

Growing Matters

Inside - the Wonderful story of Grevilleas



Leanne Ware



Friends of Gold Coast Regional Botanic Gardens Inc

Volume 21 Autumn 2019

Contents

- 3 From the President
- 4 Curator's Column
- 5 Secretary
- 6 Ground Covers
- 7 Gum Tree Corridor (cont. P8)
- 9 Gardening
- 10 Grevilleas
- 11 Grevilleas cont.
- 12 Wildlife Report
- 13 Nursery
- 14 Exploring the Gardens
- 15 In the Herbarium
- 16 Flowers by Friends
- 17 Tips on Cutting & Caring for your Flora
- 18 Birds of the Gardens
- 19 Volunteer Garden Guides
- 20 Native Orchids and a 'secret' tunnel
- 21 Guided Walk Program
- 22 Friends Centre
- 23 Dick's Challenge #15
- 24 Back Page News & Snippets

Cover Photo:



This photo of Grevillea Peaches and Cream was taken by Leanne Ware at the entry to the garden storage area under the Friends Centre on 20th Feb this year at 9.14^{am}.

DATE CLAIMERS

May 12 Mother's Day

**Order your flowers in advance for collection on
May 10/11**

9th June 2019

Botanical Gardens Open Day

<https://www.bganzt.org.au/botanic-gardens-day-2019>

4th August 2019

Rotary Botanical Bazaar

16-20th September 2019

Beauty rich and rare Perth Guide Conference

2019 Management Committee

President

Alex Jakimoff

Vice President

Rana Baguley

Secretary

Catherine Simpson

Treasurer

Harry Ellis

Australian Plants

Dr Richard Phillipps

Members

Cindy Murray

Leanne Ware

Susan Bahr

Patron: Gene Rosser

Flowers by Friends

Are you looking for something
unique for Mother's Day
on 12th May?

Flowers for Mother, for a special
friend or just for you will be
available for sale and orders for
collection on Friday 10th and
Saturday 11th May.

Please place your orders for unique
Australian native floral
arrangements by Friday 3rd to ensure
availability.



From the President -

Alex Jakimoff



The progress of the planned Visitors Centre is moving ahead steadily. Recently the Friends were consulted about our requirements and vision for this desperately needed facility in the Botanic Gardens. The consultants hired by the City of Gold Coast are about to present the Business Case for the Centre which will then hopefully flow on to the upcoming budget being prepared by Council.

Our need for more space was recently highlighted by donations of more significant books to our already substantial library. These important donations are very pleasing but now we have the task of finding space in our already overcrowded little Friends Centre. Our Coordinator has been Mary Woods who is unable to continue in this role, and we are indeed fortunate to have had someone of Mary's ability to manage so smoothly and efficiently. Thank you Mary for your outstanding contribution over many years !

The Management Committee has appointed Paula Wu as the new Coordinator and I hope you have the opportunity to meet Paula as soon as possible. It is a challenging role, although also very rewarding and integral to the Friends role of providing Visitor Information Services 7 days a week.

Our organisation attracts people wanting to donate in some form or other and we are extremely appreciative of that generosity. The Swan family recently donated the supply and installation of a seat in the Rose Garden. Horticultural books have been donated to our library, and a local family have sponsored a number of butterfly signs in that Garden. We have also recently received sponsorship of other signage from Rotary Gold Coast with whom we have a long standing productive relationship.

The Friends commitment to further interpretive signage in the Gardens continues with more of them regularly appearing. You will see another five large educational signs soon, with one of them explaining the site's history - and including the current 50 year anniversary of the land donation from the Rosser family. Other colourful signage includes plant information which is one of those points of difference to general parks on the Gold Coast. Only here can you escape, learn and be inspired all at the same time!

Another point of difference is our links to scientific institutions like Griffith University. Currently the School of Environmental Sciences is accessing the Botanic Gardens for eucalypt material relating to a research project.

Our Herbarium volunteers are involved, and we have committed to replacing their GPS device for their botanical work.

The Botanic Gardens Open Day is scheduled for June 9th, close to World Environment Day, where once again we welcome the public to see what Botanic Gardens are all about. The theme this year is "Plants of the past, plants for the Future" which relates strongly to the land's past history and future species conservation. All our activity groups will be hard at it preparing and working on the day, so hopefully you can lend a hand in some way.

"What is a weed ? A plant whose virtues have not yet been discovered"
Ralph Waldo Emerson



Curator's Column -

Liz Caddick



Last quarter I reported that our fauna habitat boxes were being inspected and repaired. We were happy to hear that many of these nest boxes are inhabited.

For the full story, have a look at page 12.

As you all know, this summer has been particularly hot and dry, and the recent cyclone unfortunately didn't bring with it the rain we'd hoped for. The bulk of staff time over the last few months has been watering to keep our plants alive. Staff also add wetting agents, seasol and hydrotherapy, to give plants the best chance to cope in the hot weather. We had a mere 12mm of rain in January, and only 57mm in February, so our plants are doing it tough. Fortunately we have a couple of extra staff on board at the moment, who are helping us to keep on top of the watering.

New plantings have been limited due to the hot dry weather and, as well as watering, staff were kept very busy over summer with the clean up from the storm on 22 December. This storm caused a lot of tree damage, and most tree works are now completed. Restoration of the Rosser Heritage garden has continued, with new annuals and perennials added to some of the garden beds. The ponds have also been emptied, cleaned out, refilled, and populated with rainbow fish to keep the mosquitoes under control.

A new accessible path has been installed along the lake edge over summer, providing safer access from the Western boardwalk.

This is an important link in the Botanic Gardens path network, and we hope to continue improving our footpath network over forthcoming years. The path still needs a bit of landscaping, which will happen as soon as the irrigation has been installed.

