

CALGAROO

A journey into nature

March 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

13 March Wednesday 10am:	Propagation
23 March Saturday 2.00pm:	Walk Narrawang Wetlands and Newington Nature Reserve, Sydney Olympic Park (see Page 2)
10 April Wednesday 10am:	Propagation
27 April Saturday:	Bushwalk Cherrybrook
8 May Wednesday 10am:	Propagation
11 May Saturday:	APS NSW Quarterly Gathering Gumnut Hall Speaker Dan Clarke 'Plants of the Cumberland Plain'
5 June Wednesday 10am:	Propagation
22 June Saturday 2pm:	Members' meeting Gumnut Hall Speaker Stuart Read 'History of Garden Design using Australian Native Plants'
3 July Wednesday 10am:	Propagation
13/14 July	Weekend visit to Illawarra incl. Illawarra Grevillea Park
14 August Wednesday 10am:	Propagation
24 August Saturday	Visit to Crommelin Arboretum Pearl Beach
11 September Wednesday 10am:	Propagation
28 September Saturday	Bushwalk (to be confirmed)

9 October Wednesday 10am:	Propagation
26 October Saturday	Bushwalk Lake Parramatta
6 November Wednesday 10am:	Propagation
23 November Saturday	Christmas Breakup Meeting 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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Walk Narrawang Wetlands and Newington Nature Reserve, Sydney Olympic Park

Saturday 23 March at 2.00pm

Jennifer Farrer

This will be a leisurely stroll beside the Newington Nature Reserve which is inaccessible, and the Narrawang Wetland. It is a one-way walk with plenty of seating along the way, so any members who wish to rest while others walk ahead will be well catered for.

Narrawang Wetland is a constructed freshwater wetland of 26 freshwater ponds and native plantings. From 1969 to 1973 it was a rubbish dump. The site was remediated in the late 1990s to restore the habitat of the endangered Green and Golden Bell Frog and of the migratory shorebird, Latham's Snipe. The remediation has been a faithful recreation of the freshwater wetlands on the coastal plains of the Sydney Basin bioregion.

It consists now of the largest area of the endangered Coastal Saltmarsh community in the Parramatta River, the endangered Swamp Oak Floodplain Forest community, and large stands of mangrove forest and estuarine and intertidal mudflats which provide habitat for a range of resident and migratory shorebirds.



Newington Nature Reserve is a high-quality remnant of the critically endangered Sydney Turpentine Ironbark Forest. It has a high plant diversity of over 210 native species. More than 50 species of birds and 11 species of microbats have been identified in the reserve. The large number of hollow-bearing trees makes it especially important for birds that breed in the reserve. Unlike the wetlands which were seriously damaged by human activity, the Forest was off-limits for 100 years while it was used by the Navy. Access is still not permitted partly because of the conservation status of the forest but also because of the danger of unexploded armaments.

However, it is possible to get some glimpses through the cyclone fence and some large Turpentines are growing on the other side of the fence.

Meeting Place Pierre de Coubertin Dog Park, Avenue of Oceania Drive, Newington. There is no car park at the dog park and parking is not permitted in the Avenue of Oceania. Street parking is possible in Newington Boulevard and surrounding streets such as Nurmi Avenue. Aim to arrive at 1.45pm so we can start on time.

We are visiting a wetland – remember to pack mosquito repellent!!

To register your attendance please email apsparrahills@gmail.com

Editor's note: For more information about the Newington Nature Reserve and the Narrawang Wetland try the links on Page 8.

February Meeting

Speaker Jess Wait, Research Officer, Mt Annan Botanic Garden

“Plantbank and the Orchid Research Project at Mt Annan Botanic Garden”

Jennifer Farrer

Plantbank at Mt Annan was established in 2013. It was created by the amalgamation of the NSW Seedbank and the NSW Herbarium which was previously located at the Botanic Gardens in Sydney. Some of our members visited this facility last year.

The NSW Seedbank partners with other seedbanks in Australia and with the Millennium Seedbank at Kew Gardens, UK. The collection has more than 100 million seeds which represent 63% of NSW Threatened Species and 5,368 species altogether.

