





REGIONAL BOTANIC GARDEN



We invite you to enter the

2023 Photographic Competition

Entry is free with prizes to be won and a chance to have your image feature in the Garden's 2024 Calendar.

Details available from

www.erbg.org.au or

the Garden's Visitor Centre

Open 9-4 Wednesday to Sunday

Phone: 4471 2544

Entries close 4pm, 29th **September 2023**A Friends of Eurobodalla Regional Botanic Garden initiative in partnership with Eurobodalla Shire Council

Front cover photo: Michael Anlezark



President's report – Gail Stevens (acting President)

Hello and welcome to the latest edition of *Correa*, Friends of Eurobodalla Regional Botanic Garden's newsletter. I am filling in as acting President while Gabi Harding is on secondment for some months.

Friends invited Helen Moody, author of *South Coast Islands*, to the Garden on 3 June to talk about her book. It was a well-attended event with more than 70 people (Friends, members of the Australian Plant Society and general public) coming to the talk. Helen answered questions and sold quite a few books. The talk was followed by afternoon tea.

Friends' membership numbers continue to grow. The Friends now have 424 members with a mix of people from the local community and visitors from outside Eurobodalla.

I thought members might be interested to know about Friends' contributions to help support the Garden and make it a great place to visit, soak up nature and take family and friends. In recent times Friends have contributed or committed the following:

\$5 000 – quality brochures and handouts and reprints;

\$600 – banners for the Garden;

\$5 000 – seed money for the calendar of events that will occur throughout the year;

\$4 000 – weather protection blinds for Spotted Gum Pavilion;

\$1 500 - grasstree sculpture at the Visitor Centre entrance;

\$2 000 – PA system for events and Garden guides;

\$10 000 – directional signage throughout the Garden.

Friends continue to contribute \$5 000 to the Visitor Centre sinking fund. Additionally, Friends are seeking grant funding for four event marquees to ensure planned events can go ahead regardless of weather and funds to contribute to a Wellness Walk.

Finally, the Public Fund has agreed to provide more than \$7 000 to purchase a high quality, cutting edge trinocular microscope, microscope camera and camera adapter for the Herbarium.

I hope you have found it interesting to see how our fundraising, membership fees and careful management of the organisation all help support and promote a great regional Botanic Garden.

Pollinator Week - 11-19 November

Celebrate the vital role of pollinators!

Join us for

Talks

Walks

Lab Session

Photo exhibition

Honey Tasting

Art demo

Kids' craft

See all activities at erbg.org.au

Photo: Peter Abbott



Charcoal Stingless Bee at the ERBG.

Garden Manager's report



Well it's certainly winter at the Garden with some good frosty mornings and although the days are shorter they have been predominantly full of glorious sunshine – so much so that it is fast becoming a problem. A lack of rain has meant that we are having to manually fill our small

ponds and water features and do additional watering in the nursery. I have also had to take the drastic action of buying in water to fill the large rainwater tanks that service our Visitor Centre and café as the tanks were almost empty. I can't recall a winter here this dry.

With such pleasant weather it is no wonder we have had record numbers of visitors for Autumn (over 21,000) and in the first month of winter (7,125). This brings our visitor numbers to over 83,000 for the last 12 months. But it wasn't just good weather that brought visitors in, events such as our Book Fair in June were not only popular but raised a whopping \$5,300 for the Garden and guest speakers and guided walks were all well attended.

We held a very important event on May 22 that was not for the public but for our volunteers, to give thanks and celebrate amazing efforts and dedication to the Botanic Garden. For the first time ever we recognised the long service of individuals, handing out 23 long service award certificates ranging from 10 to 30 years' service. It was such a privilege for me to hand out these certificates and be part of the recognition of such dedication. The day included a barbecue lunch cooked and prepared by staff and finished with an afternoon of lawn games that included Jenjo and Kubb. This will become an annual event so If you are an active volunteer and you get an invitation next year I strongly recommend you come along as we all had such a great time.

Some of the projects we are working on at the moment include a Threatened Species Garden that is being planted around and below the Spotted Gum Pavilion. We received a generous donation of \$3,080.00 from Rotary Batemans Bay and Wollongong for this project which we aim to complete later this year.

You may recall the Discovery Garden Project that we received funding for two years ago which has been in the planning stages forever but is now a step closer. It is expected that by the time you read this newsletter we will finally have the design package from the State Government 'Everyone Can Play' funding body and will have started the tender process for construction.



