

CORREA

Friends of Eurobodalla Regional
Botanic Garden
Newsletter

February 2023



EVERGREEN: The Botanical Life of a Plant Punk by Tim Entwisle

Kate
Nockels



You might remember Tim Entwisle as the keynote speaker of the AAFBG conference held in ERBG last year. His book, described below and well worth the read, is now available at the Garden shop.

Tim Entwisle opens his fascinating memoir with a quote from Robert Dessaix's *Night Letters*. It's a rather jaded view of botanical gardens as being "static, nothing's happening – no flowers are being picked, no fruit eaten, no medicines boiled up, there's no one picnicking or admiring the view. It's a museum, not a garden." This is certainly not the case for Entwisle. For him, the garden "changes each day as flowers open and leaves turn, and every sense is engaged when you walk through the gate."

Entwisle's specialist study has been in red algae and he calls himself a phycologist – a botanist who studies algae. But it is his work as Director of the great gardens of Melbourne, Sydney and Kew in London where he has made his mark. He is an excellent communicator and his description of the drawn out Sydney battle to remove and replace 11 of the 160 Moreton Bay Figs in 2004 reads like a thriller. The trees were ageing, in poor condition and needed replacing in the interests of public safety. Clover Moore, the newly elected Mayor of Sydney, led the campaign to "save" the trees and she had wide support. Finally after a bitter media battle and court case, common sense (and science) prevailed and the trees were removed and replaced.

While working in the Royal Botanic Garden Sydney he entered another public battle over the removal of bats, grey-headed flying foxes, that had moved into the heritage kauri and palms more than 190 years old. By 2011, after lengthy negotiations and another court case the bats were persuaded to relocate to a paperbark swamp in Centennial Parklands leaving the Palm Grove to begin its slow recovery after a decade of sustained damage.

Entwisle also reveals some of his other interests such as his love of contemporary music. He would traipse around London to hear a wide range of bands while resident in Kew and admires Nick Cave and the Bad Seeds above all others.

Front cover



Photo courtesy Ken Foster

Attitudes towards these largely inoffensive snakes are slowly changing, however they are still often seen as a dangerous menace and unjustly persecuted.

For more information see the [Australian Museum](#) webpages.

As you explore and enjoy the Garden this summer 'be alert but not alarmed'.

It's snake season and the Australian Museum opens its information on the Red-bellied Black Snake with:

This beautiful serpent shares our love of sunshine and water, and is a familiar sight to many outdoor adventurers in eastern Australia.

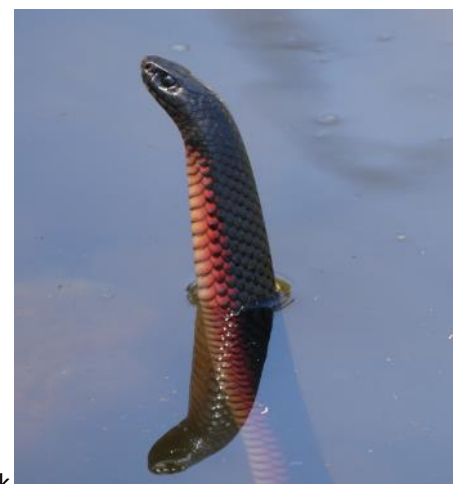


Photo courtesy Michael Anlezark



President's report – Gabriele Harding

Gosh its 2023! It's the end of January! And here we are starting another year as Friends of the Eurobodalla Regional Botanic Garden FERBG. I welcome back our ongoing Friends and extend the welcome to our new Friends. The FERBG represents a diversity of people who seek to gain different and diverse things from their membership. Some look for the discount that membership confers. Some look forward to receiving the newsletter. Some feel gratified supporting a cause that aligns with their ethics and character. Some look for a community that they can connect with and be part of through our events and volunteering. Many will consider their benefit is a combination of some or all of these. Perhaps I haven't touched on what membership provides you but as President I hope that you are achieving what you set out for. I welcome your input and feedback.