On other footpath news, Gardens users may have noticed some new stencils along some of our footpaths. Dogs are prohibited in parts of the Display Gardens but, with so many paths in that area, access can be confusing.

Rather than cluttering the site with more signs, we have installed a trail of small dog paw prints around the paths that dog walkers can use, to help them find their way from the Ashmore Road and Marbella Drive entrances, to the car park and dog off leash area.

Council has also been working throughout the summer to repair many of the timbers on our boardwalks

Regional Botanic Gardens Guided Walks

Join a free guided walk with the Friends of the Gold Coast Regional Botanic Gardens to learn more about the incredible diversity of native plants and wildlife of the Gold Coast.

Walks are held on the 1st and the 3rd Sunday and the 2nd and 4th Wednesday of the month from 10am starting at the Friends Centre.

Other group walks with our volunteer guides are available. For more information phone 0449 561 674.



Your Secretary - Catherine Simpson



The Management Committee does not meet in January in order to provide a much needed respite after the usual hectic administrative end to the year. As a result there is not a lot to report.

During February I submitted the obligatory reports to the three statutory bodies - Qld. Office of Fair Trading, Australian Charities and Not-for-Profits Commission and Federal Register of Environmental Organisations.

These submissions are not difficult but they do take time to complete. This year we advised the changes to the Membership Classes as approved at the AGM.

The Management Committee resumed meeting on 11 February with the usual full Agenda. It is working well with new members Leanne Ware and Susan Bahr.

I have belatedly responded to the Curator on the proposed Memorandum of Understanding. The latest version from Council is a more balanced document although there are still a few issues to be resolved.

During February the Biodiversity Centre Working Group met with the contractor preparing the Business Case. The contractor is BIS Oxford Economics which is a highly respected business and industry analyst. You may be interested to know that the partnership between BIS and Oxford Economics, a business of Oxford University in the UK, is recent. It was their methodology I used to calculate the Economic Value of the Regional Biodiversity Centre, which we had previously presented to Council officers! The first draft of the Business Case has been submitted to the Curator and we are excitedly waiting to see it.

Don't forget to save the dates for the Botanical Gardens Open Day on 9 June and the new Rotary Botanical Bazaar on 4 August. Rotary Gold Coast is a very good friend to the Friends and the Gardens. We will be supporting them all the way with this already popular event at Country Paradise Parklands. Councillor Peter Young is also providing valuable and much appreciated support.



*Escape Learn
Be inspired*

BOTANIC GARDENS DAY 2019

Sunday June 9 11am - 3pm

Displays
Presentations and workshops from experts
Guided Walks
Plants for sale

Food , drinks, coffee, tea, ice cream

more info www.friendsgcrbg.org.au & www.facebook.com/friendsgcrbg



Ground Covers - Kate Heffernan



Ground covers are multi-functional. There is no clear definition of ground cover, but generally it means fused canopies of foliage at a fairly low height. Landscape designers often use the term 'infill' which also means strappy leaf plants connected in a mass planting. This could also be described as ground cover, as would be diverse groups of low-growing understorey plants.

The two ground covers in the image are both local plants which are easily grown in most sunny well-drained positions. Left is a low-spreading shrub wattle, *Acacia amblygona*. It's a guaranteed favourite in early spring when it's covered in golden flower balls. To maintain its density it should be pruned by at least 10-20% every year following flowering. The foliage is slightly prickly, making it a perfect habitat for small birds.

On the right, *Goodenia ovata*, prostrate form, makes flatter mat-like ground cover. The lush green foliage provides a perfect backdrop of buttercup yellow flowers. Like the wattle, it's super tough, and fairly fast growing. Planted close together these two species are eye-catching. They soften the landscape when they are allowed to spread a little onto pathways or slightly covering rocks and pebbles.

Naturally dense, they both block sunlight from the ground below. Both will be better at suppressing weeds if they are kept dense by pruning. They both provide the same benefits as mulching, but are far more attractive and useful for butterflies and birds. Mulch piled around their stems will invite fungal problems and tannins leached from mulch across foliage may cause a toxic reaction which presents as burnt or blackened leaves. Planted along slopes they assist in stabilizing the soil from erosion.

Immediately after planting these and other ground covers always require regular watering until established. As they mature they are fairly drought resistant and only require occasional watering. Avoid watering when the foliage has heated up in the middle of summer days as this will scorch the leaves.

The SMART Gardener Text book details the many benefits of ground covers. A group of around 30 Friends attended SMART Gardener Training around nine years ago. It covered the basics of good gardening practices. Kate is working on presenting another training program to run through the winter months.



Gumtree Corridor - Moist Hinterland Section

Alan Donaldson

On a recent walk along the Gumtree Corridor, I was pleasantly surprised to see the wonderful growth in the Moist Hinterland section. I had not been to this part of the gardens for several years and the sight of the now tall *Eucalyptus grandis* trees and the well-developed understorey of *Xanthorrhoea* and *Lomandra* species caused me to reflect on my days as Friends Horticultural Co-Ordinator and the challenges and rewards that came from this time. This section of the corridor was the last major Community planting in the Gumtree Corridor, and in all, 174 people planted around 800 native tubes of trees and understorey grasses to celebrate National Tree Day there on Sunday 31st July 2011.



There have been various small replacement and/or successional plantings in all sections of the corridor for Arbor Day projects since that day. The sight of the Moist Hinterland growth and the overall growth of the trees along the corridor, also reminded me of the open sparsely grassed and unpaved area that existed prior to the first plantings on National Tree Day in 2008.

The Gumtree Corridor was conceived by the Project Control Group in conjunction with the Botanic Gardens Master Planner Lawrie Smith AM. Lawrie developed concept bubble drawings for the layout of the various beds as well as the genus and species list suggested for each bed. The beds were arranged in bark type and Regional Eco system types.

