

CALGAROO

June 2021



Eucalyptus parramattensis - Calgaroo

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

News from the Committee

Program for the remainder of 2021

The program for the rest of the year is now finalized, so mark these dates in your diaries:

Saturday 26 June Bushwalk Quarry Road fire trail Dural. Leader Pip Gibian

Saturday 24 July Members Meeting at Gumnut Hall. Speaker Lachlan Turner "Bushland Photography"

Saturday 21 August Bushwalk Cobar Ridge Marramarra National Park. Leader Marilyn Cross

Saturday 25 September Garden Visit. Garden of Alan and Jean Wright Baulkham Hills

Saturday 23 October Bushwalk O'Hara's Creek Cranstons Road Dural. Leader Jennifer Farrer

Saturday 27 November Christmas Breakup at Gumnut Hall. Speaker Malcolm Johnston "Cattai Creek from the source to the Hawkesbury"

All activities start at 2 pm.

Group Website

Our Group's website is accessed from the NSW Region website. You can check the dates of upcoming events and read news from recent events. Copies of *Calgaroo* are also there in the Members Only section.

Recently we have created a new page called Resources. Here we are posting details for recent walks. The information includes an account of the walk, a map and a list of the plants found in the area walked with the ones which were sighted on the walk in a separate column. This will be a useful resource if the Group repeats the walk in the future and also be a guide to others wanting to do any of the walks.

Bushwalk along Quarry Road fire trail

Saturday 26th June 2021 2pm

Pip Gibian

This fire trail is known for its floral diversity. It starts at the very end of Quarry Road, a long road off Old Northern Road at Dural. After a short uphill section at the start, the track is fairly flat and sandy. It is noted for its banksia display in autumn, and some should still be flowering. There is a huge range of other native flowering plants growing on this sandstone ridgetop. The early wattles, some pea flowers and local grevilleas should be out, to name just a few. If we have time there is an interesting area of hanging swamp quite close to the track. It has no large trees, and the lowest plant layer is dominated by reeds. This fire trail is popular with locals for walking and also with mountain bike riders, so it is likely we will be sharing it with others on a Saturday afternoon.

Some of the plants you will see on the Quarry Road fire trail:



Acacia myrtifolia; *Bossiaea scolopendria*; *Grevillea speciosa*; *Crowea exalata*. Photos Lesley Waite.

To comply with Covid regulations, please email your interest to apsparrahills@gmail.com or phone Jennifer on 0407 456 577 to register. Come and enjoy an afternoon in the bush.

Propagation workshop

Thank you, Lesley Waite, for your wonderful presentation at our May meeting about plant propagation by cuttings.

Lesley told us how to collect cutting material, how to prepare the cuttings, the best types of potting media to use, and how to set up a system at home that would give cuttings the best chance of 'striking'.



The demonstration was full of interest and information. It was interactive, with many comments and suggestions coming from the keen and attentive audience gathered around the table.

One of the key takeaway points was that everyone's system and requirements are unique, and if something works for you, keep doing it!

The Wasp and the Orchid

Jennifer Farrer

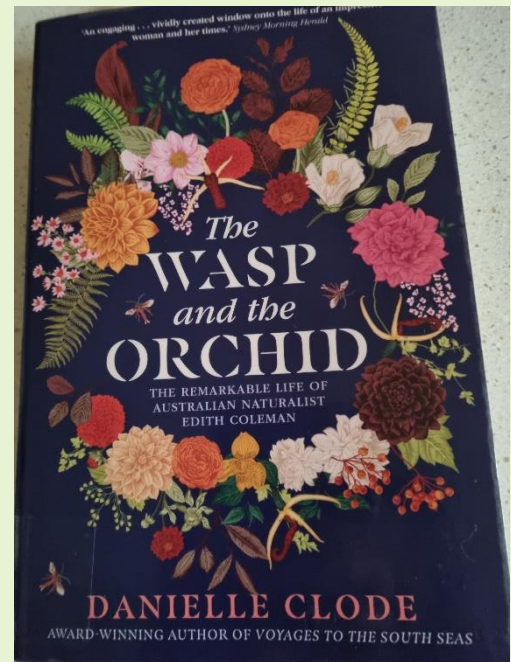
I want tell you about a book I have just read. It is *The Wasp and the Orchid* by Danielle Clode Picador 2018. My sister told me about it and I was able to borrow it from Castle Hill Library.