As we rounded out 2022 several members assisted with the stall at Art on The Path Broulee. The feedback from some participants included: *I am keen to show support for the Garden and this was a good way for me to be involved along with I feel like I am making a contribution as a Friend and Most importantly, it was FUN to be involved – chatting to different people, low pressure and finally from another This level of commitment to participating with Friends is just right for me.* Thanks to all who assisted with this stall. The aim was to communicate widely that the Garden is open for business and looking fabulous.

A reminder that we run a scholarship program each year. The Jenny Liney Scholarship recognises the contribution of Jenny Liney OAM to the development and maintenance of the Wallace Herbarium housed at the Eurobodalla Regional Botanic Garden. The annual scholarship of up to \$5000 supports students from the Eurobodalla Shire who commence or are continuing tertiary studies in a field related to the natural sciences such as botany, horticulture, conservation or environmental studies. The scholarship is funded by Friends of the Eurobodalla Regional Botanic Garden through donations and fund-raising activities. The 2023 scholarship closed on 23 September 2022. We look forward to hearing from the 2023 recipients soon. Please take the time to encourage any would-be applicants to prepare to apply for the 2024 scholarship. Applications will open later this year.

The committee is organising a number of events for Friends members throughout 2023, from guest speakers to garden visits. I urge you to look out for these and get in early as they will most certainly book up fast. See you next time.

Branded merchandise



Our Botanic Garden has developed a great range of good quality, practical and attractive branded giftware that includes caps, visors, fridge magnets, car stickers, aprons, tea towels, key rings, drink bottles, bar tools and pocket knives.

All of these products carry the Garden logo so whenever you purchase an item you are not only financially supporting the Garden but also helping to promote it.

If you can't make it into the Garden Shop we can accommodate over the phone credit card purchases and organise postage.

Help support the Garden with a purchase from this great range, while stocks last!



Daniel Bateman our Nursery Assistant looking smart in one of our new caps



Garden Manager's Report

Michael Anlezark

We have all just given a collective sigh of relief that the Christmas period and school holiday is over for another year. For December and January our visitor numbers reached over 17,700 which is a record. Strangely it didn't seem that crowded which shows the Garden's great ability to absorb a lot of people without losing its sense of peace and tranquillity. Our shop did a roaring trade with books and plants being top sellers and the Mossy on Garden Café continued to provide efficient service and first rate meals without a hitch.

Our events program for this year has some great new activities which will include evening outdoor cinema, live performances of *Snugglepot and Cuddlepie* and night-time nature walks.

Twenty-three artists have been locked in to provide almost 120 art works for this year's Easter *From the Forest* event and we are working to secure musicians, creative workshops and themed, guided walks. We are also considering a second-hand book fair in June.

I am pleased to announce that the proposal put forward last year to extend our collecting region up to the Shoalhaven River in the north and south to the Victorian border will go ahead. Soon we will put the new collecting region map up onto our website with some information and start to work on the new partnerships that are needed to achieve our new goals.

There is also good news about our Discovery Garden Project with the plans now on line for you to have a look at. See [Discovery Garden | Eurobodalla Regional Botanic Garden \(erbg.org.au\)](https://erbg.org.au) If you have any comments I would be happy to hear them.

I would also really like to get your thoughts on how we can incorporate fun and creative environmental education into the space. You will see from the plans that there is a shelter called the teaching/discovery shelter which is a blank canvas just waiting for great ideas that could appeal to a wide range of visitors (not just children). So please put your thinking caps on and let me know how you would like to see this space used.

A big thank you to Friends for funding an important improvement to our nursery which we are now in the process of completing. This project is a large shade structure over the central area of our nursery that will improve the growing conditions of our plants and the working conditions of staff and volunteers. The demand for our plants continues to grow and this improvement will help us to grow healthier plants all year round for our own garden, our plant shop and for a range of environmental projects throughout the shire.