Dylan, Russell, Arlo and Daniel manning the barbecues



Michael Anlezark

Jenny Vine accepting her 30 years long service award



Brian Cant accepting his 25 years long service award



Sue Grahame accepting her 20 years long service award



Heather Haughton accepting her 15 years long service award



Narelle Lord accepting her 10 years long service award

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Some important smaller projects that Friends have agreed to fund this year include –

- The installation of clear PVC weather blinds for the Spotted Gum Pavilion
- Personal address systems for our events and guides
- New directional signage throughout the Garden
- Grass Tree sculpture
- A digital camera and microscope for the Herbarium (to be funded by The Public Trust fund).

I would just like to finish off by letting you know that we have a huge range of events coming up with something to suit everyone. There are science seminars, music, moonlight cinema and live performances of Snugglepot and Cuddlepie. Just go to the website www.erbg.org.au and book a place. We are adding new events all the time but numbers are limited and we don't want you to miss out.

Till next time Michael Anlezark



Book Fair

Dylan Morrissey



The June long weekend saw the return of the ERBG second-hand book fair, and right at the top I would like to say a huge thankyou to all the volunteers and Friends that came to help with sorting, setting up and running the event, especially Heather and Peter Haughton for all their sage advice gained from experience running it in previous years.

There was the expected mad rush as doors opened on Saturday morning, and much to our surprise the numbers of bibliophiles barely dropped all day and kept those of us tallying sales working flat out. The Sunday was

quieter, but still very well attended and great sales achieved. We estimated roughly 65% of the books found loving new homes, and we raised over five thousand dollars for the Garden, as well as being a wonderful event and a good chance to pick up some winter reading material. Left over books were donated to Vinnies in Batemans Bay and to the CWA at Moruya.

At this stage, we are planning on running it again next year, so start stacking books aside and keep an eye out for when we make the call for books next year. A small word of advice, however; if you plan on volunteering next year, be prepared to go home with an armful of books – the temptation is just too great!

Photo: Dylan Morrissey





From the Forest Festival - literary walks

Sally Edsall

The Literary Walk was held twice during the Festival. Most attendees were local or spend considerable time in the area. Many were infrequent visitors and had not been since before the

2019/20 bushfire. Everyone was impressed with how wonderful the Garden looks now.

The aims of the Literary Walk were to help understand:

- ways of "seeing" plants in the Garden; in particular the eucalypt forest which writers, storytellers and poets have employed across cultures and throughout time;
- how literature can demonstrate human engagement with the forest;
- the adaptation of plants to our environment;
- the different management practices of landscape from the First Nation custodians to modern times via colonial practice and experience;
- the importance of conservation of plants, the role played by ERBG and why it is such a special place: its unique role as a collector and showcase of endemic species.



The walks were not a

"botanical" tour, but intended to prompt discussion about the relevance, meaning and feelings regarding the importance of this unique landscape. Over time eucalypts have been variously depicted as dangerous widow-makers and child killers, stately yet substantially boring and lacking in comparison to European trees; ghostly and charred by fire, giving a sense of foreboding, yet stolid and rooted, evoking memories and nostalgia for home, or a place to call home.

As well as the eucalypts of the forest, some other plants discussed were the *Macrozamia communis* (Burrawangs, or in Dhurga – the local language of the Walbunja people

of the Yuin Nation - banggawu); *Acacias* (Wattles); *Banksia serrata* (Old Man Banksia) and *Cyathea australis* (Rough Tree Fern). I'm still searching for more! I prepared an illustrated bibliography which was well received and taken away by most people.



Mossy on Gardens Café

Michael Anlezark

I've recently discovered some delicious new dishes at the Mossy on Gardens café – here is my review.



Lamb Kofta: this new dish on the Mossy on Gardens menu is so delicious you might get uncontrollable urges to lick the plate clean

I have had to try it several times and each time it gets my taste buds singing a song of 'we want

MORE'.

I highly recommend this dish be followed with a slice of awesome Turkish Delight cake. A match made in heaven.

In celebration of eucalypts

Margaret Lynch



Eucalypts: known in the wider community simply as gum trees are quintessentially Australian. These trees are present throughout the Australian landscape and second only to the wattles (*Acacia*) in number of species. In fact there is a special day dedicated to these Australian icons. National Eucalypt Day is celebrated on March 23 – perhaps not as widely known as Wattle Day but nonetheless as deserving.