This is a very interesting book about Edith Coleman, an enthusiastic amateur, these days we would call her a citizen scientist, who was able to confirm through meticulous observation a long-suspected phenomenon. This was the pollination of orchids by pseudocopulation. In other words, the orchids' physical appearance mimics the female wasp's sex organs to trick the male wasp to mate with 'her'.

At first glance Edith Coleman would seem to have been a typical middle-class wife and mother of the early 20th century. Before her marriage she trained and worked as a school teacher. When her daughters were older, she joined the Field Naturalists Club in Melbourne. It was within this community of enthusiastic nature lovers that she honed her skills of observation and communication.

From the earliest days of her membership of the Field Naturalists she wrote engaging pieces about the natural world for their journal *The Victorian Naturalist*. This talent was used to write over 350 articles for their journal, local and metropolitan newspapers, women's magazines and academic journals.

The reason for my sister's excitement was that Edith Coleman lived three blocks from our childhood home in Blackburn. For the first eight years of my life she was our neighbour. Blackburn then was still a semi-rural emerging suburb on the eastern outskirts of Melbourne. There were dairy cows at the bottom of our street, a cool store for local orchardists and plenty of natural bushland for children to roam around.



Edith moved to a new house in Blackburn in 1923 not long after joining the Field Naturalists. Blackburn was still recognizable as the location for some of Frederick McCubbin's bush paintings which had been painted 30 years earlier. All Edith's observations of orchid pollination were conducted in Blackburn.

Today you can still get an idea of Blackburn before suburbia took over at The Blackburn Lake Reserve – a location for many a picnic and bushwalk in my childhood. You can still see orchids and lilies here.

Maybe Edith was thinking of Blackburn Lake when she wrote this piece in 1931:
“Of all the flowers that fill the gay pageant of spring, the modest wild orchids hold first place in the hearts of many lovers of nature. Although generally of smaller size, the Australian species are the equal of ground orchids of other parts of the world. The smallest and least conspicuous of them is unrivalled in the delicacy of colouring and perfection of line. Botanists of other countries are envious of the Commonwealth's orchid wealth.

September brings some of the quaintest forms – the elves and fays of the forest world, the whimsical members of the wildflower realm. With warm sunny days the rush begins, and the student of these wildflower aristocrats is somewhat exercised to keep space with their crowded hour. These shy, wild orchids are essentially flowers of uncultivated lands, and those who have fallen under the spell of their beauty, who have, perhaps, grown up among them, say that they can make a friendly place of some remote wilderness. They are there for all. One needs no expensive glasshouse. Nature is our universal gardener, and he draw no wages. All one needs is the desire to know them and a love of bush rambles. One need be no great walker, nor need one travel far, for many species grow in easily accessible places”.

Extract from “ The Poetry of the Earth: Return of the Flowers” *The Argus* 10 October 1931.

Banksias

Robin Powell

This article was published in the Sydney Morning Herald of 6 May 2021

Plant lovers who visit the south-west of Western Australia tend to abandon good sense. As loudly as their heads tell them that plants evolved for the west's thin soils, winter rains and dry summers will not survive Sydney's killing combo of summer heat and rain, their hearts cry out with desire.



There are only a handful of *Banksia vincentia* plants growing in the wild. Photo Corinne Le Gall

Even the experts get sucked in. "We'd been to WA and like a lot of people admired the plants, and like a lot of people tried to grow them," says Phil Trickett, who with his wife Catriona, gardens an outstanding collection of Australian plants in the hills above Milton on the South Coast of NSW. Of course, just like the rest of us, the Tricketts failed to grow the West Australian beauties they planted, but unlike the rest of us, they didn't give up after the first round of deaths.



Trickett thought the key to success would be grafting onto local rootstock. As members of the [Banksia Study Group](#), part of the [Australian Native Plants Society](#), they were familiar with the literature that stated the stunning West Australian banksias could not be grafted onto eastern Australian rootstock.

"So I thought I'd give it a go," says Trickett.

His first 130 attempts failed, but then he started to work with *B. integrifolia*, the coastal banksia, and hope bloomed. After more than 15 years of work, he's successfully grafted some 35 different banksia species onto *B.integrifolia*.

