CALGAROO

A journey into nature April 2024



Eucalyptus parramattensis - Calgaroo

Newsletter of the Parramatta and Hills District Group

Australian Plants Society NSW Ltd

Our vision: inspiring people to admire, grow and conserve native plants

WHAT'S ON IN 2024

10 April Wednesday 10am: Propagation

16-17 April: Collectors' Plant Fair Clarendon - see here.
27 April Saturday: Bushwalk Pyes Creek Cherrybrook - see page 2

8 May Wednesday 10am: Propagation

11 May Saturday: APS NSW Quarterly Gathering. Morning visit to The

Hills Environment Centre Annangrove.

Afternoon meeting Gumnut Hall Cherrybrook.

Speaker Dan Clarke 'Plants of the Cumberland Plain'

5 June Wednesday 10am: Propagation

22 June Saturday 2pm: Members' meeting Gumnut Hall Cherrybrook.

Speaker Stuart Read 'History of Garden Design using

Australian Native Plants'

3 July Wednesday 10am: Propagation

13/14 July Visit to Illawarra Grevillea Park, Bulli, plus other

activities to be announced.

14 August Wednesday 10am: Propagation

24 August Saturday Visit to Crommelin Arboretum, Pearl Beach

11 September Wednesday 10am: Propagation

21 September Saturday Visit to Fairfield Indigenous Flora Park (to be

confirmed)

9 October Wednesday 10am: Propagation

26 October Saturday Bushwalk Lake Parramatta. Leader Jennifer Farrer

6 November Wednesday 10am: Propagation

23 November Saturday Members' meeting and end-of-year celebration

Gumnut Hall

4 December Wednesday 10am: Propagation

If you'd like to come to our propagation days at Bidjiwong Community Nursery and haven't been before, you can get details from Lesley Waite - phone 0438 628 483

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Bushwalk Pyes Creek Cherrybrook Saturday 27 April at 2.00pm Leaders Lesley Waite and Ian Cox

This will be a leisurely and shortish walk mostly in rainforest along the creek. It will be part of the Swing Bridge Loop Walk, and we will see tall and majestic *Angophora costata*, towering Turpentines, massive eucalypts, lots of *Callicoma serratifolia* and *Ceratopetalum apetalum* (Coachwood), wonderful Xanthorrhoeas and Lomandras, and large areas of ferns. When we last visited, the various birds kept up a ceaseless chatter.

There will be many pleasing vistas to enjoy and photograph. It will be a bit different to most of our walks because there won't be a lot of flowers or small plants to bend over to



investigate.
Everything is on a macro scale, and you will feel immersed in nature.



There are quite a few steps on the track as it drops down into the gully, but as you come to the creek it levels out. The total length of our planned walk is less than one kilometre.

Meeting Place: Entrance to Fallon Drive Reserve, Cherrybrook. Park in Fallon Drive. Aim to arrive at 1.45pm so we can start on time.

To register your attendance please email itcox@bigpond.com

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NSW REGION GATHERING 11 MAY - to be hosted by Parramatta and Hills Group Jennifer Farrer

It seems no time at all since we hosted a gathering of the NSW members but it is our Group's turn again.

There will be a day-long program:

In the morning between 10am and 12 noon The Hills Environment Centre will be showcasing its activities to our visitors. Several of our members are also volunteers at the Centre so they will be the ones hosting the morning activities.

Members will be welcome to come and have a BYO picnic lunch at Gumnut Hall. Our Group will provide tea and coffee.

The afternoon meeting commences at 2 pm. It will be the Region AGM followed by the Region's Conservation Officer, Dan Clarke, talking about "Plants of the Cumberland Plain" - a topic of great interest to our members.

This is what we would like members to do on the day:

- 1. Gumnut Hall has been booked from 11am. We need members to come at this time to:-
 - Set up the hall for the meeting
 - Set up the outdoor area for lunch, afternoon tea and plant sales.
- 2. Bring food, savoury and sweet for afternoon tea. We expect 60 members to attend.
- 3. Assist in the serving of afternoon tea.
- 4. Assist with selling raffle tickets
- 5. Assist in selling our plants grown by the Propagation Group.
- 6. Clean up afterwards

Please keep the date free and assist where you can.