Kate was Senior Project Officer/Curator at this time, and we jointly sourced and organised the purchase of the plantings. We covered many miles seeking the necessary species and hand-picking plants. City of Gold Coast's Site Supervisor Patrick Whitely and his team did lots of work with site preparation for planting each year. The later rewards of seeing trees begin to mature helped overcome the memories of the many challenges along the way. Poor soil conditions, strong prevailing winds, dog urine damage to the tube stock, and a series of storms and flood damage caused losses to the young trees. The large annual community planting days were not without problems as well. Occasional poor planting techniques and the over enthusiastic work rate by volunteers sometimes made it difficult to accurately place species. It was prior to the Friends Nursery, so poor storage and pre-planting watering facilities in the staff compound added to frustrations. We also encountered difficulty with some species identification due to the bulk deliveries. Overall these haven't had as major an impact as the lack of irrigation and delayed crown lifting which was eventually undertaken by TAFE horticulture students.

(Continued on Page 8)



(Continued from page 7)

In the Moist Hinterland bed, we had other challenges. The area allocated for planting required much more site preparation due to being poorly drained and over-grown with long-grass. Council staff did a great job to have the site ready for National Tree Day. In addition, the Myrtaceae family plant disease Myrtle Rust, was becoming a problem within ours and other Botanic Gardens around this time. *Eucalyptus grandis*, the dominant species of the bed, was unfortunately particularly prone to this insidious disease. It was decided that we should source this species from 3 different regional nurseries to see if plant provenance might provide some resistance to the disease. This proved to be the case as later attacks of the disease were confined to one small area. It was decided that this planting day would also include understorey plants.

A concern with this was possible major losses due to the dog urine problem and additional watering requirements. Although some plants were lost, looking at the site now with the well-developed understorey justified this decision in my opinion. Dog's aside, it is my hope that this concept can be extended to other beds in the corridor in the near future. The introduction of a varied understorey is essential to encourage birds and good bugs and help prevent pests. By far the biggest setback to this and other beds of the corridor was the effects of ex-cyclone Oswald that passed through the area in January 2013. It was heartbreaking to see around 100 healthy trees lost as a result of the heavy rain and strong winds.

Friends can be very proud of the work in the Gumtree Corridor. This section of the gardens has developed into one of the most botanically important and pleasant areas of the gardens. Friends role in the establishment of the interpretation, funded by Bjarne Dahl Trust, provides interest and educational value.



Gum Tree Corridor Planting

photos supplied by Alan Donaldson



Gardening - Alex Jakimoff

Congratulations to Santo Lessio the winner of our Golden Trowel award for 2018. The golden painted trowel was presented at our Gardening Christmas party, recognising Santo's boundless enthusiasm and energy.

Santo also gets a gong for completing his Horticultural Certificate, well done... and its good to see other Friends gardeners, Dwayne and Stephen, also studying for their horticultural qualifications.

Welcome to another new gardener Karen Manaia and greetings to our nomadic traveller Steve Colley returning to the gardening fold again.

The hot dry summer has had one positive and that's the bonus of slower weed growth so far, but naturally as gardeners we look forward to some serious rain again. Our gardening responsibilities are mainly in the Mangroves to Mountains zone, but we also have volunteers working in the Rose garden and the Rosser garden.

We also assist in other areas such as constructing a drain recently for the Friends nursery to handle irrigation runoff.

Installing new plant signs has been another enjoyable task - these beautiful colourful signs are a huge educational bonus for visitors and Friends alike.



Taken at the Gardening Group's last morning tea of 2018. Santo receives the Golden Trowel Award.

Photos courtesy of Leanne and Tim.



Working in the gardens one fine Wednesday morning in February.
Photos Leanne Ware



Grevillea

....Lyn Reilly

Grevillea is a genus of amazingly diverse woody plants, found in well-drained soils - those derived from sandstone to rainforest edges.

FORM varies from prostrate spreading groundcovers through small to tall shrubs to towering trees of tropical rainforests.

LEAVES are also very variable, some being small and entire, others lobed, pinnate or bipinnate. They are always borne alternately on the stems, upper and lower surfaces usually different.

FLOWERS have male and female parts and are usually borne in definite pairs, sometimes in an umbel-like raceme (stalk of flowers), sometimes in an elongated raceme. These racemes may be terminal or terminal AND axillary (rarely axillary only as are hakea flowers).

In elongated racemes the flowers may be all on one side (toothbrush-like) or distributed in a cylinder around the stem.

The style is often long, protruding from a split in the perianth tube (= petals and sepals) before its tip is released to form a pollen-presenter.

The **FRUIT** tends to be obliquely shaped which opens along the curved margin (cf Hakea which open from the tip). Seeds are flat and usually winged all round, released when mature.

This genus gives us some of our most popular garden plants. Grevilleas hybridise readily and there are a great number of cultivars on the market today. Grevilleas are propagated by seeds or cuttings or are grafted onto root stock such as *G. robusta* or *G. banksii*. Standards or weeping specimens produced by this method can be seen in the Horticulture Display area in our Garden.

PRUNING lightly will keep plants within reasonable bounds - very divided-leaved grevilleas may be pruned 'hard'.



(Continued from page 10)

One of the first grevilleas to become popular in gardens was the hybrid G. 'Robyn Gordon' which arose spontaneously in 1963 in Dave Gordon's garden at Myall Park, Glenmorgan on the Darling Downs. Dave had arranged his plantings so that potentially desirable parent species were adjacent to each other. Robyn Gordon's parents are *G. bipinnatifida* from WA and *G. banksii* from Queensland's east coast. He gave away cutting material (so his gardens never benefitted financially from its sales) and all plants available in nurseries today have been propagated from this material. It grows well in most areas of Australia (except very dry and very cold) preferring sunny well-drained positions. It flowers all year round and is bird-attracting.