Before I sign off I would also like to provide an update on the progress of sponsor tree sign replacements in the arboretum. I am happy to say that we are committing to have all sponsor signs replaced by June 30 this year. This has been a big job as almost all of the 500 plus signs were destroyed. We are engraving the new ones ourselves and it is a time consuming process so we do apologise to those who have been waiting very patiently.

As always I am very happy to answer any burning questions you might have about what's going on at the Garden. Just drop me a line.

Till next time

Michael Anlezark



The nursery shade structure project is well underway

Money matters

Sue Cogger

The October–December quarter was certainly a busy one for the shop. Like my family, I think many people – as my daughters so cheekily put it – when opening gifts had.....”Christmas by the Garden!” Mind you, they were more than happy to go and shop there.

As a result of record breaking sales, Friends were able to donate \$27,000 to the Garden for the quarter. This brings the total in donations for the period July–December 2022 to \$53,000.

Our biggest sellers were plants very closely followed by books, garden items and textiles. All other merchandise also continues to sell well and we owe a big thank you to our cooks and their assistants for having raised just short of \$4000 year to date. The days of Snap Snake sales coming second to plants is long gone and who would have thought the age-old tea towel would currently be one of our best sellers?

We continue to look for new products to add to our range and work hard to source locally and Australian made. Unfortunately, despite every effort, it is not always possible.

Thank you to Dawne and Lynne the Visitors Centre Staff and to all the Meeters and Greeters who have worked so hard and volunteered for additional shifts when the call has gone out. And let’s not forget a big thank you to our shoppers!



Chrysocephalum apiculatum available at the Garden Shop

Unusual sightings in the Garden

Geoff McVeigh



Diamond python

On 17 December 2022 I basically stumbled across a Diamond Python. It was lying beside the Prostanthera Track in ferns near Deep Creek. It was very quiet. The snake looked to be fairly thick so it may have eaten well.

On 6 November I heard Magpies carrying on and went to investigate. They were in a tree near Frog Hollow. Before I found the tree there was “loud screaming”. The noise was coming from a White Faced Heron who was in the tree. A Butcher Bird joined in and was swooping a branch. There was a Lace Monitor (Goanna) on the branch and it ignored all of the



Lace monitor (Goanna)

protests. I assume that the White Faced Heron had a nest nearby but I did not locate it. If you hear something out of the ordinary it is worthwhile investigating.

It is helpful to submit anything you observe in the Garden to iNaturalist with a photo. Observations can be reported by phone or computer. They provide an historic record of what is in the Garden and can help the preservation of species in the Garden.

Midge Orchid Secrets – Blood, Sweat or Tears

Tricia Kaye

Midge orchid flowers are some of the smallest and hairiest of all Australian ground orchids. And unlike many orchids they seem to love disturbed ground along the side of tracks. Their flowers are upside down when compared to most other orchids – the labellum (or lip) is on top of the flower, and often exudes a viscous liquid.

There is an impressive number of species, at least 80 are now known, mostly occurring in Eastern Australia, but two occur in New Zealand, and one is only found in New Caledonia. At least 19 species occur on the NSW South Coast – six of these are threatened species, one is critically endangered.

Lazy Flies Breed Variety?

That raises the question – how has such a variety of species been spawned? It has long been thought that midge orchids are pollinated by tiny chloropid flies, although many are self-pollinating. Recent work shows that the flies may be inefficient pollinators, and that many species can share the same pollinator. So to achieve success, perhaps midge orchids needed to evolve clever ways to attract a pollinator – new scents, pigmentation patterns and hairiness. Scents are commonly reported – raspberry in one species, lemon in another, and some smell of dung. But others have no discernible scent.

Blood, Sweat or Tears?