Sydney Olympic Park Narawang Wetland Walk 23 March 2024 Jennifer Farrer

Nine members and one visitor met at the Pierre de Coubertin dog park at Newington to walk along part of the Louise Sauvage Pathway at Sydney Olympic Park. Nearby apartments in Newington were built as the Olympic Village. The gardens have grown up around them to create a very pleasant residential environment. For the first part of the walk, we walked beside some of these apartments on our left and The Narawang wetlands on our right.

Walking conditions were ideal, with plenty of shade and seats at intervals for those who needed a rest.

The Narawang Wetlands are a recreation of previous wetlands that were destroyed when the site along Haslam's Creek was used as a tip for commercial, domestic and industrial waste. The earlier wetland had supported a regionally important population of the Green and Golden Bell Frog and Latham's Snipe, a migratory shorebird.

As far as I know, our Group has not considered exploring a wetland before. Wetlands are now



considered environmental icons for their ecosystem services such as maintenance of water quality, habitat for diverse biota such as juvenile fish, regulation of water flow and protection of shorelines from erosion. Wetlands have their own international treaty, The Ramsar Convention, which promotes their protection. As most of us were not familiar with wetland species we had a challenging afternoon identifying some of the plants which we encountered. Many thanks to Daniel who knew more than the rest of us and enabled us to identify quite a few.

Once the path passed under Holker Drive, we walked along the edge of Newington Nature Reserve which is a high-quality remnant of the critically endangered Sydney Turpentine Ironbark Forest (STIF). The Forest surrounds the various armaments laboratories where weapons were tested. The buildings are separated from each other to reduce the amount of

damage that would occur if there was an accidental explosion. The reserve is protected by a high cyclone fence but it is possible to view quite a lot from the other side of the fence. Some of the vegetation has also spread outside the fence. In this part of the walk, we were much more confident in identifying the plants that we saw as they are also to be seen in remnant STIF in The Hills. However, there were some new plants such as the Port Jackson Pine, *Callitris rhomboidei* and many plants of the Native Holly, *Podolobium ilicifolium*.

At this time of the year, there were no flowers to be seen. However, the lush growth of the sedges, ferns and grasses of the wetlands was a very pleasant scene.



What am I?

Alexander Dudley

A finger of air surrounded by wood,
I'm not really there, but golly I'm good;
I'm nothing but space, but space can be filled,
And my mere existence stops things being killed.

Over one hundred years it will take me to form, For an hour, or decades, I'll keep something warm. So many beings use me for safety and shelter, Where they're safe and snug from the rain and the swelter;

Goanna and tree frog, python, corella, Boobook, black cockatoo or a rosella, Possum and glider, small bat and woodswallow; Have you guessed what I am? I'm a tree hollow!

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Remembering Bushwalkers on ANZAC Day lan Cox

At sunrise, on Anzac Day 1948, the simple bronze plaque commemorating the memory of bushwalkers who fell in World War II was unveiled at Splendour Rock, Mount Dingo, in the heart of the Wild Dog Mountains, by Paddy Pallin in the presence of the President of the Confederation of Bushwalking Clubs Stanley Cottier, and between 80 and 90 bushwalkers.



Photo Keith Maxwell

In the words of Paddy Pallin:

"Those familiar landmarks - Mt Cloudmaker, the Gangerang Range, Mt Paralyser and Mt Gouougang - a spiritual home of bushwalkers - all lie within our gaze from this wonderful viewpoint. We could wonder how often had our fallen comrades gazed in happiness upon this scene that we still enjoy. Upon this rock, as sunrise lit the cliffs they loved so well, was placed a permanent record that honoured those known and unknown bushwalkers, who gave their lives for our freedom. Their splendour shall never fade!"

Each year, at dawn on ANZAC Day, a commemorative Service is held at Splendour Rock. Tamara and I attended our first Service at Splendour Rock on ANZAC Day 1988. It was

amazing. It's a magical place, with stunning views from on high, extending for many kilometers over the Southern Blue Mountains. An aweinspiring panorama.

Photo Emanuel Cosomos

Paddy Pallin wasn't able to walk in, but flew overhead in a light plane. Reveille and Last Post were played by a trumpeter.

One of the elder bushwalkers there that



day was Ron Compagnoni. Compagnoni Pass is named after him. Unfortunately, on the walk out to Splendour Rock, Ron had a fall down a small cliff. We helped him get back on his feet. It was the start of a friendship. Ron invited us to join the Australian Field Geology Club, which we did. This was almost life-changing. The club was very active, and we shared many camping trips to interesting places with our new friends. Despite the fact I didn't know the first thing about geology, I became editor of their monthly newsletter, assisted greatly by a geological dictionary.

