

April 2023 Sutherland Group Newsletter

Celebrating 60 Years of Sutherland Group 1963 - 2023

About Sutherland Group

We meet at 7:00 pm every third Wednesday from February to November at Gymea Community Centre, 39 Gymea Bay Rd, Gymea. Visitors welcome.

We support awareness and conservation of Australian native plants.

Visit our <u>website</u> & Facebook http://austplants.com.au/Sutherland





www.facebook.com/APS.Sutherland

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Newsletter Deadline:

Second Wednesday of the month

Coming up..

Wed, 19 April Sutherland Group Meeting Our local grevilleas

from 7:00 pm with Peter Olde

At Gymea Community Hall, see diary.

Sat, 22 April JB Reserve Open Day - see Diary

Thu, 4 May
Sun, 7 May
JB Reserve working bees
more information here

Wed, 17 May Sutherland Group Meeting

Look out for.. Grevillea sericea (pink spider flower)



Grevillea sericea in Royal National Park (Ph. P. Shelton)

This is one of our better known local grevilleas. It is found widely on the from southern Sydney to Newscastle and inland toward Mudgee. It has a second common name – silky grevillea (sericea = silky).

There is some variability, but generally it is a medium shrub with plentiful pink spider flowers and is easy to maintain in a home garden. It is just coming into its peak flowering season now. Lots of bees and insects are attracted in its peak flowering period. It can be a fairly vigorous grower and is happy to be pruned.

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For your diary

Contact John Arney ph 9525 0449, johnarney@ozemail.com.au we follow APS NSW Health and Safety guidelines

Wed, 19 Apr

Sutherland group meeting. Peter Olde on Our local grevilleas

Grevillea expert Peter Olde, OAM and APS NSW life member will share his experiences of our local grevilleas.

Do you have some Grevillea you want to identify? Or perhaps you would just like to hear a better back story for it. This is your chance to hear from Peter Olde on the subject.

After the talk, we'll have our plant table segment which showcases native plants in Shire gardens at this time of year. Bring along a specimen of your own and have it identified. For this month let's try to emphasise Grevilleas growing in the Sutherland area. Feel free to accompany specimens by submitting photos for the newsletter.

Please note the new earlier start to our meetings for 2023. The hall will be open at **7 pm**. Our President Leonie Hogue will formally start the meeting at around **7.30 pm**, followed by our speaker. Come from 7 pm for a cup of tea, chat, plants and books, and enjoy the earlier finish.

All visitors welcome **from 7.00 pm** for 7:30 start at Gymea Community Hall, 39 Gymea Bay Rd.

Wed, 22 Apr

Open day at Joseph Banks Reserve, Kareela for Sutherland Shire Citizens Heritage Festival, 10 am to 4 pm

We are participating in the Sutherland Shire Citizens Heritage Festival by having an open day at Joseph Banks Native Plants Reserve, Kareela. We are on the Heritage bus route loop with a stop at the top gate at Manooka Place, arriving approximately hourly from 10.25 am to 3.25 pm.

We will have guided walks (hourly) on the natural and cultural heritage values of the reserve and a display of photos from our Powerpoint developed for the 50th anniversary of Joseph Banks Reserve in 2020. Plus we'll have pre-loved books and tea/coffee for sale, and local plants. It's always hard to predict the number of visitors, but we will need volunteers throughout the day to meet and greet, lead walks, talk to people and serve tea/coffee, but mostly in the morning from 10 am. If you can spare some time, please contact Rhonda. Pick up a Heritage Festival brochure at our April meeting. *Contact* Rhonda Daniels, rhdaniels@bigpond.com or 0491 629 760

Thu, 27 April

Friends of Royal meeting: 4 pm Rhonda Daniels is speaking on *Identifying Native Plants: tips and resources*, if you missed previous talks.

Location: Environment Education Centre, 159 Farnell Avenue, Royal National Park.

