CALGAROO

March 2022



Eucalyptus parramattensis - Calgaroo

Newsletter of the Parramatta and Hills District Group Australian Plants Society NSW Ltd

What's on in 2022

Saturday 26 March 2 pm: Members' Meeting at Gumnut Hall, Gumnut Place, Cherrybrook. The speaker will be Angie Michaelis, who will be talking about plants for gardens in the shade. Angie has been a popular speaker at previous meetings. In more recent times she has written entertaining and informative articles for *Calgaroo* on the influence of Ancient Greek on some of our botanical names. Drawing on her extensive experience as a gardener, propagator and bush regenerator, she will be sure to inspire those of us with shady spots in our gardens.

Saturday 23 April 2 pm: Bushwalk at Vineyard Creek Reserve Dundas.

We will explore the upper valley of Vineyard Creek, a tributary of the Parramatta River. Be prepared for a steep walk down to a hidden fern gully and then an easier walk to the dam created to provide water for the Oatlands Golf Course. Below the dam, the walk is among tall trees - blackbutts, angophoras, bloodwoods and turpentines – in a beautiful shady valley. Some of the more interesting understorey plants include *Trachymene incisa* and *Astroloma humifusum*. Meet at the entrance to the reserve in Robert St Dundas.

Saturday 21 May: NSW Region Gathering Hosted by our group at Gumnut Hall, Gumnut Place Cherrybrook.

The 2 pm meeting will be preceded by a garden visit at 10 am to Boongala Gardens in Kenthurst, followed by a BYO Lunch at Gumnut Hall. The speaker will be Peter Olde who will

be talking about "Grevilleas suitable for pots and patios". Please keep this date free to be able to help with the many tasks required to make this meeting a success.

Saturday 25 June 2 pm Members' Meeting at Gumnut Hall, Gumnut Place Cherrybrook.

Saturday 23 July 2 pm: Bushwalk Jones Road Kenthurst.

Saturday 27 August 2 pm: Bushwalk Cobar Ridge Marramarra National Park.

Saturday 24 September 2 pm: Garden Visit to the Wright's Garden at Baulkham Hills.

Saturday 22 October 2 pm: Bushwalk.

Saturday 26 November 2 pm: Members' Meeting and Christmas Party.

Group Meeting 26th March 2022 - 2 pm

Speaker: Angela (Angie) Michaelis – Plants for Gardens in the Shade

Angie learned about native plants when helping her husband Mark Ferrington run specialist nursery Sydney Wildflower Nursery West for nearly 20 years. She is a qualified horticulturalist, as well as an enthusiastic bushcarer. She now lives in inner-city Sydney, where her small back garden has only one sunny corner.

Angie is well known to our Group. She has been a popular speaker at previous meetings. In more recent times she has written entertaining and informative articles for our newsletter, *Calgaroo*, on the influence of Ancient Greek on some of our botanical names. Drawing on her extensive experience as a gardener, propagator and bush regenerator, she will be sure to inspire those of us with shady spots in our gardens.



Microsorum punctatum Hunter Region Botanic Gardens

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Annual Report 2021

Jennifer Farrer (Secretary)

2021 started with our Annual General Meeting, which was followed by a talk by one of our members, Doug Meredith, who is also a member of the Cumberland Bird Observers' Club. He has studied the birds of the Cumberland Plain for many years, and in his talk, he shared many of his insights as well as some wonderful photos.

In March we were the guests of Malcolm and Jenny Johnson at their fabulous Boongala Gardens property in Kenthurst. Malcolm took us on a personal tour of the rainforest garden which he has created from a privet-infested gully. As well as giving us lots of plant information, he also regaled us with tales of Kenthurst pioneers. He and Jenny have lived all their lives in Kenthurst, and are a fount of knowledge when it comes to the history of the area.