The Seedbank has research teams which cover the following projects: -

- Rainforest Seed Conservation
- Wollemi Pine Conservation
- North-West NSW Rainforest and Woodland
- Orchid Research
- Myrtle Rust
- Threatened Species Seed Germination

Jess is part of the Orchid Research Team. Many orchid species are represented in the Threatened Species List in NSW. One of the reasons is that many depend on pollination by only one species of insect. Many species only grow in association with a particular species of mycorrhizal fungus. The project aims to germinate wild orchid seeds and produce plants that can be used for translocation projects and also to train sniffer dogs to locate wild populations!

The range of orchid species that are being studied in the project is mainly from the South Coast of NSW. The first task in the research is to identify the mycorrhizal fungus that grows in association with each orchid species. This is done by removing soil from around adult wild plants. The fungus may be found in the soil or the plant tissue. This seems to be a process that requires fine motor skills, lots of patience and observation under a microscope. So far the team has identified the fungi for 6 different species.

As well as identifying the ideal conditions for germination and the continued development of the plants (some are slow to germinate and others do not mature sufficiently to develop tubers) the team is also looking at ways to grow and store the fungus in the laboratory. They have already had some success with the cryostorage of fungus. One finding of the research so far is that the more endangered the species, the more specific the germination requirements.

Jess's talk was followed by a lively question-and-answer session.

Minutes of Annual General Meeting, 24th February 2024

The Meeting was chaired by Tony Maxwell

Apologies: Pip Gibian, Erica and Jim Nash, Eva Koromilas

Annual Report: Jennifer Farrer presented the Annual Report for 2023. This will be published in the March edition of Calgaroo.

Financial Report: Prepared by the Treasurer Pip Gibian and presented by Jennifer Farrer. This will be published in the March edition of Calgaroo.

Election of Office Bearers

President: No nominations were received

Secretary: Jennifer Farrer. Nominated by Ron Gornal. Seconded by Ian Cox.

Treasurer: Pip Gibian. Nominated by Ian Cox. Seconded by Ron Gornall.

Publicity Officer: Ben Turco. Nominated by Ron Gornall. Seconded by Lesley Waite.

Conservation Officer: Daniel Mc Donald. Nominated by Jennifer Farrer. Seconded by Ben Turco.

Calgaroo Editor: Ian Cox. Nominated by Linda Pine. Seconded by Jennifer Farrer.

Social Media Editor: Linda Pine. Nominated by Jennifer Farrer. Seconded by Ian Cox.

Propagation Officer: Lesley Waite declined nomination to continue in this role.

Committee members: Joan Hayes. Nominated by Jennifer Farrer. Seconded by Linda Pine.

Ricki Nash. Nominated by Jennifer Farrer. Seconded by Lesley Waite.

Jennifer Farrer took over the chair of the meeting to elect the Group's Delegate to the NSW Region.

Delegate to NSW Region: Tony Maxwell. Nominated by Jennifer Farrer. Seconded by Ian Cox

Web Manager: Sue Bell will continue in this role which is not a position on the committee.

Jennifer Farrer moved a vote of thanks to the 2023 Committee which was passed with acclamation.

ANNUAL REPORT 2023

Jennifer Farrer, Secretary

This year we have had a variety of activities which attracted about two-thirds of our membership.

Members' meetings at Gumnut Hall

In January the Members' Meeting was preceded by a BBQ in the covered outdoor area at Gumnut Hall.

In February we held our AGM. The speaker was Peter Ridgeway who spoke about the highlights of his walk across the Cumberland Plain in 2019. Peter was a staff member at The Hills Council for several years so was known to many of our members. It was good to see him again.

In April one of our members, James Indsto delighted us with his beautiful photos of Diuris Orchids which illustrated his talk about the way this particular genus of orchids mimics other plants to maximise its chances of being fertilized.

In September, Mick Roderick from Birds Australia spoke about the creation of habitat using mistletoes for the endangered Regent Honeyeater. The success of this project has since been reported in the national press.

In November Lyndall Thorburn, the Leader of the Eremophila Study Group, encouraged us all to grow Eremophilas in our gardens.

Bushwalks

In March we returned to Windsor Downs for a bushwalk. Pip Gibian and Jennifer Farrer took members along the route they had used for the post-ANPSA Conference tour in 2022.