Similar grevilleas with divided leaves do well in SE Qld - e.g. *Grevillea banksii* (both red and white forms) and Grevillea hybrids such as 'Sandra Gordon', 'Honey Gem', 'Peaches and Cream' and the new 'Dorothy Gordon'. This latter arose at Myall Park Botanic Garden a few years ago and has silvery foliage and mauve flowers. See one from the Friends Centre verandah.

Our Gold Coast Regional Botanic Garden has had a long association with the Garden at Myall Park. Friends have been participating in working bees there for almost twenty years (see some of their fine china on our 'shop' shelves).

Next time you come to the Friends Centre, look for grevilleas in the gardens there.



The gardens have an extensive collection of Grevillea species and cultivars, many of which can be identified using the photo collection at the Friends Centre.

For more pictures browse the Grevillea book of images in the Friends Centre.



Wildlife Report - Meet some of our nest box residents

Liz Caddick

The Gardens maintenance team recently engaged Habitec to inspect our nest boxes. Much to our delight, these are popular real estate in Benowa, inhabited by a whole range of different creatures. Quite a few of the boxes were identified as being in a poor state of repair, so Habitec have been back this month working on some repairs and renovations for our local residents. Here's a quick summary of what's been happening.



A whole bunch of possum families have moved in. Most of them have squeezed themselves into tiny old glider boxes, when the lids have fallen off. These boxes weren't designed for possums and are a bit cosy for them, so Council are looking at installing a few more possum sized nest boxes that will be more comfortable.



We were surprised to find a small family of microbats inhabiting one of our nest boxes near the lake. Council are going to install a bigger box nearby to encourage more bats to move in, and hopefully to breed.



One of our parrot nesting boxes has been taken over by native stingless bees. We already have a few purpose built native bee hives throughout the gardens, and it's great to see another colony moving in of their own accord, and helping to pollinate our plants. Habitec were concerned about the poor state of the box though, which is rotting, providing access for predators such as ants and wasps. On their recent visit, Habitec translocated this colony into a new purpose built nest in a hollow log, which has been reinstalled in the same tree. The bees seem to have settled in well into their new home.



This little glider was found inhabiting a box without a lid - not too comfy on rainy days. Habitec have installed a new warm dry box on the next door tree, so hopefully the glider will move into that one and enjoy the upgrade.

Editor's note: The original boxes were installed in 2009 (by Lara Solyma the then Senior Project Officer) and after ten years the boxes are in disrepair.



We apologise for the low resolution photos above but decided to retain them to illustrate the text.

Photos below were taken by Narelle Power. All photos were taken in the Gold Coast Regional Botanic Gardens.



NURSERY - Kate Heffernan

After celebrating Christmas with a relaxing morning tea, the nursery group remained active throughout the peak holiday periods of December and January. Plants were potted on, general plant maintenance, and top-up watering was on the programme until the irrigation was repaired after a breakdown. A third system was added to increase irrigation viability. Extreme heat and wind had members attending the nursery more often to ensure plants were not knocked over, had plenty of water and were not stressed. The result of the extra work is a healthy range of plants with only minor losses. Two successful Friday plant sale days brought income to the Friends and, as is one of the principal roles of the nursery, resulted in a range of regional plants planted into local gardens. The range of stock going into Autumn and this year's sales events looks promising.

The Nursery group numbers fluctuate up to fifteen, and includes several new students of horticulture, a qualified Environmental Scientist and international students all seeking practical experience and actively contributing to the community. Successes with propagation methods are improving using cuttings and from seed collected from the Botanic Gardens. The nursery group is keenly awaiting the outcome of a large seed sowing exercise with species not grown previously.

Following the great results from the *Banksia aemula* project at the Bora, Burleigh Heads, reported previously, the nursery is again assisting in the re-introduction of locally provenant species. Burleigh Heads is again the beneficiary, this time the primary school which is privileged to have a number of ancient remnant native pines, *Callitris columellaris* in the grounds. Some are being assessed for accurate dating, and could be many hundreds of years old. Seedlings have been collected and are being carefully nurtured for re-introduction to the school grounds and other locations. The project could later become a Friends SMART Gardener project at the school. Another fabulous outcome is the successful propagation of Birdwing Butterfly vines sown from seeds collected at the Botanic Gardens. These are now ready for planting and Friends members are encouraged to think beyond their own gardens and consider purchasing a few vines as an educational tool for their local schools. Lyn Reilly's beautiful children's book, published by the Friends tells the story of Birdwings New Home.

The nursery might be 'up hill' and a bit out of the way, but its success in growing quality plants at very reasonable prices is the best reward.

The Friend's Nursery Team, March 2019



Exploring the Gardens

Over the Summer holidays successful activities were held for school aged children. They ranged from Botanica Arts and Crafts leading up to Christmas to Bird and Insect Walks around the Gardens. Another session featured exploring Bush Foods and the Story of our Country along with playing Kaialgumm Games. As we come into Autumn, with hopefully some cooler weather, Little Nature Lovers for years 3 - 5 year olds will continue on the third Wednesday of the month through to June. Looking to the next school holidays another 2 sessions of Botanica Arts and Crafts and a Children's Discovery Trail will be offered.

For more information about the upcoming activities go to www.friendsgcrbg.org.au/education or visit Friends Facebook Page as all events are featured. www.facebook.com/friendsgcrbg

The current display in the Friends Centre features Native Bees in the Gardens. There is so much to learn about these amazing insects. You can join Gareth on one of the Native Bee Walks on the first and third Fridays of the month at 9:00am at the Friends Centre. There are a number of native bee hives in the Gardens including man-made boxes, tree stumps and trunks. You can also taste some of the delicious native bee honey. Books specifically about native bees are for sale at the Friends Centre. Native bees are incredible pollinators and such a wonderful addition to any home garden.

