some of the older camellias have been pruned down to stumps, giving the impression of seedlings, so work is slow. We have also lost some significant specimens as a result of over enthusiastic pruning, including the almost total removal of a significant specimen of the historic *Camellia reticulata* 'Captain Rawes'. For this reason alone, it is vitally important that we continue with the identification work, before any more specimens are lost.









The famous hybrid camellia 'EG Waterhouse'; A local kookaburra sits on one of Ruth Tindale's sculptures; Azaleas and rhododendrons line the garden paths today; and Azaleas on the paths today.

Thirteen years of paving

Friends of Hunter Region Botanic Gardens Newcastle. New South Wales

The Hunter Region Botanic Gardens is a large garden wholly managed, developed and maintained by volunteers. Our site covers 133 ha with some 26 ha developed as gardens and the remainder forming a bushland conservation area. Our site consists of coastal schlerophyll forest dominated by Blackbutt (Eucalyptus pilularis) and rusty gum (Angophora costata). It is located on the Tomago Sandbeds, part of Newcastle's drinking water catchment.

The Gardens was laid out some 35 years ago, with theme gardens, lawns and structures located within the existing forest. This meant that the Gardens has benefited from the peace and grandeur of a mature forest setting since its earliest days. The garden areas were connected by a network of gravel paths, which fitted with the bush ambience of the site. The main path, the Botanic Walk, is a circuit walk which connects all the main theme gardens. Bush trails access the conservation areas of the site.

In 2007 a decision was made to pave the Botanic Walk and associated paths. The project had two purposes. First and foremost, the aim was accessibility. Paving ensures that the Gardens are accessible to the widest possible range of people, including those with movement impairments. The paved walks can be used independently by people using mobility aids including wheelchairs, walkers and mobility scooters. It also provides easy access for our eight seat people mover.

Secondly, the path subtly changes the ambience of the Gardens. Every garden is a combination of natural and human elements. The paved paths provide orientation for visitors which allow them to confidently find their way around the Gardens and access parts of the Gardens they might not otherwise see. They assist in directing visitors' attention to Gardens' plantings and features.

The paving has been a major undertaking for a volunteer organisation. Some 3.2 km of 2 metre wide brick paving has been laid. Natural brick pavers were chosen to provide a subtle finish. The paving work was undertaken progressively over the past 13 years as funds have become available, with the project being completed in June 2021. The project has received funding from a variety of state and Commonwealth government programs, sponsorship from major local businesses, predominantly from the mining industry, and donations from individual supporters.

All the funding raised has been used to purchase materials for the project. Design and construction was undertaken wholly by volunteers from the Gardens' maintenance team. The walk is a tribute to all of the volunteers who have contributed to construction. Special recognition is due to volunteers Bill Mason and Kevin Worth who have been involved throughout the construction process. There are now a number of volunteers who are ready to retire from paying!

In practical terms, the paving has important advantages for garden maintenance, eliminating the erosion and regular grooming associated with gravel paths. Pressure cleaning and other techniques are sometimes needed in shaded areas to ensure that the paths do not become slippery.

The paving project has made a major contribution to the development of our Gardens, and we hope that it provides inspiration for other volunteer groups to consider longer term development projects within their Gardens.

Ken Page, Chairman







The rings of *Triodia*

Friends of Australian Arid Lands Botanic Garden Port Augusta, South Australia



Triodia ring in the bush photo by Murray Fagg © ANBG 1995; and rings forming in the AALBG photo by John Zwar.



Growing over a third of the Australian continent, hummock or spinifex grasses grow in circles with a bare middle; there are examples in the Arid Lands Garden at Port Augusta. Anne Campbell, Friend of the AALBG and of the ANBG in Canberra, recently wrote an article for the AALBG Friends Newsletter (issue no.190, September 2021) on how or why this bare middle forms, based on an ABC Science article by Len Gorden.

There are 65 different species of these grasses in the genus *Triodia* in the Poaceae Family and they are endemic to Australia, that is they grow nowhere else. A common name for the species, such as for *Triodia irritans*, is porcupine grass. The scientific names paint a picture. *Triodia* comes from the Greek *treis* (three) and *odous* (tooth) refers to the three-toothed or lobed bracts beneath each floret; *irritans* comes from the Latin *irrito* (irritate) referring to the rigid, pungent, leaf blades. *T. irritans* was first described by Robert Brown in his epic work, in Latin, detailing many of the plants he had collected in Australia during his journey with Mathew Flinders on the *Investigator* from 1801 to 1803.

The most notable feature of the *Triodia* species is that it starts off as a hummock or dome and grows outwards to form a ring of up to 3 m in diameter, with a bare centre resulting. There has been speculation in the past as to the cause of this bare centre. Could it be due to lack of water or nutrients or even termite activity?

