

CALGAROO

November 2021



Eucalyptus parramattensis - Calgaroo

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

Group Meeting 27th November 2021

**Speaker Malcolm Johnston - *Cattai Creek from the source to the Hawkesbury*
Pip Gibian**

It will be wonderful to see everybody after such a long time of restrictions. We have a very interesting guest speaker for this meeting. Malcolm Johnston and his wife Jenny are well-known in this area. Both have lived in Kenthurst all their lives, and they ran a native plant nursery, Annangrove Grevilleas, for many years. They now have a spectacular garden, Boongala Gardens, which they open to the public at times.

A few years ago, Malcolm undertook a canoe trip of around 30km, down Cattai Creek, from Castle Hill to where it joins the Hawkesbury River at Cattai National Park. As well as extensive knowledge of the flora he passed, Malcolm is also very knowledgeable



about early Australian colonial history, and the uses of the flora by the local indigenous population at that time. His talk is bound to cover all these facets as well as the difficulties of the trip.

Our meeting will commence at 2 pm, 27th November, in Gumnut Hall, Gumnut Place, Cherrybrook. Visitors are very welcome. There is no need to register beforehand, however, we will still need to sign in and wear masks. Those who weren't on the October bushwalk will also need to show their vaccination certificate. We will be celebrating our last meeting for the year with a special afternoon tea. Please bring a contribution for the table. Bear in mind that we still need to be careful. Bring food that can be served in individual portions. So, dips and cut and come again food like cheese should be avoided.

News from the Committee

Jennifer Farrer

Restrictions eased for vaccinated people in NSW in the middle of October, which meant we were able to hold our planned bushwalk along the Cranstons Trail in Middle Dural. There is a separate report of the walk in this edition. It was great to see so many members instead of virtually on Zoom.

The easing of restrictions also means we can hold our November meeting at Gumnut Hall, and we are allowed to have up to 40 people in the hall – see above.

Our Group has accepted a request from NSW Region to host the May Gathering on Saturday 21 May next year. We were ready to host the Gathering in 2020 but it was cancelled at the last minute when our first lockdown started. The speaker will be Peter Olde, whose topic will be "Grevilleas for Pots and Patios". We will need all the help we can get from members to make this day a success. Please put the date in your diaries so you can be available.

The committee has now prepared the first draft of next year's program. See below.

Members will remember Linda Groom from Reclaim Kosci, who spoke at a meeting in 2019 about the ongoing damage caused by wild horses in Kosciuszko National Park. Since the Black Summer bushfires, the threat to the Park has become even greater. The National Parks and Wildlife Service released a Draft Plan of Management for Wild Horses in the Park in October. Only a short time was given for responses. Thank you to individual members who wrote submissions. Included in this edition is the submission which was sent on behalf of our Group.

Some of our members have decided to accept the Neutrog offer. Thanks to Riki Nash, who has offered to be the delivery point for products ordered by members.

Our Group's program for 2022

- 26 February** Members' Meeting and AGM. Speaker Lachlan Turner "Bushland Photography"
- 26 March** Members' Meeting. Speaker tba

- 23 April** Bushwalk Vineyard Creek Dundas
21 May NSW Region Gathering. Garden Visit from 10 am. 2 pm Meeting at Gumnut Hall. Speaker Peter Olde “Grevilleas Suitable for Pots and Patios” and plant sales. **Be prepared to help.**
25 June Members’ Meeting. Speaker tba
23 July Bushwalk Jones Road Kenthurst
27 August Bushwalk Cobar Ridge Marramarra National Park
24 September Garden Visit
22 October Bushwalk
26 November Members’ meeting and Christmas Party. Speaker tba

All activities are on Saturdays at 2 pm unless otherwise indicated

Delta!

When we started naming variants of the COVID-19 virus, Delta, the fourth letter of the Greek alphabet, became D for dangerous. Angie Michaelis, in her series on Greek and botany, explores more innocent uses . . .

The fourth letter of the Greek alphabet is a simple triangle in its upper-case form. As a river approaches the coast and spreads its water into channels, as does the Nile, the shape those make is a **delta**.