The term gum tree was first used when early visitors to Western Australian shores saw a gum-like substance exuding from the trunk of the trees on shore. Thus these strange trees became "gum trees".

The ERBG arboretum displays many of our local species from forest giants to the smaller mallees. The **interpretive signs**, like the resilient trees themselves, survived the Black Summer bushfire. These signs, made possible by funding from the *Bjorne K Dahl Trust*, explain many of the attributes and past uses of Australia's eucalypts. These are highlighted in bold type throughout this story.

Not all eucalypts are *Eucalyptus* though this is the largest genus comprising around 758 species. Botanical classification on the sign "what's in a name" covers the naming of the three genera collectively referred to as eucalypts; *Eucalyptus*, *Corymbia* (93 species) and *Angophora* (10 species). This is based on the differing characteristics of flowers and seed capsules. Eucalypts also display great diversity in size and form, bark texture and leaf shape which gives rise to commonly used terms such as mallee, stringybark, ironbark or narrow-leaved peppermint. Bark texture or colour on their own can be a distinct feature: the salmon tone *Angophora costata*, often present with wrinkles under its branches which add character, the fresh new bark of spotted gum (*E. maculata*) and bluegum (*E. saligna*) after shedding or the deeply furrowed ironbark, all uniquely beautiful.



River red gum photos from the Heysen Trail Walk, Flinders Ranges, SA



River red gum photos from the Heysen Trail Walk, Flinders Ranges, SA

Our local giant, Big Spotty, a towering 70 metres high, features on "land of the giants" depicting diversity of form. However, the mountain ash (*E. regnans*), which grows in the forests of Victoria and Tasmania is taller and claimed to be the tallest flowering plant in the world reaching over 90 metres. Speaking of form, it is not only the giants that impress. Who has not marvelled at the branches of the southern or swamp mahogany (*E. botryoides*), stretching out for metres and seeming to defy all laws of physics?

Australia has almost 900 species of eucalypts which, with only a few exceptions, are native only to Australia. Some, such as the river red gum (*E. camalduensis*) are widely distributed, others such as our local *E. deuaensis*, *E. imlayensis* and *C. recurva* are limited to a small area, the first examples found at Mt Imlay and the Deua respectively and the latter at Braidwood. Note some

species are named for where they are native to, the ending "ensis" depicting this. Interestingly "camalduensis" denotes the district of Camalduli in Italy where the eucalypt was planted in the grounds of a monastery and became the first of the species to be described and named. Surprisingly an early "home among the gumtrees" even though in another country!

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White and orange form of flowering gum from my garden

Eucalypts came to dominate the Australian landscape as the continent drifted north from Antarctica after the breakup of Gondwana. The climate became drier. rainforest areas shrank and those plants adapted to the changing conditions which included greater frequency of fire, began to dominate and became the "great Aussie survivors". This was evident in the amazing recovery from the devastating Black Summer of 2019/20 at ERBG, the trees once again providing food and shelter for wildlife. Whether a cosy hollow, branch for a nest, bark to hide under; many of our animals, birds, reptiles, spiders and insects make their home in a eucalypt. Even after falling on the forest floor the contribution of large old trees continues as decomposition provides food for fungi and bacteria and even shelter in the hollow trunk. So it is "the life and death of a gum tree", a valuable provider to the ecosystem for decades, even centuries.

For thousands of years eucalypts have been a valuable resource for humans. Aboriginal peoples used bark to build shelters and canoes; timber for tools and weapons and fuel for campfires. Europeans "in the olden days" also built bark huts and later used eucalypt timbers in the construction of houses, bridges, roads, railways and wharves. Wood was also burnt for heating and powered steam engines. Today, paddle steamers are still present on some inland rivers, catering for the tourist trade and wood is still used for heating in some homes. As a valuable source of hardwood, timber continues to be used in construction, furniture, flooring and wood turning.

Aboriginal people also treated many ailments and wounds with the oil of eucalypt leaves and in 1854 Baron Von Mueller, Victorian Government Botanist, convinced the pharmacist Joseph Bosisto to begin a eucalypt oil industry. A local tree, (one grows in the arboretum), *E. bosistoana* is named in his honour. This industry continues today, harvesting the leaves of *E. polybractea*. A bottle of Bosistos Eucalyptus oil is present in many a household's laundry or medicine cabinet. As well as medicinal uses (inhalants, antiseptics, lozenges) the oil is used as a solvent, disinfectant and in soaps.