Recent field work done at Deep Wells Station 40 km south of Alice Springs and experimental work done at the University of NSW, by scientists from that university*, has thrown some light on this phenomenon. Using the species *T. basedowii* it involved seeing if seedlings grew better in soil from 'inside' or 'outside' the ring. In the initial experiment the 'outside' seedlings did better in that more of them germinated and emerged. But the scientists also needed to know if this result was due to the differing compositions of the soils, that is whether there were harmful soil microbes present in the 'inside' soil. To test this the scientists grew seedlings in both sterilised, microbe-free 'inside' soil and in live 'inside' soil. The seedlings did somewhat better in the sterilised soil. So the conclusion was that it was microbes inhibiting new growth in the centre and leading to the formation of the rings with bare centres.

But wait, there is more! The reverse was true when seedlings grown in live 'outside' soil were compared with those grown in sterilised 'outside' soil. The live soil ones did better. This suggested that other factors might be at work, namely that beneficial microbes in 'outside' soil outweighed the impact of harmful microbes on 'inside' soil, or it might simply be that the harmful microbes dominated. So, as in lots of science, there is no neat outcome, yet; more work needs to be done using more samples and checking the microbial populations in both sets of soils.

In the meantime these spiky plants provide shelter for native species in the heat of the day as well as from predators and because of their extensive root systems they help to prevent erosion and aid in capturing water.

* Professor Angela Moles and her PhD student Neil Ros

What is happening to urban trees?

Annie McGeachy
Previous editor of Campsis which turned in Eucalypt



We daily hear or read comment and debate by governments, industry or others about climate change, its effects or proposed action. But what can we do? Just plant trees?

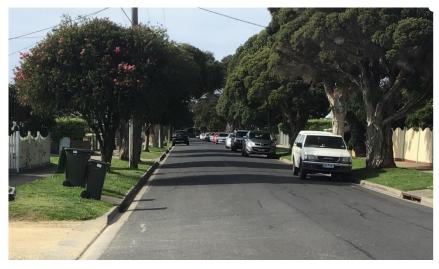
I have become more aware in recent years of the hundreds of trees removed or lost by attrition as increasingly the house and garden block of the 50s and 70s, and even some green spaces, are quickly filled with apartments. Clearly causing great distress to many!

We are gardens people and understand that the significance of our 'urban forest' is not just environmental. We know that just planting trees can make a difference. A rough count of 821 houses in my immediate area in Geelong revealed that about 30 per cent of street trees alone have been lost.

What is happening in your area? How many trees are lost or senescent? Perhaps you could count. With community involvement, data collected could be provided to Councils via a website app to assist with planning. Could this become the urban equivalent of 'land for wild life'? I hope so. When out enjoying daily walks residents could take note of their local trees. To be more concise, log on to the-'Urban Forests' program operated by the City of Melbourne at:

www.melbourne.vic.gov.au/community/greening-the-city/urban-forest/

The answer is there. Is it worth a try? Let me or the AAFBG know how you go.



Photos by Annie McGeachy

Coming back from Covid

Friends of Ivanhoe Park Botanic Garden Manly, New South Wales

So many of us have been in the same boat with Covid lockdowns. It has been tough on our members and on our Garden – Ivanhoe Park Botanic Garden. We really need to get back in there and take care of it and it looks like this will happen soon.

To that end, we're busy ramping up how to get our monthly working bees running with the current restrictions. We developed a QR check-in code that we will ask our members to use when we restart our working bees this month. We are currently allowed to have up to five fully vaccinated adults working at one time (there will be one garden supervisor and four members) so we are planning on having more than one working bee a month to accommodate everyone who would like to garden. And, of course, we still have to navigate how to confirm that a member is fully vaccinated.

Things are progressing. But we're not stopping there because we really owe it to our loyal members to re-engage with them after four months of nothing much going on.

We had our first monthly get-together, albeit via Zoom, and we're planning on continuing Zoom meetings until it is safe for us to meet face to face.

We're continuing working on The Tree Project – a member driven initiative started at the beginning of the year. It involves having members research high value and rare trees in our Garden that is then developed into a pictorial database. Every month in our Newsletter we feature a Tree of the Month which is then uploaded to our website.

During Seniors' Festival Week in April we were able to hold an event where we introduced visitors to the history of Manly, Ivanhoe Park and the trees of Ivanhoe Park Botanic Garden through a slide presentation which was followed by a guided tour through the Garden. Because of this success we are planning on holding more tours of this sort when restrictions ease.

Liz Howe who also compiled the picture of Friends at work



Horse Island: a garden of grandeur

An edited version of an article by Howard Tanner published in Landscape Australia on 25 July 2017.