We are currently planning the next raft of educational activities for 2019 - 2020. Again, we are very appreciative of Naturally GC for sponsoring many of these activities and our Friends volunteers for delivering them. As the community recognises the many benefits of interacting with nature, in particular for children, it is very reassuring to see the increased uptake of the activities Friends provide.

Rana Baguley
Education Coordinator



It takes a number of assistants to cater for the children and help them in their activities.

Friends, family members and carers are needed and appreciated by all.



In the Herbarium

Recently, March 5th 2019, **Professor Tony Carroll** (Griffith University) explored the Gum Tree Corridor of the Gardens with our herbarium group as he collected material for his eucalypt project.

Prof. Carroll is a biochemist and one of his many interesting projects is the chemistry of eucalypt flowers. He is studying its usefulness in separating species, groups of species and even individual plants of the same species on different substrates. He is using buds, flowers and immature fruit of many *Eucalyptus* species, including *E. racemosa*, *E. crebra*, *E. melanophloia* and *E. cloeziana*. (Tony spotted another *E. cloeziana* which we had overlooked in the past, giving us three so far in the Gardens.)

His study uses some of the most advanced equipment for DNA analysis and is at the cutting edge of this science.

This project is a wonderful example of the very reason that Botanic Gardens exist - holding a collection of plants in one place for scientific study.

The researcher can avoid travelling the length and breadth of the country to observe and work with his specimens.

Our Herbarium group will monitor the flowering of the eucalypts in the Gardens for his project.



Stripping flowers & immature fruit from *Eucalyptus racemosa*, Scribbly Gum, with Prof. Tony Carroll
Photo: Laura Ryan

Flowers by Friends - Claudia Knapman



The hot season has kept Flowers by Friends very quiet for the last few months, as all fresh flowers have a very limited life if they are not in permanent air conditioning at this time of year. We hope to have beautiful, native flora available for sale again very soon.

Please watch the signs at the Friends' Centre or contact us for more information.

If you are planning an event and would like to discuss what we can offer, or would like to order floral designs, posies or bunches of stunning native flora, call us on 0429 412968, leave your name and contact details at the Friends' Centre

or email: flowersbyfriends@friendsgcrbg.org.au

Are you looking for something unique for Mother's Day on 12th May?

Flowers for Mother, for a special friend or just for you will be available for sale and orders for collection on

Friday 10th and Saturday 11th May.

Please place your orders for unique Australian native floral arrangements by Friday 3rd to ensure availability.

We invite you to enjoy these lovely natural products which are sourced from Australian growers. While we cannot guarantee particular species or colours, the flora is always beautiful, has a good vase life and is very reasonably priced.

All proceeds support the development of the Botanic Gardens.



Photos courtesy of Laura Ryan



Flowers by Friends - Claudia Knapman

...Tips on Cutting and Caring for your Flora

Most of us with gardens love picking our own flowers and foliage. Whether your flowers are natives or exotics, there are a few basic guidelines to help your flora last longer once cut. These are particularly important when the weather is hot.

- Make sure your secateurs and scissors are sharp and clean.
- Cut in the cool of the day: either very early in the morning or when the sun has set.
- Carry a bucket containing a small amount of water and put your stems straight in when they are cut. If you have short stems, put a smaller jar or similar container with water inside the bucket, so that you can prevent the taller stems from spoiling those that are more delicate by separating them.
- Flowers are usually stronger if picked before they are fully open. If you are picking *Anigozanthos* (Kangaroo Paw), *Grevillea*, *Callistemon* or similar flowers choose flowerheads that are developed, but with only 10-20% of the loops or florets open.

Here are some useful tips for maintaining your flora once it is cut, or when you have bought it.

- Take flowers home quickly - don't leave them in hot cars - and put them into clean, cool water as soon as possible.
- First, remove all leaves that will be under water and excess leaves on the stems that increase transpiration above water.
- Recut the stems - under water is often a good idea - so they are freshly open to take up the water. Stems seal over very quickly once in the air. Cutting on an angle is usually best, especially for soft stems.
- Leave the flowers in cool or tepid water for at least 2 hours - overnight is good - to condition them for arranging.

Choose appropriate containers and methods of arrangement.

- If they are short lived species a float bowl may be useful; if the foliage is weeping then a tall vase could be best; if there are large seedpods or nuts on short stems a container that allows for low features at the front may be best.
- If using your own vase, clean it well; ensure flowers are not jammed in or the stems crushed.
- Many natives (e.g. *Banksias*) do not need preservative, but use preservative if so advised (e.g. for *Actinotus* [Flannel Flowers]).
- Display flowers away from sunlight, wind, heaters and lamps.
- After a few days remove any dying flowers or leaves and, if in a vase, recut stems if they seem slimy and replace the water if possible.
- Check water regularly whether the flowers are in a vase, foam or other container.

Enjoy your flowers.

Some native flora will last for a month and some dry well in the vase.



Birds of the Gardens 17

Bush Stone-curlew (*Burhinus grallarius*)

Quiet and reclusive by day, but noisy and active with a frightening, eerie, high-pitched wailing at night, that is the life of the Bush Stone-curlew. Also known as the Bush Thick-knee or Weeloo, it has also been called 'The Screaming Woman Bird'. It is believed to be responsible for night-time reports of the folklore yowies and bunyips screaming in outback billabongs. Bush Stone-curlews are a distinctive, but secretive, seldom seen bird, with their eerie, mournful wailing at night often the only sign of their presence.

Bush Stone-curlews are quite tall, ground-dwelling birds, with long spindly legs, large yellow eyes and a short dark bill. Displaying a hunch-shouldered stance, their slender body has cryptic-coloured plumage of mottled brown, grey and white with a conspicuous white spot on the wing and a black band running from near the eye down the neck. Though large, they are hard to see. A master of disguise, when disturbed they either stand perfectly still, or lie flat on the ground with their head and neck outstretched where they camouflage well with the surroundings, hoping to avoid predators. An unusual looking bird, they are easy to identify, with the related Beach Stone-curlew having a much larger bill and more boldly masked face.