Honey production is another industry largely dependent on flowering eucalypts but perhaps the most recently acknowledged benefit of the trees is that of carbon storage. The role eucalypts have in removing carbon dioxide from the atmosphere is becoming increasingly valuable as the world strives for the reduction of greenhouse gases.

Eucalypts are undoubtedly worthy of celebration so come March 23 hug a gum tree, there's sure to be a deserving specimen close by!



Spotted gum trunks Narooma



Photos: Margaret Lynch

My garden - an update

Lesley Vincent

It is over three and a half years since the 2019 New Year's Eve bushfire ravaged our shire. Despite the adjacent forest and many other surrounding properties being burnt, our home was virtually untouched. But the garden was not so lucky. In May 2020 I wrote an article about the impact that the bushfire had on our garden. Recently the Editor of *Correa*, Trish Richardson, approached me about writing an update on how the garden is faring today.

Looking back now to that period after the fire, it seems surreal. Nature is so incredible in its ability to renew itself and many people looking at our property today would not know that it was almost completely burnt. However, the blackened skeletons of taller Acacia and eucalypts in the gully below the house stand testament to the damage that it suffered.

The property looks vastly different now. With the assistance of good rainfall in the past couple of years, many native species are thriving. Grasses and Macrozamia communis were the first to re-emerge quickly followed by many groundcover species such as Chryoscephalum apiculatum, Hardenbergia violacea, Myoporum parvifolium and Carpobotrus sp.

While we lost many of our Grevillea species, there were a few cultivars that survived including a G. 'Bush Lemon', and a G. 'Coconut Ice' that sprouted from the charred root stump and is positively flourishing. After several months seedlings of our local Grevillea rhyolitica 'Deua' started to emerge. Other plants that came back from seed after a time include Philotheca myoporoides, Indigofera australis, Ammobium elatum, Westringea fruiticosa, and Scaevola aemula.



January 2020



March 2023 - some new plantings and some survivors



New Polycias murrayi (Pencil cedar) emerging around two years after the fire

January 2020



July 2023 - hardy survivors including Banksia spinulosa large form, Macrozamia communis, Hakea maacrena

I was advised to 'wait and see' what comes back after the bushfire and this was sage advice. In the first few months I saw new growth emerging from the roots of some trees that I thought had been lost including the Hymenosporum flavum, Tristaniopsis collina and laurina, Eleocarpus reticulatus, Acacia cognata, and shrubs such as Banksia spinulosa (large form), Hakea macraeana, Anigozanthos Callistemon and Crinum lilies.

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Recently on a foray into the gully to remove pesky wild tobacco trees I was excited to discover the first re-emergence of Polycias murrayii (Pencil Cedar) and several Sandpaper figs. So, even some three years after a bushfire some plants will still surprise us. I have since found other pencil cedars on adjoining properties, so it pays to be patient.

However, the new regrowth is not all good. Along with the rains following the fires came millions of new Acacias and Eucalypts which have required constant removal/thinning over the last couple of years. Another species that grew rapidly in our gully after the fire is Commersonia fraserii (Brush Kurrajong). These plants sucker and selfseed and were so numerous that I gave up trying to remove them and now have a tall 'hedge' of Commersonia at the bottom of the garden.

Local wildlife enjoying a drink

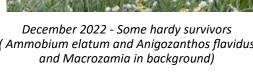
In the first year or so following the bushfire we missed the sounds of the native birds and animals that used to visit our garden. However, today there are more fairy wrens here than ever and many other bird and animal species including lyrebirds and wombats.



Regular visitors to our garden



December 2022 - Some hardy survivors (Ammobium elatum and Anigozanthos flavidus





One of several Grevillea rhyolitica that came back from seed after the fire

Photos: Lesley Vincent

Why are pollinators important?

Jane Elek

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All plants need to have their ova fertilized by male pollen to produce seeds so they can reproduce sexually and provide genetic diversity. And that is also the only way they can produce fruit. Most of us enjoy sweet tomatoes, stone and pome fruit (has a core of several small seeds surrounded by a tough membrane), citrus, nuts and avocados. Even many vegetables such as tomatoes, capsicum, chili, cucumbers, and pumpkin (anything with seeds) are really fruit so their production also requires fertilized flowers.