While many of the plants starring in the Trickett's garden are from WA's botanical hotspots, some of the rarities are local, grafted and not. The informal thigh-high curve of hedge down the drive, spiked with candles of flower, is *Banksia vincentia*. This plant from the Jervis Bay area was identified in 2007 as a unique, and critically endangered species. Its wild population has since shrunk to just a couple of plants.

The Tricketts grew their *Banksia vincentia* from seed collected from the wild more than a decade ago. The plant is now also being grown in large numbers by the [Booderee Botanic](#)

[Gardens](#), which is planning to reinvigorate the existing population, and by the [Australian National Botanic Gardens](#) in Canberra, which may release it through its Growing Friends.

Banksia vincentia is an excellent hedge and appealing garden plant, as is *B. oblongifolia*, with velvety brown new growth and flowers of pale green and mauve. This native of the NSW coast gets to about a metre or so in a neat dense mound.

This plant is uncommon in cultivation, but there's no reason for that to continue to be the case. Hopefully the Trickett's research into garden-friendly Australian plants and revolutionary grafting techniques will lead to new opportunities at the nursery – and more gardens like theirs.



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I have been speaking to a botanist from Mt Annan Botanical Gardens over the last few days, who told me that *Banksia vincentia* had recently undergone DNA testing, and now was not regarded as a separate species. It has similar DNA characteristics to *Banksia neoanglica*, which occurs on the McPherson Range in southern Queensland, along the eastern edge of the New England Tableland and as far south as Hanging Rock in New South Wales. It's thought possible that someone had planted it at Vincentia. It seems that it's not critically endangered after all!

- Ian

Creatures on a bush block

Ian Cox

All photos taken here

I know this newsletter is supposed to be about plants, but the plants attract the animals and insects, which depend on the plants. I hope I'm not suffering from "plant blindness" – see the article *The Joy of Plants* in the March 2021 *Calgaroo*.

Attracting native birds to our gardens is part of a subject close to my heart – and that is providing homes in our gardens for a whole range of native animals like lizards, insects, frogs, and of course birds. I am lucky that my own garden is close to the bush, which gives me the opportunity to see many more animal visitors than people in more built-up areas.

Lace Monitor



Bandicoots are regulars in the garden, and at night give the ground a good digging over in search of insects. Grey-headed Flying Foxes occasionally come to feed on the eucalyptus blossoms. Echidnas make brief visits. And then there's the Swamp Wallaby – the cutest visitor imaginable.



Apart from the birds and insects, the most prolific garden inhabitants are reptiles. Around dusk on a humid day comes a froggy chorus from the vicinity of the pond.

On a sunny day active and playful skinks scuttle around the rocks that border the garden. Leaf-tailed Geckos can be seen at night in the vicinity of back-lit windows, stalking their prey of flying insects attracted to the light. Now and again if you're lucky you will see a colourful Thick-tailed Gecko.



Leaf-tailed Gecko



Thick-tailed Gecko

Harmless snakes like Diamond Pythons, Yellow-faced Whip Snakes and Green Tree Snakes are magnificent creatures that attract a lot of attention and interest. With the addition of the likes of Bearded Dragons, Lace Monitors and Blue-tongued lizards, there are a host of reptilian friends to entertain and enthrall you.



Green Tree Snake



Diamond Python

You also see the harsh side of nature. Many of the animals in an ecosystem, unfortunately for them, provide food for others. When you get a build-up in the number of small reptiles – what happens? In come the Kookaburras for a feast. They are not welcome here! The Diamond Pythons and Lace Monitors are definitely not popular either when they raid the nests of Double-barred Finches established near the fern garden. And when the Sacred Kingfishers set up home in a termite arboreal nest which was raided by a Lace Monitor, it was very sad.



Bearded Dragon

There are lots of common black ants, and I am sure they could support more Echidnas. Watch these ants closely, for when they start building up their nests in a burst of frenzied activity it tells us that heavy rain is not far away. Termites abound too. These insects never cease to amaze me – the way they so quickly recycle logs or dead trees left lying around. They are one of nature's most efficient scavengers, and replenish the soil's nutrients so effectively with by-products of their meals.