Thu, 4 May

Joseph Banks Reserve working bees, from 9 am.

As part of Sutherland Bushcare's 30th anniversary month of activities in May, Joseph Banks is hosting a Weed and Walk activity with morning tea. Come along and meet new staff member Polly Simmonds.

Fri, 5 May

Leonie Hogue is speaking at Rockdale Garden Club.

From 10:30, 36 George Street, Rockdale.

Sun, 7 May

Joseph Banks Reserve working bees, from 9 am.

Wed, 17 May

Sutherland Group Meeting. Samantha Newton on Bush tucker plants and gardening responsibly.

Sat, 20 May

APS NSW quarterly gathering and AGM hosted by the Central Coast group Check details in the APS NSW enewsletter. Heather Miles will be stepping down as President, but John Aitken is continuing as Vice-President to provide transition support. Location: Phillip House, 21 Old Mt. Penang Rd, Kariong

Location. Filling House, 21 Old Mt. Ferlang Ru, Randing

Wed, 5 Jul

Sutherland Group Committee meeting – location TBA

Other APS groups nearby

Have you considered visiting another local APS group? Each group welcomes APS members and visitors, so check your diary. Please try to confirm meetings at the group sites provided.

Harbour Georges River (formerly East Hills)

Sunday, 7 May from 10 am - Visit to Sydney Park Check their activities page https://austplants.com.au/Harbour-Georges-River/

Menai Wildflower Group

Usually on the 2nd Saturday of the month (Check links below)
Illawong Rural Fire Brigade
Old Illawarra Rd, Illawong



https://www.facebook.com/profile.php?id=100068944233153

https://austplants.com.au/Menai-Wildflower

Illawarra Group - check for activities at their web site

At the March meeting

Flying Foxes - A Crash course in their Conservation and Management

Presented by Matthew Mo and Libby Timmis from NSW Department of Planning and Environment.

As we know, Flying Foxes can cause some headaches for us poor, easily-upset humans. They provide an excellent ecological service through pollination and seed dispersal and are a vital keystone species. However, they tend to set-up shop in highly urbanised areas which can cause problems for residents and school children, mainly due to noise and odour produced by colonies. (The last time I bought a car, the car dealership told me that flying fox poo would completely destroy my car! Hmmmm....).

There are four flying-fox species in Australia: The Little Red, The Black, The Spectacled and The Grey-Headed. Three of these are listed as threatened in the wild (The Black is not currently listed). We only see three of these in NSW; the Spectacled lives in Tropical Australia.

Flying Foxes group together in camps referred to as 'roosts' and the numbers of individuals per site can vary enormously. The main lifecycle progression is: birthing in spring, lactation in summer, conception in Autumn to winter and gestation through winter.





Grey-headed fly fox (*Pteropus poliocephalus*)
(Ph: Matthew Mo, <u>DPE, Living with Grey-headed Flying Foxes</u>)

Grey-headed flying fox in flight (Ph: Shane Ruming, NPWS)

Their main diet is flower-nectar and fleshy fruits of a wide variety of tree species. They actually chew fruit and then spit it out as they do not digest fibre well. This likely aids germination of some native species. They are known to move their roosts in time with large flowering events of particular plants. In a previous talk that we received on flying foxes, we were told that they are the main pollinator of white-flowered eucalypts (which is pretty much most of them in NSW) and they will travel 10s of kilometres each night through the eucalypt canopy. This large spread of genetic material is incredibly important.

The most common roosts we see in Sydney are those of the Grey-Headed Flying Fox (listed as vulnerable). I used to spend time in the roost on Cabramatta Creek, adjacent to Warwick Farm Racecourse on the Hume Highway, when I was a kid. We thought it was a 'haunted and magical' place to hang out.