In June Lesley Waite and Ian Cox led a walk along the Challenger Track at Ku-ring-gai Chase National Park. We were rewarded with many Hawkesbury Sandstone plants in flower.

In August Jennifer Farrer led a walk at the well-known biodiversity hotspot at Paulls Road South Maroota.

In October Jennifer Farrer and Jeff O'Neill led a bushwalk amongst the tall Turpentines and Blackbutts at Vineyard Creek in Telopea.

We are indebted to Tony Maxwell for preparing checklists of the plant species likely to be encountered on each walk.

Visits

In May we went away for the weekend to visit Phillip Baird's property at The Branch. This regenerated forestry block has more than 200 species of plants including many forms of *Banksia spinulosa* which were flowering at the time of our visit. A rare Grevillea, *Grevillea guthrieana* is another special plant on the property. On the Sunday, members visited the Shortland Wetlands Centre in Newcastle.

In July members visited Mt Annan Botanic Gardens which included a tour of the Plantbank. Ben Turco drove the Community bus that we hired for this excursion which saved members the need to drive there.

Submissions

Our Conservation Officer Ricki Nash submitted a response to the survey on the Review of the Conservation Biodiversity Act.

Ricki also sent a submission for the Draft Kosciuszko National Wild Horse Heritage Plan.

Jennifer Farrer prepared a submission for presentation to Councillors when the petition of over 16,000 signatures opposing the clearing of bushland at Fred Caterson Reserve in Castle Hill and requesting a public briefing on the Master Plan was tabled.

In conclusion, I would like to thank the 2022 committee – Pip Gibian, Tony Maxwell, Ian Cox, Ben Turco, Joan Hayes, Linda Pine, Daniel Mc Donald and Ricki Nash for their hard work and support.

Treasurer's Report for the year ended 31 December 2023

Pip Gibian

Income	\$
Membership fees	500.00
Plant sales	220.00
Raffles	230.00
Interest	150.54
Total Income	<u>1,100.54</u>
Expenses	
Meeting expenses	547.32
Calgaroo expenses	109.06
Speaker expenses	<u>120.00</u>
Total Expenses	<u>776.38</u>
Profit for the year	<u>324.16</u>

Assets at 31 December 2023

CBA Bank	639.70
Bendigo Bank Term Deposit	5,167.10
Petty Cash	<u>204.80</u>
Total Assets	<u>6011.60</u>

There were 58 members at 31 December 2023.

"Unless we are willing to encourage our children to reconnect with and appreciate the natural world, we can't expect them to help to protect and care for it."

David Suzuki

"We have become the impatient species, too busy to let nature replenish itself and too puffed up with our own sense of importance to acknowledge our utter dependence on its generosity."

David Suzuki

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In the land of giants, it was a dark, foggy day up on Mt Dandenong. Towering and mighty Mountain Ash (*Eucalyptus regnans*).

. . . From *Nuts about Gums* Facebook

Australian Native Plants Society Canberra Region

Australian Native Plant Sale

Saturday 16th March 2024

from 8.30am to 1:00pm or earlier if sold out.

Australian National Botanic Gardens

Southern Car Park

Clunies Ross Street Acton ACT

Please bring your own bags and boxes!

Prices: \$7 (70 mm pot), \$9 (90 mm pot) \$11 (140 mm pot) each

This sale is smaller than usual with around 3,000 plants on offer. Come early for the best selection.

We offer a wide range of beautiful, unusual native plants suitable for the Canberra region and other cool climates

Editor's note: If you are thinking of going, I have a list of the plants for sale that I could email you.

Using Native Edibles in Cooking

Thursday, 21 March 2024 10:00am to 12:00 noon.

Would you like to learn how to integrate native edible plants into your cooking? Do you want to create unique recipes using natives leading up to Easter?

Come to this show-and-tell workshop to learn how to cook and use native edibles in your everyday recipes or special treats!

Community Environment Centre volunteers and cooking extraordinaires, Linda and Lynn, will teach you some methods on how to use native edibles in your cooking, show samples and share some tips and tricks.

This workshop will involve samples of natives used in seasoning, cooking or treats and sharing of recipes.

Where: The Community Environment Centre, Currie Avenue Annangrove.