In April we went on a bushwalk in the Lane Cove Bushland Park. We went with the intention of looking for fungi as it is a renowned "hotspot". We did find some fungi but none of the rare species. Members were also kept busy identifying the many rainforest species present in the park.

In May our resident propagation expert, Lesley Waite, led a workshop on Propagation Techniques. By May last year, it was more than a year since our Propagation Group had been able to visit the Council's Bidjiwong Nursery, so it was invaluable for us to refresh our knowledge and learn some new techniques.

In June we went on a bushwalk along Quarry Road Dural. This is a hotspot of flora diversity, and we were rewarded with many plants in flower. Little did we know that this would be the last activity for some time.

In September when we were still in lockdown it was decided to hold a meeting on Zoom with the theme "How I survived Lockdown". Several members contributed with garden photos, accounts of walks in the bush, and tales of other activities which had kept them occupied.

In October we were able to go on a bushwalk on the Cranston's Trail in Dural. This is a lovely walk with many different plants to see, but members seemed to be more excited about seeing each other after such a long time apart.

In November, Malcolm Johnson came to our meeting and gave an illustrated talk about his canoe trip down Cattai Creek from Castle Hill where it rises to its confluence with the Hawkesbury at Cattai. Malcolm gave us a picture of the changing riparian vegetation along the way and also the history of those who had settled along the banks of the creek in the early days. Some of their houses are still able to be seen from the water.

During the year two Life Members of the Australian Plants Society who had been members of our Group passed away – Betty Rymer and Gordon Brooks. Both these "APS Elders" have contributed much to our Group as well as to the wider Society. They will be greatly missed.

In November our Group made a submission to the NSW Government on the Draft Kosciusko National Park Wild Horse Heritage Management Plan.

In conclusion, I would like to thank the 2021 committee – Pip Gibian, Tony Maxwell, Ian Cox, Ben Turco, Joan Hayes, Daniel Mc Donald and in particular Marilyn Cross who is retiring this year, for their hard work and support.

Treasurer's report for year ended 31 December 2021 Pip Gibian

Income	\$
Membership fees	400.00
Plant sales	405.00
Book sales, raffles	205.80
Interest	<u>43.62</u>
Total Income	<u>1,054.42</u>
Expenditure	
Subscription for Sue Bell	56.00
Meeting expenses	420.00
Total Expenses	<u>476.00</u>
Profit for the year	<u>578.42</u>

Assets at 31 December 2021

CBA Bank	2,158.13
Bendigo Bank Term Deposit	5,500.06
Petty Cash	<u>195.00</u>
Total Assets	<u>7,853.19</u>

We have 53 members.

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Minutes of the Annual General Meeting of the Parramatta Hills Group of the Australian Plants Society

Held at Gumnut Hall, Cherrybrook on Saturday 26 February 2022 at 2 pm.

Present: Pip Gibian, Lesley Waite, Ian Cox, Jennifer Farrer, Jean and Alan Wright, Ricci and Jim Nash, Carolyn and Gary Whitton, Joseph Muthama, Chris and Sandra Cheetham, Ben and Jennifer Turco, Ron and Barbara Gornall, Chris Coe.

Apologies: Graham Forrest, Jeff O'Neil, Marilyn Cross, Joan Hayes, Daniel McDonald.

The Annual Report was presented by the Secretary, Jennifer Farrer. Jennifer Farrer moved that the Annual Report be accepted. Seconded Pip Gibian

The Financial Report was presented by the Treasurer, Pip Gibian. Pip Gibian moved that the Treasurer's Report be accepted. Seconded Ian Cox

Election of Office Bearers:

President: No nomination

Secretary: Jennifer Farrer. Nominated by Ron Gornall Seconded by Tony Maxwell

Treasurer: Pip Gibian Nominated by Ben Turco Seconded by Lesley Waite Publicity Officer: Ben Turco Nominated by Ricki Nash Seconded by Ron Gornall

Conservation Officer: Daniel McDonald nominated by Jennifer Farrer Seconded by Ian Cox