In botany, we find the letter most simply in *di-* meaning ‘two’. **Dicot** is a term to group plants that start life with two seed leaves, or **dicotyledons**. **Monocots** begin with just one (*mono*) **cotyledon**, a word that comes from *kotyle* – a ‘cup’ or ‘bowl’ that cradles the new shoot. (Each of those two groups has other important distinguishing characteristics: in broad terms, woodier plants with 4 or 5 petals will be dicots, where small plants with fibrous root systems, say grasses or lilies, are monocots – but that is nothing to do with Greek!)

Seedling showing two seed leaves or dicotyledons



Dioecious is a useful word, as it describes species that have their male and female parts on separate plants, as do, for example, most of the Casuarinas. But it is horrible to spell: knowing it comes from two Greek roots, *di-* and *oikos*, meaning ‘two households’, may help you sort out the vowels. *Oikos* is also at the root of **ecology** and **economics** – whoever coined those words decided a simple ‘e’ would do to represent the first sound.



Botanists have named a number of species, such as **Dichelacne**, **Dichopogon**, **Dichondra**, because they have two of some feature that you would only see with a hand lens: two bearded anthers, for example. But one naming that is obvious is **Diuris**, the group of orchids known sometimes as ‘doubletails’. *Oura* means ‘tail’. (Their other common name, Donkey Orchid, refers to the top end of the flower, where the petals stick up like asses’ ears).

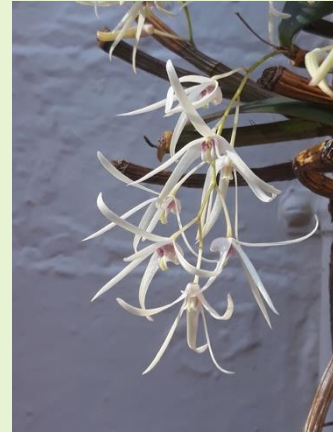
Diuris species, showing “double tail” and donkey ears: Photo by Stef McRae, Wildflower Society of WA (Inc)

Good things don't always come in pairs, and *di-* does not always mean two. ***Dianella*** is derived from Diana, the Roman goddess of the hunt who hung out in woodlands.

In a Greek plant book, the first word I was able to decipher was δένδρον, *dendron*, meaning 'tree'. ***Rhododendron*** ('rose' + 'tree'), ***Leucadendron*** ('white' + 'tree') and ***Philodendron*** ('love' + 'tree', or 'tree-hugger') are all exotic. Australian species with the Greek root are less well known: the ***Haloragodendron***, of which some species are highly endangered; the northern rainforest species, ***Archidendron***; and *Pararchidendron pruinosum* (***Pararchidendron*** means it is 'near to', or resembles, an Archidendron).

Finally, another tree hugger from the Orchid family which owes its name to two Greek words: *dendron*, and one we met a couple of months ago, *bio*. Its 'life' is (for most species) in a 'tree', so we call it ... **Dendrobium.**

Dendrobium aemulum. Photo Angela Michaelis



The Parrot

David received a parrot for his birthday. This parrot was fully-grown, with a bad attitude and a worse vocabulary. Every other word was an expletive. David tried hard to change the bird's attitude and was constantly saying polite words, playing soft music, anything he could think of to set a good example. Nothing worked. He yelled at the bird, and it got worse. He shook the bird, and it got angrier. Finally, in a moment of desperation, David put the parrot in the freezer. For a few moments he heard the bird squawking, kicking and screaming, then suddenly there was quiet.

David was frightened that he may have hurt the bird and quickly opened the freezer door. The parrot calmly stepped out onto David's outstretched arm and said, "I'm sorry that I might have offended you with my language and actions, and I ask your forgiveness. I will endeavour to correct my behaviour".

David was astonished at the bird's change in attitude, and was about to ask what had made such a dramatic change, when the parrot continued, "May I ask what the chicken did?"

SUBMISSION ON THE DRAFT KOSCIUSZKO NATIONAL PARK WILD HORSE HERITAGE MANAGEMENT PLAN FROM THE PARRAMATTA HILLS GROUP OF THE AUSTRALIAN PLANTS SOCIETY

My name is Jennifer Farrer and I am the Secretary of the Parramatta Hills Group of the Australian Plants Society. *Our organisation's mission is to inspire all Australians to love, grow and conserve Australian plants.* At the present time, our Group has 56 members. We welcome the opportunity to comment on the Draft Kosciuszko National Park Wild Horse Heritage Management Plan.