Cost: Free

Event Organiser: The Hills Shire Council

[Register Here](#)

I found these articles interesting, and you might too:

Hidden deep in the wetlands of Sydney Olympic Park are secretive, shy creatures living quietly under cover of reeds – from [Sydney Olympic Park](#)

The critically endangered Sydney Turpentine Ironbark Forest, protected within Newington Nature Reserve – from [Sydney Olympic Park](#)

Saving Australia's Dinosaur Tree – from [The ABC](#)

Critical peatland ecosystems in Western Australia receive funding – from [The ABC](#)

Antarctic moss and climate change – from [The ABC](#)

How alien plant species on the first fleet changed Australia – from [The Conversation](#)

Voice of Country – from the [Invasive Species Council](#)

A closing window of opportunity for Australian environmental protection – from the [Invasive Species Council](#)

An amazing black stump – from [The ABC](#)

Growing ferns in pots

Ian Cox

Over the last year or so I've tried growing ferns in large pots. I'm satisfied with the results so far.

This one is *Todea barbera*. It is well-suited to growing in a pot. It's extremely fast-growing, and as you can see the pot is now almost hidden.

It looks majestic, graceful, imposing, and elegant. I suppose that's why its common name is King Fern.



Here is *Adiantum formosum*, in the pot to the left, and *Microsorium punctatum* plus a young tree fern in the one on the right.

Blechnum

Cartilagineum is doing well in a large pot.

I feed these ferns with liquid fertilizer such as diluted worm farm liquid about once a month, but not in winter.

The potting mix is nothing special - just my normal sandy soil mixed with compost - and with woodchip mulch on top.

Ferns around the house give you a sense of peace and tranquillity, and on a hot day you feel a bit cooler when you see them.



Golden Rules for Container Plants

. . . From *Wildflower Society of WA Newsletter November 2002*.

Know your plant: its family, natural habitat and growth patterns, preferred soil and water needs.

Choose the best quality potting mix and vary it to suit the plant's requirements

Perfect drainage, open mix. Don't stand pots on bare ground. If in a saucer, raise pots above water level. Some members recommend tubestock in an oversize pot with good drainage to increase the initial growth rate.

Group pots together for protection from the sun and ease of watering. Cover the top of the pot with mulch – bark, gravel, pieces of wood, to prevent drying.

Watering is best done by soaking in a bucket until bubbles stop, drain well. Avoid tipping water from saucers back into pots, as it contains harmful salts. Hanging pots require more water.

Rotate pots for even growth. Move them regularly to maximise appropriate sun/shade light.

Fertilise regularly. Apply a weak mixture of soluble Aquasol or equivalent fortnightly in the growing season, or spray foliage weekly to force the pace. Vary the type of fertilizer used – fish oil, Seasol, liquid organic mix.

Add slow-release pellets – native Osmocote or equivalent – to the potting mix. When re-applying, do not leave the pellets exposed to the light on top of the pot; cover with mulch

Microclimates around your Garden

Mark Abell

... From *Gumleaves*, Newsletter of the Hunter Valley APS Group, February 2024

Microclimates are small areas where the climate and conditions are different from the broader surrounding area. In nature, this can be moist and shady gullies, drier hilltops, western-aspect slopes, or south-facing slopes. These different areas tend to support variations in the vegetation communities that are found in each.

Your garden also contains several different microclimates. Identifying these can help with making the best use of each area and broadening the range of plants that you can successfully grow. The house itself provides the core element for many of these different zones.

Areas to look at around your house and garden include –

- closeness to the house - under the eaves will get less direct rainfall than areas a little further from the house
- aspect - the northern and western sides of the house are more exposed and will tend to be both warmer and drier than the southern and eastern sides of the house.
- areas adjacent to hard surfaces (i.e. paths and driveways) will get extra water from rainfall running off the hard surfaces
- topography - if you are on a slope, the soil tends to get a little moister as you move down the slope. This is more pronounced if there is any sort of gully or depression
- areas adjacent to concrete can be more alkaline than other areas (lime slowly leaching from the concrete)
- higher nutrient areas can be found where there were previous exotic flower and vegetable beds, as well as in areas downslope from neighbours with fertilised gardens and lawns. This can be a problem for many native plants (particularly Proteaceae) which have a poor tolerance for phosphorus.
- radiant warmth can also be found near brick walls. This can help with plants that like warmer conditions and those that are frost-sensitive.