The ghost-like call is the contact call and may be given by several birds in chorus. The wee...loo... often repeated several times, culminates in a screeching crescendo. By day, curlews stand quietly, eyes half closed, or squat on the ground where their plumage blends inconspicuously with background twigs and leaf litter. At night their calls carry far across lonely bushland.

Open forests and woodlands with a sparse ground layer of grass, leaves, sticks, stones and twigs is their preferred habitat. Found singly, in pairs, families and small flocks, they prefer untidy landscapes covered in fallen timber and debris because this provides the best habitat for nesting, camouflage and foraging. Usually staying within a fixed home range, most pairs stay together throughout their life. Bush Stone-curlews have become highly adapted to living in modified environments like golf courses, caravan parks, sports fields and urban parklands. They avoid dense vegetation. Although quite common in northern Aust and Qld, serious declines are evident in southern states. They are now rare or extinct in many areas of southern Australia and are listed as endangered in NSW. They are rarely spotted in urban areas around the Gold Coast. Here in The Gardens they can be seen during the day resting under shady trees over the fence in Royal Pines As you walk along the path following the fence line, you will need a sharp eye to spot them camouflaged among the twigs and leaves.

Bush Stone-curlews are mainly nocturnal, being a terrestrial predator adapted for stalking and running. They specialise in hunting small grassland animals, mostly insects, but will also take lizards, snakes, frogs and snails found among the leaf litter. Curlews may also eat small seeds and fruit. Interestingly they obtain moisture from their food and do not need water to drink.

Their nest is a scrape or small bare patch on the ground, relying on camouflaged eggs and cryptic plumage to avoid predators. Following a remarkable courtship dance with outstretched wings and feet-stamping, two mottled grey-brown eggs are laid, then incubated by both parents with the off-duty bird usually standing guard nearby. Baby Bush Stone-curlews can walk almost as soon as they are born and are taught to eat food by dropping it in front of them. If danger threatens, the parents may raise their wings wide and high in an impressive threat posture and hiss loudly and hoarsely, or carry their young off under their wings.

Curlews protect themselves by combining their natural camouflage with good visibility to see predators approaching. If disturbed, rather than fly, they will crouch and freeze, or walk stealthily off. They frequently respond to danger with distraction, or threat displays called 'mantling' (hunching shoulders and spreading wings to protect the babies). Feral animals such as foxes, cats and dogs are a huge threat, with native predators including kookaburras, goannas, pythons and the white ibis.

After dark here in The Gardens the curlews are free to wander undisturbed. It could be a very noisy affair, especially on moonlit nights, with the Bush Stone-curlews wailing in chorus. To the uneducated may be a bunyip screaming from the lagoon!



Bush Stone Curlews close up



Text and photos by Jenny Rosewell



Volunteer Garden Guides with Shelly Kelly



The 2019 guiding year has commenced with a flourish despite not having any planned Free Guided Walks until March. Gareth has battled on through the hot summer months and continued with his popular native bee walks with over 40 having attended so far this year. We have had several booked guided walks with almost 60 attending overall.

There was a very good attendance at our first guiding meeting for the year with everyone very enthusiastic and with many suggestions for our year of guiding. Keep an eye out on our Facebook page or the GCCC

Calendar of Events for some of our innovative new walks e.g. The Peace Walk on Sunday 19th May (A guided walk through some of the beautiful surrounds of the Gold Coast Regional Botanic Gardens focussing on walking on the earth for inner and outer peace).

The “Yugambeh - Story of Our Country” guided walks are very popular with the general public.

To increase our knowledge with guiding through this special garden, the guiding group has decided to visit the Yugambeh Museum in Beenleigh on Wednesday 6th March. The Yugambeh language people are the traditional custodians of the land located in south-eastern Queensland and north-eastern New South Wales.

In September, a group of FGCRBG guides will be travelling to Perth for the 16th Australasian Botanic Guides Conference. The theme for this year is “Beauty Rich & Rare”. We are expecting to see a bounty of this in Kings Park and during our pre and post conference tours with Kate Heffernan. The conference is being held from 16th to 20th September which coincides with the spectacular Western Australian wildflower season.

We are making another call for volunteers to join our guiding team. The next training course will be commencing in May.

To find out more about the rewarding world of guiding or if you have any enquiries or wish to book a group walk,

please ring 0449 561 674 or email info@friendsgcrbg.org.au



Photos by Shelly Kelly show Rana conducting a Butterfly Walk in the absence of Josephine Romeo



Native orchids and a secret tunnel:

Australian Plants' first activity for 2019 (9/2/19)



Richard Phillipps organised this activity in the Friends Centre and he spoke about native orchids.

We saw pictures of Australia's largest terrestrial orchid *Phaius australis* which are growing in a couple of sites in our Botanic Gardens. Discussion ranged over other species [the yellow form *P. bernaysii* (North Stradbroke Is.) and *P. tankervilleae* (SE Asia and the Pacific Islands)]. *P. australis* can be propagated easily by laying the stem in damp sphagnum moss. Plantlets emerge from the nodes and can be potted up when large enough.

Geodorum densiflorum or Shepherd's Crook orchid can be seen outside the Visitor's Centre, usually with new leaves in spring and flowers in summer.

Other easily grown ground orchids are the Greenhoods, species of *Pterostylis*.

Richard also showed us images of the endangered Eastern Underground Orchid - *Rhizanthella slateri* - which had been found (naturally enough) by accident. (*R. omissa* was unearthed once during roadworks in the 1950s at Lamington.)