Matthew and Libby work very closely with researchers and are well-versed in published scientific studies regarding flying foxes. In one land use study, it was found that 66% of roosts were established in urban areas, 20% in cleared / non-native vegetation and 14% in good quality native vegetation. General observations have been made by many that flying foxes love to establish in a good old botanic garden or camellia patch perhaps. Reasons for this are likely due to the wide variety of exotic, non-local native and native plants that are available. Artificial night light also creates easier navigation. And Flying Foxes learn where the best and easiest food is. Hence, urban areas, as a breeding and foraging ground, make a lot of sense.

At least 13 roosts are known in the wider southern Sydney area, from Thirroul and Campbelltown to Centennial Park. We have around 4 alone in Sutherland Shire.

Matthew and Libby are involved in management and education on flying foxes. This includes community education at a variety of levels; listening and responding to concerns and complaints; including the community in strategies to deal with flying foxes; and providing subsidies to help people manage flying foxes where they are causing an issue. They have a 3-tiered policy when dealing with flying foxes. 1. Routine management. 2. Create buffers between flying foxes and residents or development. 3. Implement dispersal.

Management works can include habitat restoration, grounds-keeping and cleaning up the groundlayer. In some cases, tree removal may be undertaken to move flying foxes further away from houses and schools. Tree and weed removal may also be undertaken to try to persuade flying foxes to move. Habitat restoration might be undertaken in an area further away from houses, to encourage individuals to 'keep moving over'. Flying foxes may have particular preferences for particular vegetation structure which might include a 'canopy only' structure or vegetation comprised of a variety of strata.

In one particular case, residents were complaining profusely about the noise and odour of a neighbouring flying fox roost. It was found, when double glazing was installed on the windows of the houses, the complaints dropped enormously.

The most undesirable strategy is where flying foxes have to be deterred or moved on. What many residents do not realise, is that strategies such as noise-deterrents must be implemented at 4:00 in the morning, in order to get flying foxes to abandon a roost. This creates a lot of extra noise. Other strategies include intermittent spraying of water and noises through the day. From scientific research (some of which is in the Australian Journal of Zoology), where dispersal was actioned, 77% of flying foxes eventually returned to that roosting site. Another study showed that where flying foxes were deterred and forced to move, 88% of new roosting sites ended up being in a worse spot than before, in terms of human-interaction.

Flying Foxes can cause enormous headaches for those in the agriculture industry growing fruit trees. Matthew's Team provides funds for appropriate fruit netting. Fruit-tree netting has been a huge problem in the past, with the apertures of the netting being too large. Hence, flying foxes get caught and die. NSW now has a promotional strategy called "Net it right, get it right", which promotes and advocates the correct netting to use, with very small apertures. The weblink is here: https://www.environment.nsw.gov.au/news/net-it-right

Flying foxes are also killed by electrocution (which is some cases, pups can survive), as well as barbed-wire fences. In a natural sense, of course, the odd Powerful Owl may knock one off as well.

Flying Foxes are severely affected by extreme heat and I used to observe this as a kid at Warwick Farm. Days of over 36°C are generally too hot for flying foxes and at 42°C, there will likely be mass death. In the extreme summer of 2019-2020, around 72,000 flying foxes died at 40 roosts in NSW. Therefore, we have to consider what climate change may bring for these species. Flying foxes try to cool down by getting lower in the canopy and midstorey. However, most deaths were likely due to inappropriate vegetation structure at the roosts.

Matthew and Libby have considered sprinkler systems and hosing of roosts. However, it is not known how this might affect humidity and any young that may be present.

Volunteers are able to assist with monitoring and counts when they are planned. Drones are also more frequently used to count flying foxes at roosts.

Question time included general comments and observations. A flying fox can live to 18 years of age!

Our gardens can support flying foxes by retaining eucalypt trees and planting fleshy-fruited native-tree species.