Chloropid flies have often been observed drinking fluid from the flowers, but what attracts them remains a mystery. It turns out that they are mostly females, which could indicate that the flowers somehow are mimicking an egg-laying site – but no eggs or egg-laying behaviour has been observed.

An intriguing theory was proposed: female chloropid flies are often attracted to the “blood” (haemolymph) of dead insects. This Draculean behaviour - required to stimulate egg laying - has been recorded overseas, but never before in an Australian orchid.



The East Lynne Midge Orchid (Genoplesium vernale) at the ERBG, spring 2022. Photo: Daniel Bateman



Midge Orchid secrets: Are flowers mimicking dead insects or blinking eyes - or something else entirely!

Midge orchids are classified as *Genoplesium* in NSW, *Corunastylis* in other states.

Continued from previous page

Could the orchids be attracting female flies by mimicking the scent of insect “blood”? Chemical analysis of the endangered Tuncurry Midge Orchid lent support to that theory. But another international group investigated three other species and put forward an alternate theory – chloropids are known commonly as eye gnats and drink from the eyes of mammals. Could these orchids be mimicking a mammal's blinking weeping eyes? Further chemical analysis indicated that both strategies could be in play.

And what about the self-pollinating species? At least some of these have a bet each way, pursuing both self-pollination and insect-mediated pollination. Maybe self-pollination helps to keep the species going in a time when insect numbers are low – after a bushfire for instance.

This intriguing genus is attracting a lot of attention – and maybe its secrets will be unravelled one day. Meanwhile we can only marvel at its success!

Midge Orchids in the ERBG

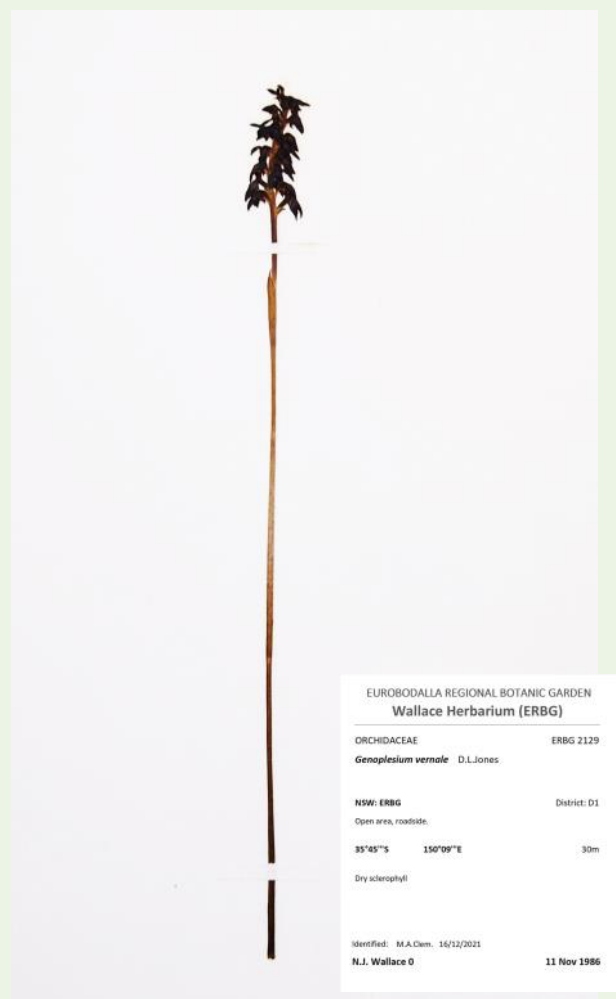
Three species have been collected in the bush at the ERBG – including the threatened East Lynne Midge Orchid *Genoplesium vernale*, unusual for its spring flowering.

The earliest known record of this plant is a specimen collected by June Wallace on the Hill Track in 1986 – the year the ERBG commenced. That specimen is now fittingly housed in the Wallace Herbarium.