Calgaroo Editor: Ian Cox Nominated by Jennifer Farrer Seconded by Ron Gornall Social Media: Editor Joan Hayes Nominated by Jennifer Farrer Seconded Ian Cox Delegate to NSW Region: Tony Maxwell Nominated by Marilyn Cross Seconded by Ian Cox Propagation Officer: Lesley Waite Nominated Ron Gornall Seconded Jennifer Farrer Committee member: Ricki Nash Nominated Jennifer Farrer Seconded Ian Cox Web Manager: Sue Bell will continue in this role which is not a position on the committee.

Lesley Waite moved a vote of thanks to the Committee members for 2021 for their contribution.

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Which Plant Where

Talk by Prof. Michelle Leishman

At our February meeting, the speaker was Professor Michelle Leishman from the School of Biological Sciences at Macquarie University.

As well as being a botanist, Michelle has extensive knowledge of climate change, particularly its effects on plants and the urban environment. She started her talk by reiterating some of the irrefutable facts about



climate change, illustrated with graphs. We know that the average temperature of our city is rising, and that average rainfall is falling, particularly in our far western suburbs.

What can we do now to ensure our suburbs remain liveable despite these facts? It is now proven that on hot summer days, leafy green suburbs remain cooler than those with little vegetation and open parklands. Aerial photos with heat-sensitive cameras clearly demonstrate this. To counteract climate change, we need to increase areas of vegetation between our buildings and expand current green spaces. As housing blocks become smaller and houses larger, there is little space left for trees or any living plants. Planning laws should change to reflect the need for increased green space in the future. Tests show that trees reduce temperatures more than green grass, by providing shade. As well as lowering summer temperatures, trees help combat pollution, reduce carbon dioxide in the atmosphere, provide habitat for birds and other animals and have beneficial physical and psychological effects on the human inhabitants. This latter fact was clearly demonstrated during COVID lockdowns.

These factors lead to difficult decisions about what to plant to increase urban vegetation. Damage to old established trees has already been seen during heat waves, with leaf burn and even plant death. What we previously planted as street and park trees may no longer cope with increasing climate change. The need for evidence-based decisions has triggered the WHICH PLANT WHERE project. For about five years, Michelle has been heavily involved with a group of researchers, studying and testing a large number of native plant species, looking for resistance to high temperatures and low water availability. The results have led to the development of the WHICH PLANT WHERE website, which is to be launched in March or April this year. The team has incorporated test results with facts about the occurrence, natural habitat, rainfall and usual growing conditions in the wild of a very large number of

native plants. The collated information is being used to recommend which species to plant in a certain area. Some further specifics were added, including a description, size and shape, whether the plant has poisonous fruit, or is likely to drop large limbs.

On the WHICH PLANT WHERE website, you can enter a postcode and be given a large list of appropriate plants. Your search can be narrowed down by adding further requirements, e.g. asking for a shrub or tree of a specific size, and choosing whether it is for a home garden or a public park. The listed plants include further information and a photo. The results have been further divided into how hardy a species is likely to be under future conditions. This is done with a "traffic light" coding, green for good, orange for not as good and red for not likely to do well. This coding has three time zones, namely now, in a few years, and in many years. Some recommended species will be designated "green" now, but may in the long-term be in the "red" category, as climate change worsens. The website covers the whole of Australia, suburban and rural, including all postcodes. Of course, conditions can vary in a suburb and also in a home garden, so the website does have limitations. However, this will be the only reference available for information that considers the effects of climate change on the growth of a native plant.

Pip Gibian

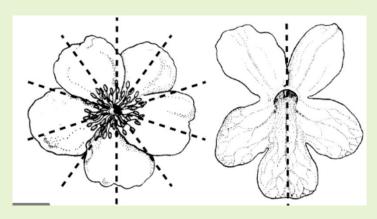
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Ancient Greek, botany and Australian native plants . . . Angie Michaelis is working her way through the alphabet to find connections to enlighten us.