Dan Clarke

On the plant table

The plant table is a great way to see what grows well in Sutherland Shire and what flowers when. Please free to email some photos in addition to showing the plant specimens at the meeting. These may be included in the newsletter. You can email by reply to the newsletter or to Dan Clarke at: dmclarkebotanical@icloud.com

Plant steward Phil Keane's nursery, <u>Ausplants R Us</u>, is in Sutherland. Visits by appointment or check out sale days (often Saturday 12 – 4:30) on https://www.facebook.com/ausplants/
Ph: 0435 410 857 or ausplantsrus@gmail.com
...and some will also be on the APS online plant profile database

Proteaceae

Banksia 'Birdsong' A hybrid between *B. ericifolia* and *B. spinulosa*, it grows to about 2 m tall by 2 m wide. Has large orange inflorescences and fine narrow foliage. Is reputed to attract birds into the garden. Prune to encourage a compact shape and more flowers. Needs full sun and good drainage.

Grevillea 'Bush Lemons' A shrub to 3 m x 3 m, it is another cultivated grevillea with brilliant yellow flowers and grey- green dissected leaves. Tolerates a range of soils and is very hardy. Birdattracting. A very nice grevillea.

Grevillea 'Pink Midget' A dwarf-shrub to 0.5 by 0.5 metres tall and wide, it is a hybrid between G. leiophylla (a Queensland/northern NSW species) and G. humilis (a NSW species). It has leaves to about 3 cm long by 0.7 cm wide with a pungent point, with pink spider-inflorescences which can be produced profusely at the terminals. Very useful for small gardens, containers and rockeries. It is becoming popular! Provide full to part sun and adequate drainage.

Stenocarpus sinuatus (QLD Firewheel Tree) A tree that can reach 35 m tall in its natural rainforest environs in northern NSW and Qld, but usually much smaller in cultivation with a narrow spread. Has interesting and large foliage which is invariably lobed and wheel-shaped inflorescences (umbels) with 10-20 red flowers produced at the terminals or on previous season's branches. Can be a very attractive tree and will tolerate a range of climate with adequate moisture. Grow in sun or part-shade. Can be propagated from cuttings of seed. Just note that trees can take 7 years to flower but well worth the wait!

Persoonia pinifolia (Pine-leaved Geebung) This is a shrub to about 4 m tall, found mainly on sandstone with a restricted distribution on the Central Coast of NSW. Has soft pine-needle foliage with sprays of individual yellow 4- tepaled flowers produced amongst the leaf axils.

Conspicuous green drupes are then produced which ripen to purple Whilst not overly successful in gardens, more and more effort is going into *Persoonia* cultivation and this is one of the more reliable species. Can also produce new growth which is strikingly purple.

Plant in a free draining soil. Prune after flowering to encourage a denser shape. A very beautiful plant that deserves one or two attempts.

Goodeniaceae

Goodenia ovata Shrub to 1 m tall, easy to grow but possibly short-lived. Give a bit of room as it can spread to 1 m wide. Plenty of small yellow flowers. Found naturally close to local rivers and creeklines.

Geraniaceae

Geranium solanderi (Native Geranium) This is a very common groundcover in many habitats in NSW (even persisting in paddocks and degraded bushland areas). It creeps along the ground forming colonies and has highly dissected green leaves, up to 4 by 4 cm in diameter. It produces small dainty pink flowers in pairs. It is currently going 'berserk' in Dan Clarke's garden but does a good job of keeping out other weeds. It may need culling itself eventually but is great in a shady and damp area.

Common in some Sutherland Shire bushcare reserves.

Pelargonium australe (Wild Geranium) Locally native herbaceous perennial with hairy foliage and pink umbels. It is found locally on sand dunes and coastal cliffs. May do well in a rockery or container and can be hardy.

Asteraceae

Brachyscome triloba A form showed up at the March meeting which Dan thinks is this species. It used to be called *B. angustifolia*. It has distinctive broad and toothed leaves, to about 1 cm wide, by 4 cm long. The daisies are purple or pink with yellow. There are some cultivars sold such as 'Brasco' and 'Fresco' A useful groundcover growing to about 50 cm wide. Great for borders and rockeries.