In 2021, our horticulturalist and orchid specialist Dylan Morrissey spotted it in a forgotten corner on the Hill Track. The other two species collected in the ERBG – the Freak Midge Orchid and the Green Midge Orchid have not been spotted in recent years.

NSW NPWS has been monitoring *Genoplesium vernale* for over 20 years and considers the population stable. The rain following the 2019 – 20 bushfires seemed to stimulate flowering of many orchids.

In 2022 we initiated a project to monitor these fascinating plants in the ERBG, looking at pollination and reproductive success. Stay tuned for more!



This specimen in the Wallace Herbarium is the earliest known record of the threatened species *Genoplesium vernale*. Collected 1986 by June Wallace on the Hill Track in ERBG.

ERBG and Eurobodalla Walkers

Glen Tulip



Deep Creek Dam just before the fires

For many years, stretching back to our time as *Walking for Pleasure*, members of Eurobodalla Walkers have been frequent visitors to ERBG. At least twice a year, we have a scheduled walk in the Garden on a Wednesday; in fact, our most recent walk was on the 8 February. The walks are scheduled to give members a chance to see the Garden in different seasons. In June, we celebrate our group's birthday with a barbeque in the covered pavilion.

So, what brings us back time and time again to the Garden, both as part of a group and individually?

It is beautiful, open space, where we have free access to a variety of walks on broad, flat trails. Even the least botanically minded can learn from the information on the signs. After walking, we sit on the spacious lawns and enjoy lunch together, or take advantage of the extensive menu in the café.

The gift shop is a source of Christmas and birthday presents for the whole family. The goods on offer are high quality and very representative of local artists. Many members buy plants which are for sale near the café.

We, like everyone else, were saddened by the destruction wreaked by the 2019 bushfires, but delighted by the recovery – obviously the work of dedicated volunteers and staff. Furthermore, considering what has happened to our region in the past three years – bushfires, floods, Covid – we feel extremely lucky to have the Garden, with its beauty and peace, freely available to us.



Attention Book Lovers

Michael Anlezark

A fantastic book has just arrived in our Garden Shop: that for a mere \$32.95 it is guaranteed to give you great power.

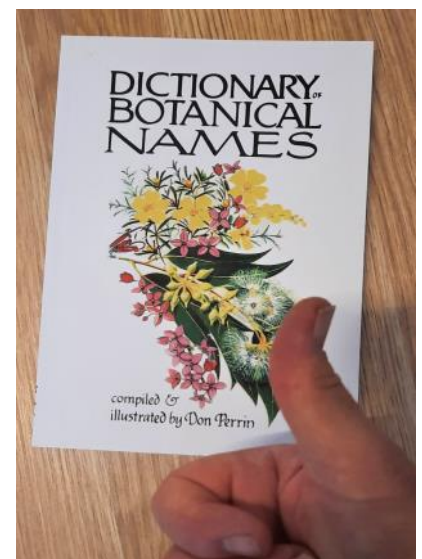
Reading this book (and remembering the contents) will make you sound seriously clever, allow you to impress your friends, become the master at botanical trivia and provide you with entry into the elite and mysterious world of botanical nomenclature.

The *Dictionary of Botanical Names* compiled and illustrated by Don Perrin is a must have reference for anyone interested in Australian plants.

It clearly and simply explains the origin and meaning of our plant names to such an extent that you might hopefully give up using common names forever.

I also think the language in this book has scope to provide the reader with a range of intelligent and creative ways to insult people.

This book is a big thumbs up from me.



Ferns of the South Coast – talk by Kevin Mills at the ERBG

Tricia Kaye



On Saturday 4 February, Kevin Mills delivered an excellent talk on South Coast ferns to a packed audience in the Banksia Room. Kevin is a well-known botanist, ecologist and author who specialises in the south coast region including the offshore island. He is about to publish a new book on the ferns of the NSW South Coast and his talk gave us a preview of its contents.