By being aware of the different microclimates you can adjust what is planted and where to improve your chances of successfully growing your chosen plants. With an understanding of the zones that you have, you can also make adjustments to the zones themselves. This can be by things like - adding iron chelates near concrete, additional water for the drier areas, and, adjusting the light and shade levels by pruning or extra shelter planting.

Another option is to use plants in pots - you have much greater control of the growing conditions in pots. Fertiliser and potting mix can be adjusted as needed, watering controlled, and pots can be moved to put them in sun or shade and even moved to protected areas over winter to avoid frosts.

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The correspondence of Ferdinand von Mueller

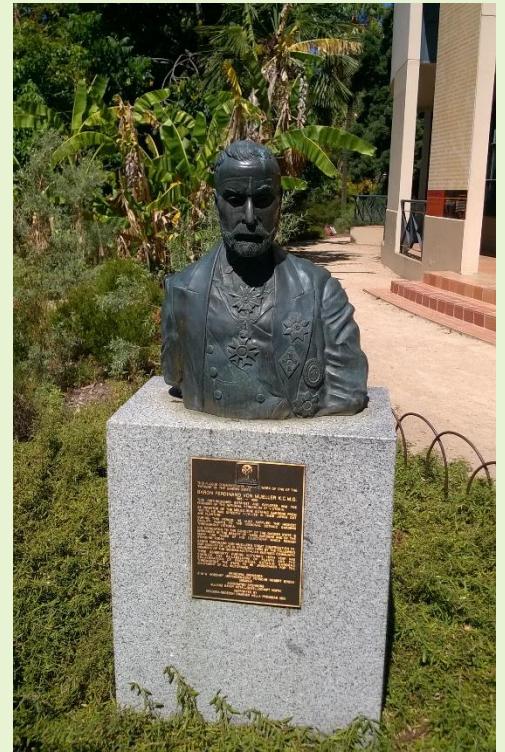
From Royal Botanic Gardens Victoria

The von Mueller Correspondence Project (VMCP) makes available to the public the majority of the surviving correspondence of Baron Ferdinand von Mueller. Mueller was Victoria's first Government Botanist and the first Director of the Melbourne Botanic Garden.

Mueller's correspondence is believed to have included over 100,000 letters. The VMCP team has located over 15,000 of these letters, with new items continuing to emerge. These documents have been digitally transcribed, translated into English where written in other languages, annotated and indexed so that they can be searched.

These documents are of particular interest to botanists, historians, and sociologists, providing insights into many different aspects of Australian life in the second half of the 19th century, particularly:

- botany and botanical history
- the role of expertise in government service
- exploration
- social and economic history
- science beyond the metropolis
- science and empire



Bust of Mueller at the Royal Botanic Gardens, Melbourne – Photo Wikipedia

During his career, von Mueller corresponded prodigiously with individuals all over the world. Through his membership of myriad scientific societies, he became the most important link between Australia and scientific research taking place elsewhere.

Mueller was himself a notable explorer of inland Australia, often on horseback, and in later life became a leading promoter of further exploration by others.

To access the website, visit: <https://vmcp.rbg.vic.gov.au/>





RAINY DAY FEAST

Gentle mists, rainy days and savage storms have all featured this summer in the Blue Mountains. While walking during a thunderstorm is not to be recommended, mist and light rain can make for invigorating walking conditions.

Here, a recent walk through misty woodland after a rain shower near Evans Lookout, Blackheath, revealed many sights, sounds, and scents to delight the walker.

Pictured from top left to right: Mountain Devil flowers dropped by feasting parrots; Flowering tea tree (*Leptospermum* sp.); New growth on Waratah (*Telopea speciosissima*); Raindrops on eucalypt leaves; Ferns in the mist; Mountain Devil flower (*Lambertia formosa*); Eucalyptus Leaf Beetle (*Paropsisterna hectica*); Conesticks (*Petrophile pulchella*); Pathway through misty woodland; Reddish new growth on eucalypt; Blue Dampiera (*Dampiera stricta*).

From Wild Blue Mountains Facebook

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

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