The following poem, by the Late Joan Morison OAM, is taken from the Order of Service held at Splendour Rock on 25th April 1993:

Walking Trails

The Blue Mountains . . we adore them, Where mountain trails are oft traversed, Each generation of bushwalkers Believes that their experience is the first.

But what of those who went before us? Mapped the rugged bush terrain, And lobbied Government officials, So the mountains could remain . . .

Each succeeding generation Can thank each hardy soul. Who pioneered the Wild Dog Ranges, And found the Devil's Hole.

Walked the Narrow Neck Peninsular, Found a way down from Cedar Hill. Helped Tarro build his ladder, A 'monument' that's with us still. Climbed Mount Solitary, Ruined Castle, Blazed the Landslide trail of rocks, Forged their way to far Kanangra, Splendour Rock, Black Dog, the Cox...

As well as saving mountains blue, They lobbied in our Shire, For Royal National Park and Heathcote too, They endlessly did tire . . .

These walkers of the twenties. And of the thirties too, We have a lot to thank them for, More than any of us knew.

Many of those pioneers Lost their lives in World War Two. The plaque that stands on Splendour Rock Gives them an everlasting view . . .

Of their beloved great Blue Mountains. Their boots still echo on the track, You can hear them if you listen, All you who travel pack on back.

Using Native Edibles in Cooking

Linda Pine and Lynn Jones gave a wonderful presentation on 21st March at the Community Environment Centre, Annangrove. And they had these yummy treats for us to taste:

- Lilly Pilly jam; cordial; pickled
- Lemon Myrtle biscuits; syrup
- Dark chocolate finger lime bark
- Bunya nut cake
- Finger Lime marmalade
- Roasted capsicum dip with Lemon Myrtle
- Native leaf teas
- Macadamia biscuit base cheesecake slice with Lemon Myrtle and Finger Lime
- Aniseed Myrtle biscuits
- Davidson Plum jam
- Atherton Raspberry jam

They were all so delicious!

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Kangaroo Press – farewell, and thanks!

Ian Cox

Kangaroo Press, operated by David and Scilla Rosenberg at Kenthurst, has just closed its doors.

David and Scilla published hundreds of high-quality books of all types, but what made them special was the large number of iconic reference books about native plants. Remember, most of these books were published well before you could look things up on Google, and much of the information was new.

I've just checked my bookshelves, and here's a list of the Kangaroo Press ones I have:

The Grevillea Book (Peter Olde and Neil Marriott).

Field Guide to the Native Plants of Sydney (Les Robinson).

Native Plants of the Sydney Region (Alan Fairley and Philip Moore).

The Banksia Book (Alex George).

Eremophila (R. J. Chinnock).

After the Greening (Mary White).

Australian Ferns (Calder Chaffey).

Propagating Native Plants (Alec Blombery).

The Plant Life of Kosciuszko (Codd, Payne and Woolcock).

Growing Australian Natives (John Mason).

Growing Native Plants for Balconies, Courtyards and Townhouses (Blombery and Maloney).

Growing Australian Orchids (Alec Blombery and Betty Maloney).

Creating an Australian Garden (John Hunt).

Flower Power in the Australian Bush and Garden (Taylor).

Australian Plants for Mediterranean Climate Gardens (Roger Elliot).

Taken for Granted – the Bushland of Sydney (Doug Benson and Jocelyn Howell).

Australian Plants for Waterwise Gardens (Maria Hitchcock).

Triggerplants (Douglas Darnowski).

This is truly amazing! There are lots of others I don't have, of course.

I've just been given some books from their stock that our Group can use for raffle prizes.

A big thank you to David and Scilla Rosenberg for their wonderful books about native plants!

Autumn Fungi

Words and photos Tracee Lea

From Illawarra APS Group's newsletter March/April 2024 with permission.

As the humid summer months draw to a close, conditions become suitable for a variety of fungi to begin appearing around the region. The parts we see above the ground are the fruiting bodies of what is often a vast underground network.

Fungi are in a class of their own, regarded as being neither plant nor animal. From species that provide food to us to weird and wonderful shapes and colours and even some that





glow in the dark, they are amazing organisms. They provide an important role in breaking down organic matter so that it can then be reused and recycled. Isn't nature wonderful!