One of our members has an interest in a ski lodge at Thredbo which we have used as a base for the Group's bushwalks in Kosciuszko National Park. Individual members have also visited the park from time to time to walk amongst the snow gums and explore the amazing variety of wildflowers growing there in the warmer months. One of our members has been compiling species lists for each area of NSW. Attached is the list of Alpine Plants in NSW and the ACT. Many of these species are the ones being impacted by the presence of wild horses in the park.

We wish to express our concern for the exponential growth in wild horse numbers in Kosciuszko National Park since the bushfires of 2019-20, and the damage that has been done to the fragile alpine environment. We understand that feral horses have been responsible for impacting 23 threatened flora and 11 threatened fauna species in the Park. We therefore support a rapid removal of horses from the park as proposed in sections 5.2 and 5.3 of the Plan.

We question, however, the decision to retain 3,000 horses in the park. There does not seem to be any scientific reasons given for this figure. Surely a base number of 3,000 animals will soon grow to a higher number. We also question the need to retain horses in one-third of the park. This decision dooms these parts of the park to ongoing environmental damage.

We appreciate that the decision to cull large numbers of the feral horse population is an emotional issue for many people, and that this is the reason why the report does not recommend aerial culling, which is actually the most humane way to address the problem. The plan should include measures to educate the public of the reasons for the cull. Effective public education programs have been used in the past to influence opinions and to change behaviours. This challenge should not be beyond a feasible solution. Aerial shooting of kangaroos, buffalos and camels occurs regularly in Australia without any public outcry. A telephone survey undertaken in the Monaro electorate during last year's by-election indicated that 80% of respondents wanted some action taken to manage the number of horses.

We also understand the reasons why the wild horse issue is so emotionally charged amongst many people. The poems of Banjo Paterson and the novels of Elyne Mitchell have done much to romanticise wild horses in Australia's High Country. The colonial mythology of 150 years should not have more importance than the unique Alpine environment which has evolved over millions of years. Yet this is how it appears at the moment. The Kosciuszko Wild Horse Heritage Act 2018 has given the feral horse a status which it does not deserve. A brumby is a horse and there are plenty of horses all over the world. Nowhere else on earth can you find the corroboree frog and the other flora and fauna unique to the Australian Alpine environment.

This Act is in conflict with the NSW Biodiversity Conservation Act 2016 which lists feral horses as a key threatening species to our biodiversity. We call for the repeal of The Kosciuszko Wild Horse Heritage Act 2018.

However, we do recommend that the heritage of the Brumby in the Australian Alps be commemorated, but not by continuing to allow these horses to breed in the wild. The heritage of the Australian wool industry is celebrated at the Shearers Hall of Fame in Hay, and the Stockman's Hall of Fame in Longreach celebrates the equally romantic history of the outback and the cattle industry. We recommend the establishment of a museum

commemorating the era when horses were part of the pastoral industry, particularly in the High Country, using the museums mentioned above as an inspiration. The museum could include free-range paddocks where a select number of brumbies could live so people could see them. These horses could also be used for guided tours. Those who favour the retention of wild horses could channel their energies into planning and fundraising for the museum.

Thank you for the opportunity to comment on the Draft Plan. We urge you to implement it with the proposed amendments as soon as possible.

Walk Cranstons Trail Middle Dural - Saturday 23 October

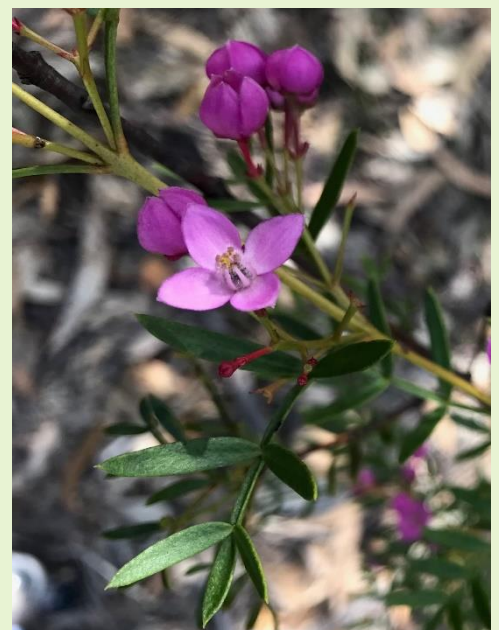
Jennifer Farrer

This was our first face-to-face activity after the easing of restrictions. Members were obviously keen to get out and about, as there were 22 of us on the walk.