Echidnas are one of only two mammals to lay eggs (monotremes), the other is the platypus. These amazing creatures are usually nocturnal, foraging for their food of ants, termites, grubs and worms, which they locate by their advanced sense of smell. They can live to 50 years.

Then of course there are the birds. The garden reminds me of a stage, with the birds the star performers, putting on dazzling displays in a never-ending parade. Actors, trapeze artists, choreographers, opera singers. Courtship, frivolity, curiosity, *joie de vivre*. Words cannot do justice. And this high-class entertainment is free!

Hakea bakeriana – with its unusual and attractive flowers.



The photo of the buds was taken on 10 April, the other two on 7 May, all by Lesley Waite.

When Peter Ridgeway was Environment Officer at the Hills Shire Council some years ago, he would come out to your home and set up sound recording equipment overnight, and was able to tell you what species of nocturnal microbats lived in your garden. An amazing service to residents!

The following article by Peter was previously published in *Research Matters*, newsletter of the [Australian Flora Foundation](#).

How old are the Cumberland Plain's trees?

Peter Ridgeway

Senior Biodiversity Officer, Greater Sydney Local Land Services

The Cumberland Plain has some of the oldest and most magnificent trees of any part of NSW. However, most of our trees are very young, and old trees are in short supply. As well as supporting arboreal fauna, old trees provide us with a critical terrestrial resource - hollow logs.

Without old trees (and hollow logs) many woodland remnants have little habitat value for the small terrestrial animals which are disappearing from the Cumberland Plain. In the Cumberland Plain, old trees are exceptionally rare. Unpublished local National Parks studies reported that less than 1% of trees in the Cumberland Plain reserve system are over 0.6 metres trunk diameter. This is a severe problem!

Despite this there are a few very large old trees remaining on private land. The biggest of these are: The recently discovered 'Mr Fat' at Camden, a 2.6 m diameter natural hybrid of *Eucalyptus saligna* x *E. botryoides*. (Photo at right)

The Ebenezer Church Tree, a 1.7 m diameter Forest Red Gum stump.

Three 1.6 m diameter roadside Forest Red Gums (two on Cobbitty Road and one scheduled for destruction on Northern Road).

The 1.6 m diameter Grey Box in front of Oakville House.



To date we didn't know how old our trees were. This has been a significant barrier to conserving old trees locally. To fix this problem I recently dated two local 'reference' trees.

How the ages were determined

Local trees grow opportunistically so tree rings are not representative of annual growth. Trees also grow according to local conditions, so growth curves from other regions (or from nurseries) are not accurate.

Thankfully tree girth is generated very regularly over the long term and provides a reliable technique for dating. I generated growth curves for representative trees using a series of three or more confirmed tree girths calculated from dated historic photos. Doing this properly required trigonometric calibration using photo scales - fixed objects of known size & distance (such as old buildings).

The results

The technique was successfully applied locally for two trees. The Ebenezer Church tree (*Eucalyptus tereticornis* 1.7 m dia.) is dated between 380 – 480 years old. The growth curves suggest it was a 1.1 m diameter tree around 1800 – 1810 which is consistent with reports

from that date, when church services were held under its shade. It is likely that other Forest Red Gum in the Cumberland Plain region will have grown at broadly similar rates.