Zeta-Eta-Theta

Not the easiest to master, these next three letters in the Greek alphabet, coming after *epsilon*, are written Z-H- θ . Let's find an example or two for each, starting with the consonants, zeta Z and theta θ , which make z for zebra and th for thick sounds.

Z gives us **zygo**- which means a 'pair' or 'union'. The **zygote** is the cell formed when a male and female sex cell fuse, or make a union. It's the very beginning of a new plant, or even a human. When the cell divides, it becomes an **embryo**, which also derives from Greek.



Zygo- also gives us zygomorphic. You may remember a flower is actinomorphic when it has the form (morphe) of the sun's rays (actino-) – for example, a daisy. Lots of flowers are instead zygomorphic, meaning you can draw a line down the middle to show its shape is a pair of mirror images.

Actinomorphic and zygomorphic flowers, for example, Hibbertia and Prostanthera.

For theta, **Thysanotus**, the Fringe Lily, comes directly to us from Greek thysanos, meaning 'fringed'. The fifty or so species, all found in Australia but mostly in south-western WA, all have a fringe on the petal margins.

Thysanotus tuberosus, the Common Fringe Lily of the east coast. (And yes, the flowers are actinomorphic.)
Tuberosus is a Latin word, referring to the tubers on the roots, which were a food source for Aboriginal people. Photo Brian Walters.



Now to that tricky H known as *eta*. We previously met *epsilon*, the short or simple *e*. This one is long and complex – and sometimes, like the other vowels, it can have an 'aspirated' or *h-for-hat* sound at the start.

So *eta* gives us the root *hemi-*, meaning 'half', in words like **hemisphere**. A **hemiepiphyte** for example, spends half its life depending on its host up in a tree, but later relies on its own roots. We also meet *hemi-* in *Hemiandra* and its close relative *Hemigenia*. They have in common something seen only under a microscope: only half of the pollen cells on the flower's anthers are fertile.

To the Ancient Greeks, the Sun God was **Helios**. The *Helianthus*, the Sunflower, is **heliotropic**: that is, it turns its sunny-looking face towards the sun as it grows (*tropos* means 'turn'). The **Heliotrope** was also believed to have this quality. We have about 80 Australian *Heliotropum* species, although most are straggly and with little ornamental value.

Finally, Helios gives us two more commonly known Australian genera, although botanical taxonomists have reduced these in recent years. Of the once recognised hundred Australian *Helichrysum* species, we now have only about eight. The name poetically meant 'sun-gold'.



As most flowers are golden yellow, some of the names of the alternative genera show that, for example **Xerochrysum** ('dry' + 'gold') or **Chrysocephalum** ('gold' + 'head').

Chrysocephalum apiculatum, formerly Helichrysum apiculatum. Photo Australian Daisy Study Group.

But for **Helipterum**, which means 'sun' + 'feather', the sun has set in Australia. The botanists now decree you can see it only in South Africa. Here, there are only *Anemonocarpa*, *Hyalosperma*, *Leucochrysum*, *Rhodanthe* and *Triptolodiscus*.

Rosella's picnic

Looking like a little pile of bright red firecrackers are the fallen flowers of *Lambertia formosa*, a nectar-rich flower loved by honeyeaters and parrots like the Crimson Rosella.

Each of the freshly dropped flowers had been nipped off at the base and drained of its sweet nectar before being discarded and added to the colourful pile.

Seen in the bush at Point Pilcher lookout, Medlow Bath.

From Wild Blue Mountains



Congratulations Chris Jones

New member of our Group, Chris Jones, was honoured by The Hills Shire Council when he was named 2022 Environmental Citizen of the Year.

For a very long time, Chris has been planning, creating and maintaining the demonstration sustainable vegetable gardens at the Community Environment Centre, Annangrove, as a volunteer.