The Cranstons Trail goes from the end of Cranstons Road Middle Dural to O'Hara's Creek, a tributary of Cattai Creek. The vegetation is typical of the Hawkesbury sandstone flora. Our group walked the ridgeline to the point where the trail starts to plunge into the valley. In this relatively short distance, the eagle eyes of our members identified 61 species. A full list appears in the Resources section of our website. So, I will just mention some of the highlights:



- Several *Angophora hispida* in bud at the start of the walk. This very scruffy-looking small tree has the most beautiful deep burgundy flower buds. The prominent hairs on the buds and stems give it its name. *Hispida* means hairy in Latin.
- We saw two plants that were new to most members. A small wattle *Acacia hispidula*, which was identified by its distinctive seed pods and the hairs on the leaves and stems - there is that Latin word again. Then on the other side of the path the only prostrate *Dodonaea* in the Sydney region, *Dodonaea camfieldii* with its prominent seeds.
- Several stands of tall *Boronia pinnata*.

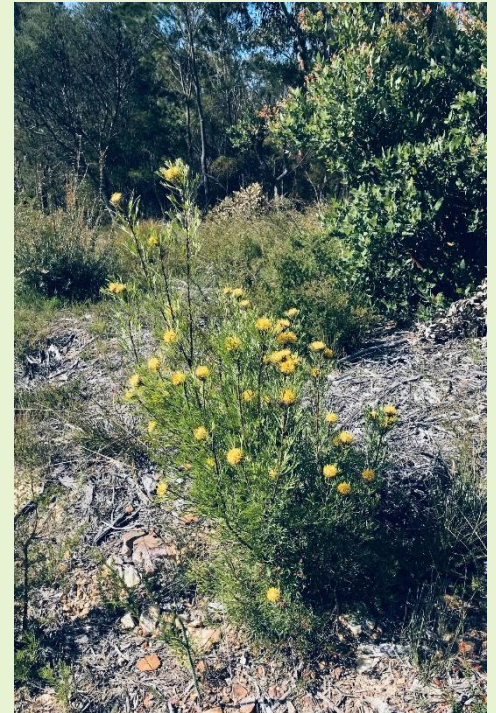


Boronia pinnata. Photo Lesley Waite

- Clumps of *Isopogon anemonifolius* all bursting with yellow flowers.
- Many *Kunzea capitata* plants with their distinctive terminal pink flowers. There were also many bushes of the more common *Kunzea ambigua* in flower.
- *Philotheca buxifolia* in flower. This is not seen in many places locally.
- One sighting of the rare *Darwinia biflora*. Rare because it only occurs in parts of north and north-west Sydney.

This was our last walk for this year. We will be out again next year when the summer is over.

Isopogon anemonifolius. Photo Lesley Waite



New native nursery in northern Sydney – Cicada Glen

Pip Gibian

A new nursery is open in northern Sydney. Those members mourning the loss of Wirreanda Nursery can take heart, as a new native nursery has opened in Ingleside. Kelly, who worked at Wirreanda for many years, is running the new retail nursery at Cicada Glen, on Mona Vale Road, (corner of Chiltern Road) Ingleside.

It aims to concentrate on local native species, unusual species and rainforest plants. At present the nursery is open Monday to Thursday, and soon will be on weekends. It offers a 10% discount to APS members. Read more [here](#) on the APS NSW website.



It is going to be a rather gorgeous nursery, I think. The site is unique. Already Kelly has stocked it very well. If you were thinking of visiting you should go to Harvest Seeds on the way. If you haven't seen it before, look in on the Bahai temple which is very beautiful. If you walk further along their road, past the temple, you come to their patch of wild *Grevillea caleyi*, which they are protecting.