The talk focused on the different fern groups and the way in which ferns can be identified. The South Coast is home to about 68 percent of the ferns to be found in New South Wales. These range from tiny filmy ferns to tree ferns growing to over 10 metres tall. Most of these ferns are easily found by those interested in native flora, but experience is needed to be able to accurately identify the species.

Minnamurra Rainforest near Jamberoo has the most diversity, with 82% of the South Coast species represented there. Diversity decreases southwards, with many ferns reaching their southern limit on the South Coast. However two ferns (Lance Water Fern *Blechnum chambersii* and Shore Spleenwort *Asplenium obtusatum* ssp. *northlandicum*) have a more southern distribution and reach their northern limit on the South Coast. Many south coast ferns are also found in New Zealand, and some can be found around the world.

The Shore Spleenwort grows on rocks on the shores of Tasmania, eastern Australia south of Kiama as well as New Zealand. Locally it has been seen on Montague Island and the sea platform at Dalmeny. It is remarkable that a fern can flourish in such harsh salt-water conditions, given that it requires freshwater to reproduce.

Cultivated ferns are increasingly escaping from gardens and invading the bush. *Pellaea viridis*, the Green Cliff Brake, is one such invader, indigenous to Africa and Asia, previously recorded in the Illawarra area. But one attendee brought in a sample from Bawley Point which is now the most southerly record.

The classification of ferns has been going through a major upheaval. Early systems recognised a few families, while later systems recognised many – maybe too many. Knowledge of fern structure and life history has increased, and DNA analysis has rapidly been improving understanding of fern relationships. In general terms, the Australian Plant Census is up to date, but there are still some discrepancies with current international classification of some important genera – Cyathea for example.

Prior to the talk, Kevin did a quick survey of the ferns in the ERBG – there are ~17 fern species to be found in the Garden, including tree ferns, maidenhairs and fishbones. We look forward to learning more about them when the book comes out.

now half
price

\$5

Get your 2023 calendar



Add \$5 if
you would
like it
posted

Bushfire Recovery Story

Steve Winslade



We were lucky during the fires of 2019 - the wind changed and our house survived. Sadly, our drought affected native garden was completely wiped out by the fires. We had a large stand of weeping cherries on the north side of the block which did not recover and only a handful of the many plants we had planted over years survived.

So four months after the fires, we cleared the slope of dead trees and shrubs and reshaped the entire site so that the new garden would better protect our house from any future fire event.



The new design needed truckloads of large garden rocks, many metres of soil, and hundreds of plants. After two years, and with the benefit of a lot of rain, the turnaround has been amazing both in terms of plants that have just spontaneously grown as well as all the plants we grew from cuttings or from seedlings purchased from the ERBG.



Calling all green and brown thumbs!

Come along to the Eurobodalla Shire Council plant swaps to exchange environmental weeds from your garden for free native plants.

You can also ask our Environment Team about weeds in your gardens, learn more about native alternatives and get great tips and advice.

To take part in the plant swap, just pop environmental weeds from your garden in a bag and bring it to the Council stall.

- ◆ Sunday 26 March 2023, 9:00 am - 1:00 pm Corrigans Beach Reserve, Beach Rd, Batehaven NSW 2536
- ◆ Sunday, 30 April 2023, 8:30 am – 1:00 pm Narooma Rotary Markets
- ◆ Saturday, 20 May 2023 8 am – 12:30 pm Moruya Riverside Markets

[View Website](#)
[Contact via Email](#)

Cost: Free - just bring along environmental weeds from your garden to exchange



Field Trip to Mt Annan – NSW Herbarium

Tricia Kaye



The new NSW Herbarium – six silos house the specimens

In 2022 the National Herbarium of NSW relocated to a purpose-built facility at Mt Annan Botanic Gardens.

The facility cost ~\$60 million, and provides state of the art facilities for Australia's largest plant collection with over a million specimens. In early November, the ERBG Herbarium Team went up to have a look – and were impressed.