So, while you are out and about this autumn, look out, you never know what you might come across!





Hard to kill: here's why eucalypts are survival experts

Gregory Moore, Senior Research Associate, School of Ecosystem and Forest Sciences, The University of Melbourne – from <u>The Conversation</u>.

They can recover from fire. Grow back from a bare stump. Shrug aside bark loss that would kill a lesser tree. Endure drought and floods.

Eucalypts are not interested in dying. They're survivors. The world's 800-plus species are almost all found in Australia, a continent with old, degraded soils and frequent fires and droughts.

In the fossil record, they first appear about 34 million years ago. As the Australian continent dried out, eucalypts gradually emerged as the dominant trees in all but the most arid and tropical areas.

But what is it about eucalypts that makes them survivors? It's a combination. Leathery leaves. Fire-resistant bark. Dormant buds under bark, waiting for fire. Mallee roots (lignotubers) at ground level to let them regrow. Roots which put out special chemicals to unlock scarce nutrients. And gumnuts which use fire to germinate and get a head-start on any rivals.

In a difficult place to survive, they thrive. Here's how they do it.

Leaves

Many gum species have leaves that hang vertically. These adaptations are about water. Water in Australia is often scarce, and it makes sense for trees to hold onto it when they have it. Vertical leaves mean less direct sun, which means less evaporation. Their dry, leathery leaves also keep the water inside. It also improves their tolerance to bushfires.

Bark

Stringybark, ironbark, candlebark – the bark of eucalypts is used to identify them. But it's also one of their great adaptations. The bark is often an excellent insulator against hot, dry summers as well as a protective barrier against fire.

Stringybark is so fibrous that despite singeing and looking black on the surface, it often doesn't burn, meaning buds beneath it are protected from damage.

Buds

Underneath the bark of a normal-looking eucalypt lie thousands of dormant buds. These invisible "epicormic" buds are a remarkable adaptation, letting the tree rapidly regrow after

bushfires, severe insect and animal grazing, storms, droughts or floods.

You can spot epicormic shoots sprouting up and down the trunks of gum trees after a fire, making them look like "toothbrush trees".

Epicormic Shoots emerge from Eucalyptus buds hidden under the bark after a bush fire. Forest Service/Flickr



Epicormic shoots can grow 27cm in a single day, or up to 6 metres in a year. When epicormic buds touch the soil, they can sometimes develop as roots. This allows fallen trees or even large branches to re-establish and anchor after storms and floods.

You can sometimes see hundreds of woody spines on the trunks of old dead trees. These are a pointy reminder of how many undeveloped epicormic buds lurk under the bark.

Mallee roots (lignotubers)

As remarkable as epicormic buds are, they're not the recovery mechanism of last resort.



That job falls to the bulge at the bottom of many eucalypt trunks, which we often call "mallee roots".

These are lignotubers, remarkable adaptations possessed by most eucalypts.

Lignotubers growing at the base of a eucalyptus tree. Anitham Raju Yaragorla/ShutterStock

To appreciate the complexity and biological beauty of a lignotuber, imagine the trunk of a eucalypt with all its epicormic buds scrunched into a ball at the base of the trunk. The buds have direct access to a large root system able to supply water, nutrients and carbohydrates.

This is a gum tree's emergency reboot option. Even when the tree above is falling apart, the lignotuber can

rapidly regrow the tree at a rate of 6 metres or more in a year.

Roots

The roots of species such as river red gums drive deep into the soil along water courses, searching for subterranean water supplies as a backup in case the river dries up.

For other species, the solution to limited water is to send roots far and wide, often many times further than the tree's height. In many species, the lignotuber and roots are buried under an insulating layer of soil. This acts as protection against fire.

That's not all. Many eucalypt species produce "exudates" from their roots – chemicals that leach into the soil and free any locked-up nutrients in poor soils.

Still other exudates seep out to help feed mycorrhizal fungi in the soil. The gum trees do this as part of a wonderful symbiosis, allowing both tree and fungus to thrive. The gum gives sugar, the fungi give water and nutrients.

This underground exchange greatly improves soil quality and lets other species grow in difficult conditions.

Gumnuts

Gumnuts – woody fruits of eucalypts – are familiar to many of us from May Gibbs' famous Snugglepot and Cuddlepie stories.