Also in northern Sydney is Harvest Seeds and Native Plants at 281 Mona Vale Road, Terrey Hills. It is a native plant nursery serving the northern areas of Sydney and beyond with high-

quality native plants, seeds and tube stock. It also offers a 10% discount to APS members. Read more [here](#) on the APS NSW website.

How many species?

Kevin Mills

There are around 24,000 plant species in Australia; the number varies from year to year, as new species are described and existing described taxa are re-organised.

The family Myrtaceae contains about 70 genera and 1,646 species, being the largest family in the country in terms of species. There are now over 850 species in the genus *Eucalyptus*, almost all of which are endemic to Australia. This is second only to the *Acacia* in terms of the number of species in a genus. The bloodwood genus *Corymbia* contains about 115 species, all but five are endemic to Australia. The 'apples', *Angophora* species, another genus in the 'eucalypts' group, contains 13 species, all endemic to Australia. Other locally common non-rainforest genera in the Myrtaceae include *Syncarpia*, *Leptospermum*, *Tristaniopsis*, *Kunzea*, *Melaleuca* and *Callistemon*.

The family name Myrtaceae originates from a European species in the family, namely the Myrtle *Myrtus communis*; this plant is the *type species* for the family. The family contains at least 5,000 species, most occurring in the tropical and subtropical regions and concentrated in the southern hemisphere.

Quotes

"they talk, but they don't do."

- Queen Elizabeth II, referring to world leaders and the Glasgow climate summit.

"A garden is never finished. It is nurtured, maintained and grows; it is never finished."

- Wai Davidson.

"The great cliffs and awesome views, the deep valleys with their spectacular canyons and cool clear streams; the rainforest with its mossy rocks, green ferns, giant softwood trees and majestic gums which grow in moist gullies; the open sandstone ridges with their rocky outcrops and wondrous array of different plants and flowers."

-Libby Raines, speaking about the Blue Mountains.

Photo Gallery

Love a duck!