Chris will open his own large garden at Kenthurst for the <u>Sydney Edible Garden Trail</u> over the weekend of 26-27 March. His garden features 36 raised vegetable beds, over 90 fruit trees, native bush tucker plants, native beehives, 13 compost bins, 6 worm farms, chickens, and 500 metres of hedging.

Boongala Native Gardens open days

Due to the extreme wet weather, Malcolm and Jenny Johnston's magical garden, <u>Boongala Native Gardens</u>, will be open on different days to those previously advertised.

New dates are:

Friday 11th March to Sunday 3rd April 10 am to 4 pm, Friday, Saturday and Sunday

There will be plants for sale, and a guided rainforest and bush tucker tour for a small fee at 11 am and 1.30 pm. The address is 76 Pitt Town Road Kenthurst.



Awards by the Australian Institute of Horticulture for 2021

Recipient: Greg Bourke
The Silver Gum - for Promotion and
Contribution to Horticulture

Greg joined the team at the Blue Mountains Botanic Garden (Mt. Tomah) in 2011, and has been the Curator Manager since 2013. In this role, he is responsible for a team of horticulturalists, front-line staff, casuals and volunteers, and oversees 252 hectares of exquisite garden.



The garden is home to exotic and native plants including several endangered ecological communities, and the first translocation site for Australia's own 'dinosaur tree', the Wollemi Pine. Conservation and exploration of plants, in particular carnivorous plants, became a keen interest of his.

Greg began working in the field, and had the thrill of discovering several new species in Malaysia, Indonesia, Philippines and Australia, and is recognised as an expert in carnivorous plants, holding senior positions with various groups including his current role as Vice President for BGANZ (Botanic Gardens Australia and New Zealand).

Green Space Events & Engagement Award Recipient: Collectors' Plant Fair



Collectors' Plant Fair launched in 2005 and has grown to be the largest plant fair in Australia. The fair quickly outgrew its first home in the grounds of founder Peta Trehar's property in Bilpin. For the past seven years, the event has been held at the Hawkesbury Race Club in Clarendon, allowing more specialist nurseries to

showcase their plants, and more gardeners to find them.

In 2015 Collectors' said a fond farewell to its founders Peta and Peter Trehar, and Beth Stokes. After a decade of sterling effort in building the Fair, the trio passed the baton and the responsibility for its future onto two plant lovers determined to uphold the integrity, passion and generous spirit of the Fair, and enable it to continue as Australia's treasured garden event.

Linda Ross (B.LArch, Hort) and Daniel Wheatley (M.Eng.Mgt) have taken the tiller to steer the plant fair into the future. They have an unflagging enthusiasm for plants, plant growers, gardeners and gardening in general.

<u>The Collectors' Plant Fair</u> will be held at the Hawkesbury Race Club Clarendon on 9-10 April 2022.

Speaking of plant sales . . .





Exactly!

Unusual plants – Jones Road Fire Trail

On a recent bushwalk at the Jones Road Fire Trail, Kenthurst, Lesley Waite and I found a form of *Phebalium squamulosum* with variegated leaves. On previous walks, we discovered a *Boronia ledifolia* with pure white flowers, and a population of *Boronia floribunda* with flowers ranging from pink to pure white.

Rare plants there include *Leucopogon fletcheri subsp. fletcheri* (endangered), *Darwinia biflora* (vulnerable), and *Tetratheca glandulosa* (vulnerable).

Our Group is planning its July bushwalk at this location. These stunning *Styphelia triflora* and *Phebalium squamulosum* plants should be flowering then:





Quotations

"A garden is not a place. It's a journey."

- Monty Don

"Look deep into nature, and you will understand everything better."

- Albert Einstein

"To forget how to dig the earth and to tend the soil is to forget ourselves"

- Mahatma Gandhi

Share your stories . . .

What have you been up to?

Email me at itcox@bigpond.com for the next Calgaroo.



Parramatta and Hills District Group

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