Richard detailed the ANOS Vic (Australasian Native Orchid Society) as a source of further information and of tubers for its members. He also mentioned ANOS Beenleigh as a further source of information and encouragement.

Judith and Ted de Boer spoke about their work restoring the 'secret' tunnel at Molendinar, recently featured on ABC News and website. Opened in 1898 and closed in 1964, it is a rare example of 19th century railway engineering on the Gold Coast. Images of this former part of the original Brisbane to Southport Railway line brought back memories for some of those present. After afternoon tea, some members drove in convoy to the tunnel and expressed admiration for the de Boer's work there - a clean, clear tunnel complete with 'tunnel art', an open lawn section and photographic display of memorabilia.

Next month (2nd Saturday afternoon in March at 2pm) Richard has organised a visit to the 'Land for Wildlife' eleven-acre farm of Peter Biddle & Chris Robbins, 81 Ducats Road, Tallebudgera Valley:

On April 13th Professor Tony Carroll will be in the Friends Centre at 2pm to speak about his eucalypt project (see p.15 for more)

There are still a few vacant slots in the year's program, so if you have a good idea, please contact Gareth on ausplantsgc@gmail.com and he will spread the word.

Lyn Reilly



GUIDING PROGRAMME - March to June 2019

| March | | | |
|---|----------|--------------------------------------|---|
| Fri March 1 | 9.00 am | NATIVE BEE WALK | Meet at Friends Centre |
| Sun March 3 | 10.00 am | Free Guided Walk | Be Uplifted (Landmark Trees in the Gardens) |
| Tues March 5 | 9.00 am | BUTTERFLY WALK | Meet at Friends Centre |
| Wed March 13 | 10.00 am | Free Guided Walk | Indigenous Use of Bush Foods and Flora |
| Fri March 15 | 9.00 am | NATIVE BEE WALK | Meet at Friends Centre |
| Sun March 17 | 10.00 am | Free Guided Walk with Kate Heffernan | Selecting Small Trees for Gold Coast Gardens |
| Wed March 20 | 10.00 am | Free Guided Walk | Be Uplifted (Landmark Trees in the Gardens) |
| Tues March 26 | 9.00 am | BIRD WALK | Meet at Friends Centre |
| Wed March 27 | 10.00 am | Free Guided Walk | For the Love of Trees |
| April | | | |
| Tues April 2 | 9.00 am | BUTTERFLY WALK | Meet at Friends Centre |
| Fri April 5 | 9.00 am | NATIVE BEE WALK | Meet at Friends Centre |
| Sun April 7 | 10.00 am | Free Guided Walk | The Wallum Woodland |
| Wed April 10 | 10.00 am | Free Guided Walk | Along the M2M Trail - Destination Bush Foods Garden |
| Wed April 17 | 10.00 am | Free Guided Walk | The Wallum Woodland |
| Fri April 19 | 9.00 am | NATIVE BEE WALK | Meet at Friends Centre |
| Sun April 21 | 10.00 am | Free Guided Walk | Autumn in the Botanic Gardens |
| Tues April 23 | 9.00 am | BIRD WALK | Meet at Friends Centre |
| Wed April 24 | 10.00 am | Free Guided Walk | Autumn Walk - Horticultural Display & Rose Gardens |
| Note: Kate Heffernan will guide a 1.5 hour walk on Sunday March 17th which features small trees suitable for home gardens. | | | |

| May | | | |
|------------|----------|------------------|--|
| Fri May 3 | 9.00 am | NATIVE BEE WALK | Meet at Friends Centre |
| Sun May 5 | 10.00 am | Free Guided Walk | A Discovery of History and Horticulture |
| Tue May 7 | 9.00 am | BUTTERFLY WALK | Meet at Friends Centre |
| Wed May 8 | 10.00 am | Free Guided Walk | The Green Within the Gold |
| Wed May 15 | 10.00 am | Free Guided Walk | "What's in a name" - A Look at Regional Plants |
| Fri May 17 | 9.00 am | NATIVE BEE WALK | Meet at Friends Centre |
| Sun May 19 | 10.00 am | Free Guided Walk | Peace Walk |
| Wed May 22 | 10.00 am | Free Guided Walk | A Discovery of History and Horticulture |
| Tue May 28 | 9.00 am | BIRD WALK | Meet at the Friends Centre |



Attending the Yugambah Museum on Wednesday 6th March 2019 - Sue, Noreen, Alan, Kate Shaun Davies, Shelly, Gerard and Sally-Anne.

Shaun gave a talk on the origins and history of the Yugambah peoples, language and kinship. An inspiring and greatly appreciated journey through the Story of our Country which is one of the feature areas of the Gold Coast Regional Botanic Gardens



What you will find at the Friends Centre

Information:

- ◆ a map of the Gardens
- ◆ brochures on Friends Guided walks, our Climate Watch project, NaturePlay passport quest, Kaialgumm Games and other children's activities
- ◆ flyers on upcoming events and activities
- ◆ fact sheets on the plants and wildlife in our Gardens
- ◆ Friends information brochure and membership forms
- ◆ changing displays, like the current *Native Bee* display

Merchandise:

- ◆ plants for sale from the Friends Nursery volunteers
- ◆ flower arrangements from Flowers by Friends, periodically
- ◆ books, eg local plants, birds, bees, butterflies, frogs and bushwalks
- ◆ gift ideas, including unique items from botanic artist Min-Jun Oh and pottery based on leaves of plants in our Gardens by Helen Parer, and, works from our crafty Friends
- ◆ local honey and beeswax candles
- ◆ botanic coasters and Aroma Bloqs from BellArt designs
- ◆ organic teas, jams, bush food spreads and cooking ingredients

and friendly Friends Centre Volunteers to help you find your way.