Most plants are self-incompatible, so they rely on pollen being transferred from another plant for fertilization. Plants with small, inconspicuous flowers such as grass, conifers, olives and grapes release lots of tiny pollen into the air and rely on wind pollination, hence producing the hay fever season in spring. Other plants have evolved various methods to attract animal pollinators such as more showy and scented flowers with a

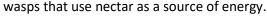
nectar reward. Some flowers divert more energy into specialisations to attract specific pollinators that are more likely to visit similar flowers. For example, large, robust red and yellow flowers such as bottle brushes and banksias attract birds such as honey-eaters and parrots. Bunches of perfumed eucalypt blossoms also attract flying foxes at night. Smaller tubular flowers such as Epacris plants attract smaller birds with fine bills such as Eastern Spinebills. White, blue and yellow flowers are favoured by insects.

The ultimate in specialised co-evolution of plant and pollinator is achieved by the orchids. But we will talk about that in a future article.

As well as plants specialising to attract pollinators, many animals have specialised to take advantage of this nutritious and abundant food source. Lorikeets, honeyeaters and sugar gliders have specially-adapted tongues to lap up nectar. Since about

Hoverfly

65% of plants depend on insects for pollination, a wide variety of insects feed on nectar and incidentally help with cross-pollination. This includes butterflies, many beetles such as beautiful jewel beetles (Buprestidae) and soldier beetles (Cantharidae), flies such as the beneficial Syrphid hoverfly that is a bee mimic, and many other flies and





However, bees are the most familiar pollinators, and the most specialised since they rely solely on nectar and pollen for their survival. As well as the familiar (introduced) European honey bee which is now naturalised in the bush, there are 1600 other species of Australian native bees with probably over 170 species in our region. They have excellent vision, including UV wavelengths, and sense of smell to find flowers. They have developed a process for converting nectar into honey to feed their offspring, and different species have developed a variety of methods for transporting pollen. Social bees such as honey bees and native stingless bees, Tetragonula carbonaria, have also developed a language, a visual dance to communicate to other bees in their colony where the best flowers are.

Ed note: You may also like to check the February 2022 newsletter for Tricia Kaye's article *Sex, lies and videotape*.

Photos: Jane Elek



Jenny Liney scholarship - news



We are very pleased to present the following letter from a 2023 recipient of the Jenny Liney Scholarship.

Dear Friends of Eurobodalla Regional Botanic Garden,

My first session of university has been an incredible, life changing experience. Although I am not sure how I am surviving without my dogs and the beach, I have loved university so far. I have made connections with some amazing people from a vast range of backgrounds. It's truly eye-opening to hear about such different life experiences. In my course I have met like-minded people and it's a lovely experience to talk about common interests and passions.

I am endlessly grateful for my accommodation which the Jenny Liney Scholarship made possible for me. The community and facilities are excellent. I share a cottage on-campus with 7 girls in a quiet location with a lovely view of the walking track

(where I see lots of dogs), and some large Eucalypts right outside my window. We regularly enjoy cottage dinners, movie nights and birthday celebrations. Recently I have set up a tea station in my room and I have a reading corner with a selection of my many (probably too many) books!

During session one my subjects were *Biology, Introduction to Animal Science (part 1)* and *Knowing and Understanding Country*. The content has been both interesting and engaging. I have particularly enjoyed the science-based subjects and look forward to progressing further into my specialisation.

I achieved outstanding results in my first session, earning a GPA of 6.0 (out of a possible 7). I'm very proud of my grades and worked hard to achieve them. My high school rule to always follow the marking criteria, is still very much applicable. The learning style of university is refreshing, and I have adapted well to it. I find the autonomy of independent learning and the reframing of the student teacher dynamic particularly suitable.

I am excited for session two to begin tomorrow. My subjects this session are *Microbiology, Animal Anatomy and Physiology* and *Introduction to Animal Science (part 2)* in which we will begin to focus on wildlife conservation — which I am very much looking forward to as an important foundation for my future career. I am also looking forward to expanding on my previous learning, although I must say I found the dissections quite a challenge!

I wish to formally thank all the Friends of the Garden for providing me the much-needed support which has allowed me to experience such a wonderful first session of university. The Jenny Liney Scholarship has opened opportunities for not just me, but the whole community to benefit through enabling studious and ambitious people, like me, to enter into conservation.