Ebenezer tree and church *circa* 1952

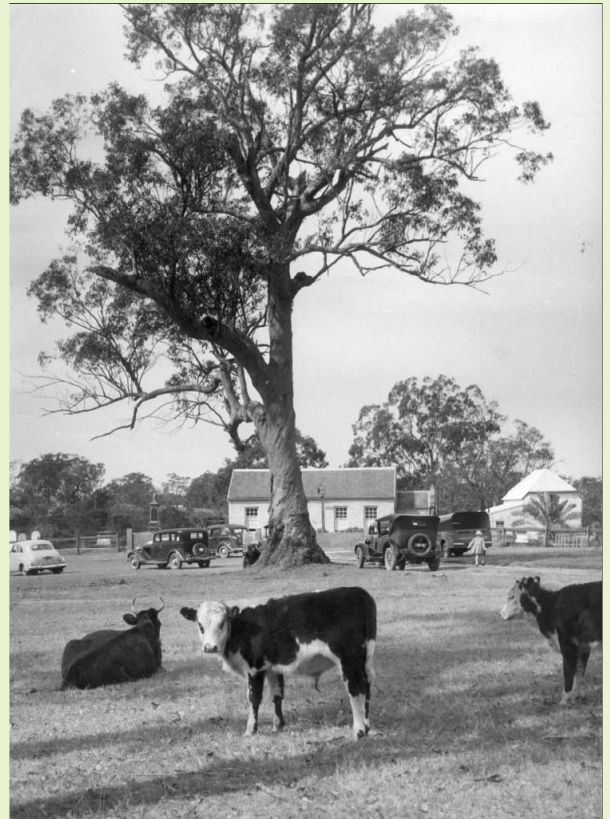
Surprisingly the St Pauls Church tree (*Angophora subvelutina* 1.2 m dia.) was dated between 330 – 460 years old - comparable to the ‘older-looking’ Ebenezer Church tree. The growth curve for *Angophora subvelutina* has greater error margins due to lower resolution in the historic photos used. w.environmentblacktown.com

What you can do

It would be very helpful to also calculate the age of Grey Box *E. moluccana*. To do this I need your help. If you have access to historic photos, please look through these for any which may include remnant *E. moluccana* trees which could be dated.

I am also interested in knowing about any other old trees over 1.1 m diameter. Make sure you measure the circumference with a tape at breast height, and take a GPS location and a photo.

You can contact me at ridgewaypeter@gmail.com with any questions or suggestions. Have fun!



Eucalyptus Sp Cattai

There’s an interesting article [here](#) from the Sydney Morning Herald.

The article features Steve Douglas, who was a member of our group, and who found the tree growing at the corner of his street in Kenthurst.

The tree is critically endangered, and as far as I know only grows in The Hills Shire. It’s said to be greater Sydney’s rarest eucalypt, and no seedlings are being produced in the wild. Steve thinks it will get a proper name soon.



I’d like to see our Group involved in propagating *E. Sp Cattai*, but at present I’m not sure how this would happen. It is illegal to collect seed without a permit, and any program would have to be approved by the DPIE (Save our Species). There are also genetic issues. The trees planted by Mt Annan Botanic Garden at the secret southern location were selected because

of their genetic representation of the species. There are several hybrids too, so whoever collects seeds needs to be an expert in identifying the plant.

One of our members, Ricki Nash, was featured on The Hills Council's Facebook page. The caption reads:

Celebrating our volunteers

This week is National Volunteer's Week! To celebrate, we're highlighting some of our wonderful volunteers who give generously of their time to help The Hills community 🙌

Ricki has been a volunteer at our Community Nursery and Environment Centre since December 2020 🙌 She volunteers because she believes it is a great way to meet likeminded people and learn new skills.



This article from the SE NSW Group's May newsletter highlights Tony Maxwell's huge plant database project.

Interesting Website - our very own APS NSW

In this day and age of overwhelming information it is sometimes easy to miss some very useful documentation. I recently discovered a gem.

Buried in layers of the NSW APS website <https://austplants.com.au/> is a resource that I think we should all be aware of. You may all know about it already, but just in case you are like me, and didn't take the time to explore, I'll help you find it.

If you go to the APS NSW website and click on the Resources tab, you will see a drop-down tab for Plant Database, Information and Newsletters and Journals. The Plant Database is interesting, but it is another database that amazed me. Click on Information, and then on the Conserving Native Plants and Habitats box. On the page where it says "To see all regions and data, click here.", do just that and the regions and data options will be revealed. Select the area you wish to explore.

There is so much information here relevant to the Eurobodalla Region and the far South Coast. The person who put all this together, Tony Maxwell, explains how he began this project and what he has done. A huge amount of work and such a valuable resource. I hope you find it as interesting as I did.

- Di Clark



Hello! Am I a fearsome creature?

No – I'm the bulbous trunk of *Brachychiton rupestris* (Queensland Bottle Tree)

It's your *Calgaroo*

Please send your articles, comments, observations and photos for the next Calgaroo to itcox@bigpond.com



Parramatta and Hills District Group

Secretary - Jennifer Farrer: apsparrahills@gmail.com 0407 456 577

Editor - Ian Cox: itcox@bigpond.com

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