Come and see us at the Friends Centre - open 10am to 2pm everyday

Mary Woods
Friends Centre Coordinator



STOP PRESS - New Friends Centre Coordinator

Paula Wu, a new member of Friends, is taking on the role of Friends Centre Coordinator. Paula brings to the role her experience from a successful professional career and a strong background in volunteering. Paula and I will be working together to ensure a smooth handover in the next few weeks.

I am resigning as Friends Centre Coordinator as I find I am not in a position to give the role and its responsibilities the time and attention required this year.

I have enjoyed my time as Friends Centre Coordinator and particularly enjoyed working with our wonderful team of Friends Centre Volunteers. I will continue to volunteer at the Friends Centre and look forward to seeing you all around the Gardens.

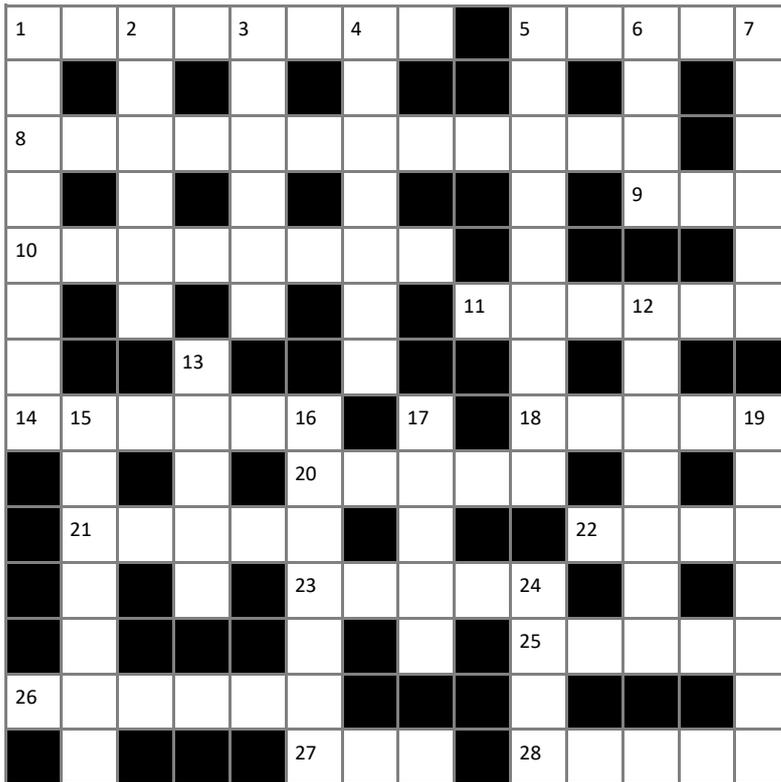
Be sure to say hello to Paula and introduce yourselves. I know you will give her a warm welcome when you meet her around the Friends Centre.

Mary Woods

(Outgoing) Friends Centre Coordinator



Dick's Challenge #15



Down

- 1 Largest Island in 1 across
- 2 River large eucalypt of inland waterways
- 3 Mile Beach, NW Western Australia coastal reserve
- 4 When careened at Cooktown, the Endeavour's hull was found to be
- 5 A type of compound leaf
- 6 "..... world', part of Lamington National Park
- 7 Thistle Y Australian author & conservationist
- 12 19th Century Nth Qld explorer
- 13 Optimum
- 15 Historic Clarence R. town
- 16 stick palm of the rainforest
- 17 Doryanthes Lily
- 19 Australian Light Horse Brigade took Beersheba 1917 under Field Marshal
- 24 Alice Springs river

Across

- 1 Bass Strait Island Group
- 5 Large inland casuarina
- 8 Redland City's Environmental Education Centre
- 9 Name of a sailor in Cook's time
- 10 Large deep fjord in SW NZ Sound
- 11 A bushwalker's worry
- 14 A carnivorous plant
- 18 Pacific Island monarchy
- 20 *Billardiera scandens* Berry

- 21 Lakes NSW coastal National Park
- 22 Blandfordia Christmas
- 23 Boat used by Australian commandos to attack Singapore Harbour 1943
- 25 A Victorian Mallee town
- 26 Colourful variegated shrub
- 27 Common name for smooth-barked eucalypts
- 28 Donald Duck's girlfriend



Archives



The Friends archives constitute a collection of materials in all forms to preserve a record of our Association and its vital contribution to the City of Gold Coast.

Our archivist, Helena Kelso, and several Friends members also belong to the Garden History Society and understand the importance of well documented and stored garden records. Helena asks if all members could contribute any news clippings, photos (digital or otherwise), video clips, pod casts or any other material that should be archived.

This material is being kept safely in anticipation of a permanent home at the Biodiversity Centre in years to come and is also supplied to the John Oxley Libraries historical records.

Helena Kelso, archivist

Please keep this archive collection growing.....
information contact: info@friendsgcrbg.org.au

Dick's Challenge #15

Solution

Across 1 Furneaux 5 Belah 8 Indigiscapes 9 Tar 10 Doubtful 11 Snakes
14 Sundew 18 Tonga 20 Apple 21 Myall 22 Bell 23 Krait 25 Ouyen
26 Croton 27 Gum 28 Daisy

Down 1 Flinders 2 Red Gum 3 Eighty 4 Unsound 5 Bipinnate 6 Lost
7 Harris 12 Kennedy 13 Ideal 15 Ulmarra 16 Walking 17 Spear 19 Allenby
24 Todd

REFRESHMENTS, ICECREAMS. HIGH TEAS

Visit Jason and Samantha at Coffee at the Gardens to partake of their delightful cuisine.

Open from 9.00am on the verandah of the Friends Centre.

Bookings for groups can be made or just pop by for an enjoyable break.

Coffee at the Gardens



P. Reilly



Proudly supported by
CITY OF
GOLDCOAST.

Our thanks to Gold Coast City Council for their continued assistance with this Newsletter.