Architecturally designed, the Herbarium is situated next to PlantBank, NSW's seed and germplasm storage facility. There are six large vaults housing the specimens that are climate controlled, but also designed to be energy efficient with very thick adobe walls. Next to the vaults, on the north side of the building, are offices and labs. These include a large specimen processing lab, a walk-through freezer and a DNA-preparation lab.



High resolution specimen images allow fine details to be seen

As part of the relocation project, all specimens were photographed at a resolution of 100–150 megapixels – that's about 10 times the resolution of a phone camera. Software is used to create and merge image stacks, providing a single high-resolution image of the specimen with an impressive depth of field.

The specimen images are a game-changer which will greatly facilitate taxonomic work in Australia and overseas. In the past, botanists would need to borrow specimens from relevant herbaria to undertake a review. Sending specimens on loan is costly and specimens have been damaged in transit. And while the specimens are on loan – sometimes for a number of years – they are not available locally to help with identification.

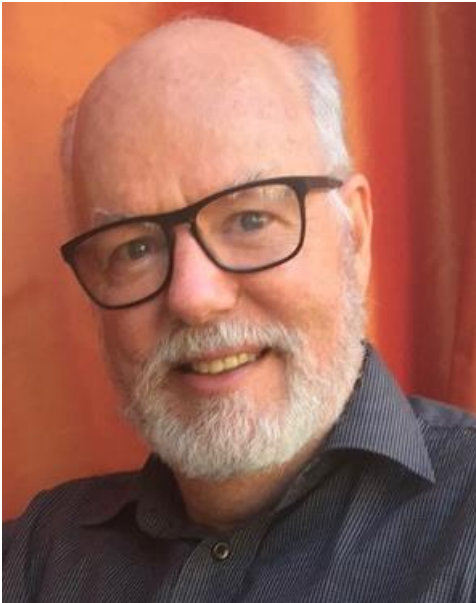
The images will drastically reduce the number of loans needed, but they will also reduce the need to access specimens for identification purposes. And they will be a great help to us as well – not only do we have access to our own Wallace Herbarium, we now also have 'virtual access' to the NSW collection.



The group views specimens in the preparation lab

Meet new Committee Members

Steve Winslade



I have a business background and before coming to the South Coast worked in Australian Universities running large business operations and research facilities.

I feel that the ERBG is a unique community asset and has a great vibe. We found it to be a wonderful resource while planning our home gardens over ten years ago when we were building a house locally and then again after the 2020 fires burnt the garden out.

I'm excited to be on the Committee and to be part of the team that, post the enormous effort of the bushfires rebuild, is working to make the Garden even better in terms of it being an enjoyable place to visit, enhance its role as a centre for learning, and ensure it continues to support botanical science on the South Coast.

Peter Keogh



I am a relatively new resident of the Eurobodalla, having moved to Malua Bay in January 2020, immediately following the fires.

As a member of the Eurobodalla Photographic Club I participated in the Spring Bioblitz organised by Tricia Kaye in early October. I really enjoyed the interaction with Friends and those who attended on the day.

I believe that my photographic club and the Garden can both benefit from my participation on the Committee and I look forward to exploring opportunities which will foster that synergy.

Friends Committee 2022-23

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

Vice President & Public Officer: vacant

Treasurer: Sue Cogger: cogger.sue@gmail.com

Secretary: Susan Magnay susanmagnay@gmail.com

Ex officio: Michael Anlezark Garden Manager: 4471 3348

Tricia Kaye Herbarium Curator: Tricia_Kaye@hotmail.com

Committee

Sally Edsall: sallyedsall57@gmail.com

Kate Mann: katemann@iinet.net.au

Peter Keogh: keoghp@gmail.com

Steve Winslade: steve.winslade21@gmail.com

Newsletter Trish Richardson: pararr1@bigpond.com