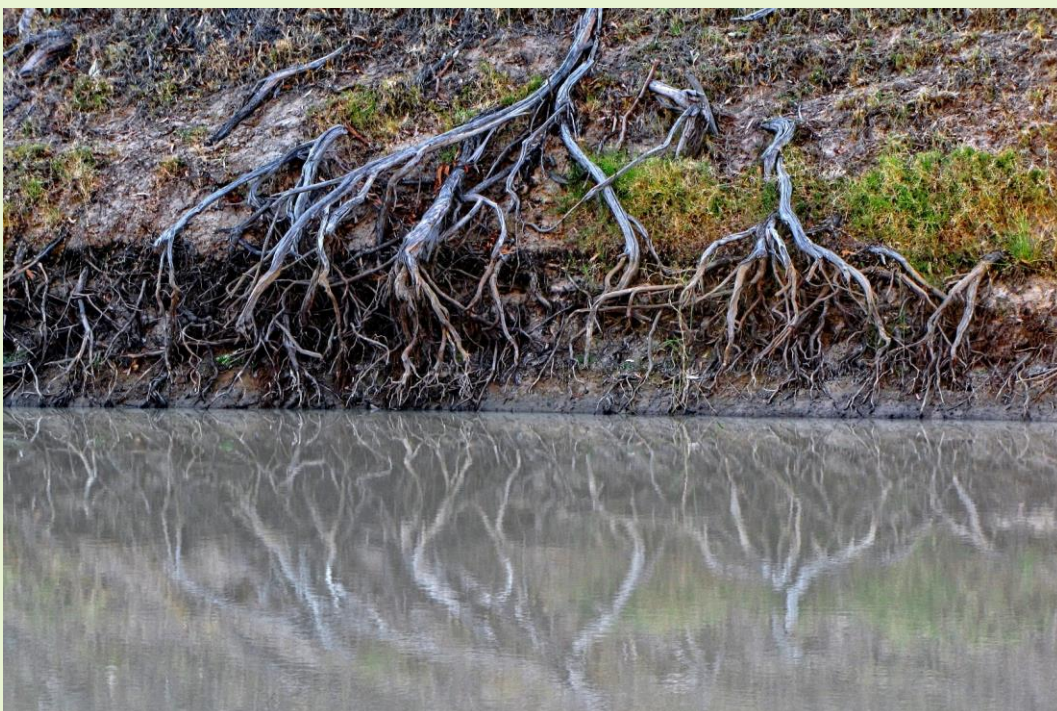
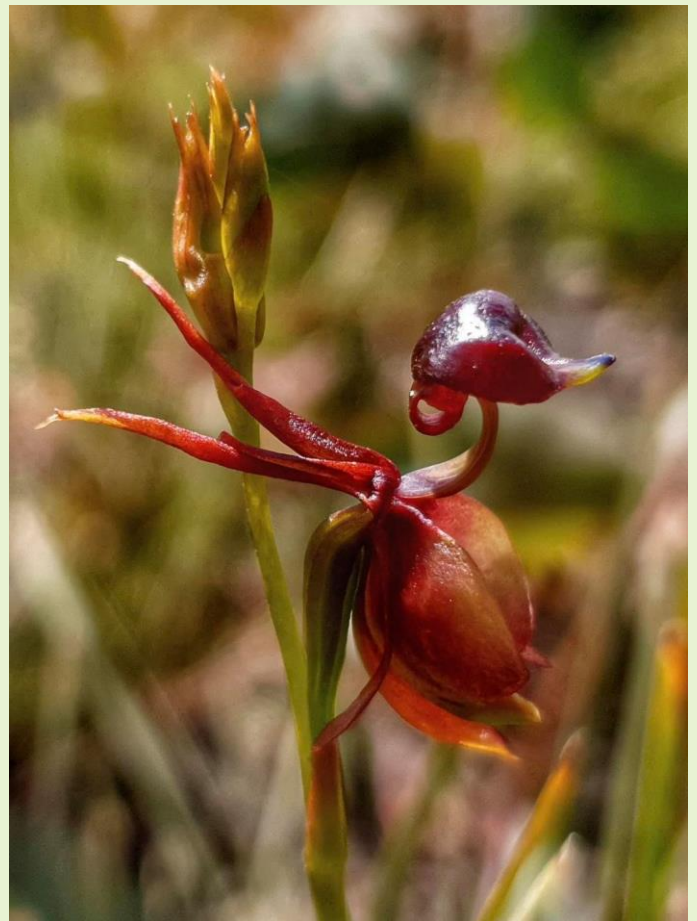
Caleana major (Large Duck Orchid) is a native terrestrial orchid that's difficult to spot in bushland because of its small size and inconspicuous colouring, but once seen it's hard not to notice this remarkable flower's resemblance to a duck in flight.

The 'upside-down' flower is reddish-brown and 15-20 mm long. The labellum or tongue, at the top, is a deep red and attached to the rest of the flower by a sensitive strap. Pollination is via male sawflies. When the insect touches the sensitive labellum it snaps shut, trapping the insect in the sticky body of the column. It deposits pollen it may be carrying and picks up more. It's then released to fly to the next orchid.

Caleana major is found in exposed sunny locations in heath, woodland and open forests, often in groups. This specimen was seen in bushland at Mount York.

The genus *Caleana* was named after George Caley, an early botanical collector. *Caleana major* flowers from September to January.

Photo: Teresa Sanchez



Holding the world together!

Tree roots on the Cooper River, Innamincka, South Australia. This photo by Bill De Belin shows how important native plants are along river banks.



Are these dinosaur footprints?

No! They're scars from detached fronds on the trunk of *Cyathea brownii* from Norfolk Island.

Named after the botanist Robert Brown, it's the world's largest tree fern, and the world's largest fern species.





A native Carpenter Bee on *Leptospermum rotundifolium*.

This photo by Bill De Belin was taken at Malcolm and Jenny Johnston's garden in October.

An *Angophora costata* eating a rock!

Photo taken near Katoomba by Andrew Cox.



This photo was featured in October's Photo Gallery as *Grevillea mucronulata*. Actually, it's *Grevillea venusta* - thanks to Peter Olde for pointing this out!



Share your stories . . .

What have you been doing in the garden? Or elsewhere?

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



Parramatta and Hills District Group

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