Without your support a tertiary education would not be possible for me. I am truly grateful for your passion and commitment to conservation. It has allowed me to flourish and expand in all aspects of my university life, so that I too may contribute meaningfully to the field of conservation.

Raine Atkinson

Celebrate Science Week with our events — all free! Bookings essential

Sunday 6 August – Monthly guided walk 11 AM – 12 PM

Saturday 12 August – seminar – Threatened species and botanic gardens 1:30 PM – 3:30 PM

Saturday 19 August – seminar – Citizen science matters 9:30 AM – 12:30 PM

Saturday 19 August – Guided walk and talk: *How iNaturalist is contributing to research and conservation* 1:30 PM – 3 PM

Saturday 19 August – Guided walk and talk: learn about the fascinating world of orchids 1:30 PM – 3 PM

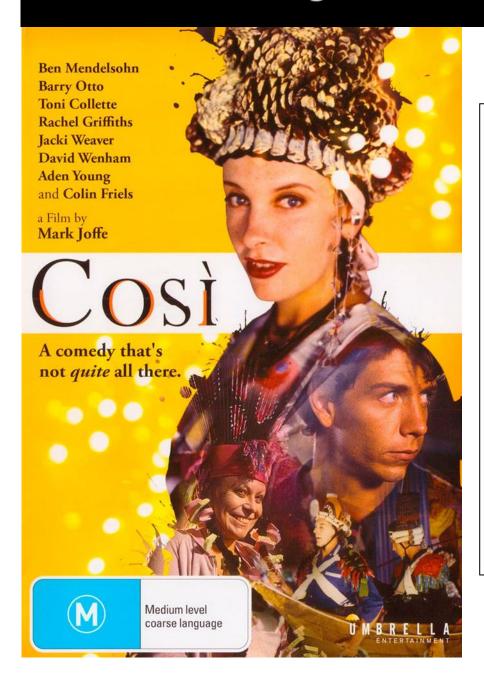
Click here for more information and booking





moonlight movies

Eurobodalla Regional Botanic Garden



Saturday September 16, gates open 5.30pm for 6.30pm start

tickets \$15, to book go to our events at

www.erbg.org.au

or





Mackay Regional Botanic Gardens

Heather Haughton

Knowing that Peter and I head north to Cairns in winter, our Editor Trish asked if I would write about botanic gardens we have visited on the way. Mackay Regional Botanic Gardens (opened in 2003) is a favourite.

We think it is a really impressive community-oriented amenity: conservation, education and recreation underpinning its existence. Designed to showcase local plants from the Central Queensland Coast Bioregion, the Gardens also include exotics from similar climates around the world. We found plots dedicated to local microclimatic and soil zones, e.g the Waterway Garden, the Lowlands Garden and the Tropical Shade Garden. Local plants and exotics are also used in specialised precincts, for example to record the importance of Maltese families in the sugar industry.

Each month, a Photo Walkabout Workshop is hosted by Friends of MRBG and Mackay Camera Group. Local artists may display work in The Lagoons Gallery.

Plants for sale in the Visitor Information Centre are propagated by SGAP Mackay - Native Plants Queensland. Ed. More details will be in the next edition of *Correa* along with additional gardens.





A close-up of the sign pictured right

Photos: Peter Haughton



Recent comments from the Visitors Book

- Amazing garden & design. Always something new and improved and educational.
 Volunteers do a wonderful job. Café food excellent value and quality.
- Loved every minute of it, well done team!
- Loved the Aboriginal Heritage Walk! Such a rich culture and knowledgeable of the land.
- EXQUISITE!! How much you have achieved in only 2 1/2 years since the fires.

Friends Committee 2022-23

President: Gabriele Harding: gabriele.harding1@gmail.com

Vice President & Public Officer: Gail Stevens:

gailstevens54@outlook.com

Treasurer: Sue Cogger: cogger.sue@gmail.com
Secretary: Susan Magnay: susanmagnay@gmail.com

Membership secretary: Chris Bendle: chrisbendle7@gmail.com

Ex officio: Michael Anlezark: Garden Manager: 4471 3348

Tricia Kaye Herbarium Curator: Tricia_Kaye@hotmail.com

Committee

Sally Edsall: sallyedsall57@gmail.com

Steve Winslade: steve.winslade21@gmail.com Sharon Winslade: sharon.winslade@gmail.com

Newsletter: Trish Richardson: pararr1@bigpond.com