Western view from the big house. Photo by Jason Busch.

Thomas Sutcliffe Mort (1816–78) is one of the great names of 19th century enterprise in Australia.... He was a pioneer in many industries including mining, railways, wool, dairy, sugar, silk and cotton production. In 1846 Mort purchased a property known as Percyville, on Darling Point.... By the 1860s Mort had acquired and consolidated 14,000 acres of land on the South Coast of New South Wales around the Tuross River and its fertile river flats....

In the late 1980s Thomas Mort's great great-granddaughter Christina Kennedy saw the opportunity to regain part of her heritage when her husband Trevor and she purchased Horse Island in Tuross Lakes near Bodalla, a beautiful and unusual setting for an envisaged house and garden.

Trevor and Christina Kennedy had acquired a gently hilly 200 acre island with four narrow peninsulas fingering out into the expansive waters of Tuross Lakes. To the northeast, across the lake, a distant line of Norfolk Island pines alludes to the beachfront at Tuross Head, and the ocean beyond. To the northwest the vista across a wide body of water is to dense eucalypt forest and the majestic misty mountains of the Deua National Park.

The island, reached by an old hardwood bridge, was one big unfenced paddock, planted with kikuyu grass for grazing, and infested with weeds. Stands of old southern mahogany (Eucalyptus botryoides), forest red gums (Eucalyptus tereticornis) and ironbarks (Eucalyptus sideroxylon) shaded the open spaces, with an occasional large kurrajong (Brachychiton populneus) on the ridge. Spotty or spotted gums (Corymbia maculata) filled the central valley, mingling with subtropical rainforest. Along the water's edge were mangroves and groves of she-oaks (Casuarina glauca)....

First steps included weed control and the regeneration of the foreshore. While the whole island required thoughtful landscape conservation, the construction of a cottage and its garden setting was an important early initiative. This was a relatively modest venture, and only hinted at what was to come. The cottage, inspired by colonial traditions, has a Tuscan-columned veranda and a low hipped roof. As the builder's debris was cleared away, Christina faced the challenge of making a garden setting for the house. By chance, her friend the botanical illustrator Robyn Mayo was visiting, and she suggested that using a palette of native plants would be truly complementary to the natural beauty of the place.....

As the cottage garden evolved, she saw the need to make a scrappy dam – which compromised the view – into an elegant water feature, and the chance for the grassy slopes between the tall trunked trees to become a compact set of golf links for Trevor. Like the writer Bill Gammage, she came to appreciate that at its best, the east coast Australian landscapes provided a kind of splendid understated parkland: with drifts of native grasses between clumped trees. As Christina gradually appreciated the 'capabilities' of the place, a much larger scheme of vistas, plantings and buildings came into view....



Clipped peppermints in front of big house. Photo by Jason Busch.

The immediate environs of the main house are formally planned, with the eastern garden's rill, circular pond, curving colonnade and lushly planted border recalling great English prototypes. Yet! It is *Pandorea jasminoides* 'Variegata' crowning the colonnade, and the wonderful shrub border has *Melaleuca hypericifolia* 'Ulladulla Beacon' clipped in an undulating form interspersed with Gymea and Lord Howe Island lilies (*Doryanthes excels* and *Dietes robinsoniana*) plus massed kangaroo paw and grevilleas. Firewheel trees (*Stenocarpus sinuatus*) and red cedars (*Toona australis*) provide vertical accents. Across the lawn, a handsome composition of cycads and elkhorns provides a rich visual plinth to the house...

Elsewhere there is the Grevillea Garden – a species collection devised by Peter Olde – and places for potting and propagating, a vegetable garden, and guest accommodation with garden interludes for the visitor's enjoyment, all linked together by grassy tall-treed fairways.

With thanks to Jason Busch and Christina Kennedy for permission to publish this abridged version of their article.

Captions for Kate's photos of the Tasmanian tour on the back page.

Clockwise from top left:
Enjoying the gin and whisky tasting at Shene Estate
Some of the group with RBG Tas guide Eileen in the Japanese Garden
Coloured basket in the Sprokklewood Sculpture Garden
Primula in flower at the Tasmanian Arboretum
Japanese Garden RBG Tasmania
Labyrinth by the river at Wychwood Garden & Nursery
Looking across the Tasmanian Arboretum.



The food was delicious and varied. Rosemary and Mike G

All gardens and hosts were wonderful. All guides at the gardens were knowledgeable, helpful and welcoming. Margaret and Helen S

Josef Chromy - excellent and fun wine tasting, Shene Distillery very interesting and fun tastings. Rosemary M









A really great experience Irene; The variety of the garden visits was excellent and stimulating Michael; Kate was wonderful Rosemary M