These capsules protect the tiny seeds inside from desiccation and fire. After a fire, eucalyptus fruit may be damaged or dry out. This frees the fine seeds, which sprinkle over the soil like pepper over dinner.

Some eucalypts rely not on lignotubers or epicormic buds but on the seeds contained and protected in those woody gumnuts. The seeds fall to the ground and germinate when conditions are right, renewing the forest.

Survivors - but not immortal

In the years ahead, we'll see natural disasters occurring more often and with greater ferocity as the climate changes. And in the aftermath, we will also see the spectacular and rapid responses of eucalypts – one of the world's great families of survivors.

But we will also see dead forests. Gum trees do perish, despite their ability to regenerate. Some species such as mountain ash are not coping with pressures such as logging and climate change, while thin-barked snow gums are struggling to cope with new fire regimes. Every living thing has limits.

More Ferns in Pots

Jennifer Farrer

When I bought my house in Castle Hill, I inherited a large expanse of concrete between my house and the fence on the southern side. So over the years, I landscaped it with plants in pots and hanging baskets. About ten years ago we made some changes, including covering some of this area with a polyurethane roof to make a BBQ and dining area. It was about this time that Dwayne and Kylie Stocks from Verdigris Nursery came and talked about ferns at a NSW Region Gathering that Parra Hills was hosting. I was immediately persuaded that ferns would be the best plants to grow in this new area.

Generally, this has been very successful. There have been the inevitable casualties but quite a few ferns have thrived to the extent that they have outgrown their pots and are now planted in shady parts of the garden. All the ferns in pots or baskets are growing in a mix of half potting mix and half compost with a small amount of perlite. My main problem growing the ferns under cover has been an invasion by caterpillars and mealy bugs. I also had a few literally drown last year in heavy downpours, which drove the rain under the roof. However, ferns are generally pretty tough and forgiving, so many do recover from mishaps like being eaten within an inch of their lives or swimming in water.

The photos are:

Asplenium goudeyi – a beautiful blue-green fern from Lord Howe Island Cyathea brownii – the Norfolk Island Tree Fern that can grow very big but has grown very slowly in the pot.

Dennstaedtia davallioides – I love the soft foliage on this one.

Microsorum diversifolium - this one is just about ready to leave its pot.









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Emails received

From Ricki Nash:

Hi lan,

Just a bit of news for the next Calgaroo. I was reading the recent newsletter from the Australian Network for Plant Conservation which was very interesting as usual. For those interested, the 14th <u>Australasian Plant Conservation Conference</u> is being held in Toowoomba, Queensland from the 13- 17th October 2024. So, when people are finished with the ANSPA Conference down in Victoria, if they are looking for warmer weather with hopefully no cyclones they can head on up there!!

Kind regards, Ricki

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From Brian Roach (Westleigh Native Plants):

Just wanted to let you know I'm finding it too difficult to keep my catalogue up to date, however, at present I have a few tables out the front with a range of plants for sale in tumblers (\$5) and 6"/140mm pots (\$12) along with Johanna's Christmas in 6"/140mm pots (\$15). Feel free to have a browse if you're in the area and don't hesitate to give me a call (0418115630) if you need help.

Happy gardening, Brian.

Editor's comment: Brian's address is 47 Eucalyptus Drive, Westleigh, but give him a call before you visit.

New word for the month: Tropism

Tropism is the response of a plant to a stimulus that acts with greater intensity from one direction than another.

Geotropism (or gravitropism) is the growth of the parts of plants in response to the force of gravity. The upward growth of plant shoots is an instance of negative geotropism, and the downward growth of roots is positive geotropism.

Another example of positive tropism is a sunflower turning its face toward the sun during the day.

Kevin Mills - from Budawangia March 2024

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Share your stories . . .

Your contributions to *Calgaroo* are always welcome.

If you have interesting observations of plants in the garden or the bush, photos, or any other news, please send them to me at itcox@bigpond.com for the next edition.

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In the spirit of reconciliation, we acknowledge the Traditional Custodians of our Country, the people of the Dharug Nation, whose cultures and customs have nurtured, and continue to nurture, this land since time immemorial. We honour and celebrate the spiritual, cultural and customary connections of Traditional Owners to Country and the biodiversity that forms part of that Country.

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Parramatta and Hills District Group

SECRETARY: Jennifer Farrer <u>apsparrahills@gmail.com</u> 0407 456 577

EDITOR: Ian Cox itcox@bigpond.com

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