Chrysocephalum apiculatum (Billy Buttons)
Attractive scrambling groundcover with blue-grey foliage and golden terminal daisy-inflorescences.
Native to NSW and widespread. Excellent border plant and used for mass planting. Prune regularly but lightly.

Lobeliaceae

Isotoma axillaris (Rock Isotome) A very attractive perennial herb found over much of NSW on rocky crevices and outcrops on granite or sandstone, it has strongly dissected thistle-like foliage and large bright purple star- shaped flowers at the terminals. They grow well if adequate moisture is given. Can also flower right through summer. Plant along borders for good affect. Prune back hard after flowering to encourage new growth and flowering the next season. Prefers a light, well-drained soil.

Loranthaceae

Muellerina eucalyptoides (creeping mistletoe)

Peter Shelton brought in this mistletoe which he found growing on a Chinese Elm tree in his local patch. We think it matches this species well which is local to our area and wider NSW.

The species name, of course, means 'resembling *Eucalyptus*' and it is commonly seen on eucalypt trees.

Has leaves to 25 cm long potentially, by 3 cm wide. The flowers are produced in a raceme or 'triads' – which are sort-of separate chandeliers consisting of 3 flowers, green to red. They have nice yellow pear-shaped fruit. I think Peter is going to try to spread them through his patch which is a great idea to help local wildlife. See item below – page 8.

Rutaceae

Citrus australasica (finger lime/ caviar lime)

Almost on the plant table! Thanks to Ralph and Russel who brought a supply of Finger lime fruit to ensure everyone at the meeting could take a nice supply home. I even had some on my fish from thr local fidh & Chip shop.

I suppose the message is, once you have these plants established you should be well-rewarded for your efforts. Ralph also explained how he goes about freezing a good supply to use over the coming months.

Poaceae

Cymbopogon refractus (Native Lemon grass / Barbed-wire Grass) A native tussock grass, local to Sydney, usually found on heavier clay soils. It has a very similar height and habit to Kangaroo Grass. It is in the Lemongrass genus

and leaves can smell like lemon. Has very distinctive barbed-wire looking florets. Can add interest to gardens with small shrubs. Grow in a sunny position with some drainage.



C. refractus (Ph: P. Shelton)



C. refractus 'barbed wire' detail (Ph: A. Fairley)

Dan Clarke

More information can be found at these websites:

www.anspa.org.au
plantnet.rbgsyd.nsw.gov.au
plantnet.rbgsyd.nsw.gov.au
www.wikipedia.org
resources.austplants.com.au/plant-database/

Plus: Dan Clarke has all the monthly plant table information compiled in his <u>Plant Table Master List</u> document available from <u>our web site</u>.

News and More

Membership

If you are not receiving the monthly APS NSW enewsletter, please email enewsletter@austplants.com.au so we can sort out whether we have your correct email address in our records. Each monthly issue is emailed at the end of the previous month.

Membership renewal

Members receive an email from APS NSW when their membership is due through the year and can renew online on the APS website. Check your membership status with our treasurer Anne Webb at the next meeting or by phone.

More free books and magazines for new members

At the meeting, look out for books and back issues of *Australian Plants* journals from the collections of our members including Doug Rickard and others. A gold coin donation for significant books, but many available for free.

Update your first aid for free

In 2020, we received a federal government volunteer grant for first aid training. We still have some left. Members can complete the one day first aid course at the St George and Sutherland Community College at Jannali. It is held regularly through the year on Saturdays, approx. 9 am to 3 pm.

If you would like to attend, check the dates here www.sgscc.edu.au/courses/WorkSkills/first-aid-courses and contact and pay the college directly or phone 8543 7412. Let me know at rhdaniels@bigpond.com so we can keep track and reimburse you \$120 on course completion. We all benefit from up-to-date first aid knowledge.

Rhonda Daniels

Sutherland Group history – technology and our newsletter

Leonie Hogue's article in our February newsletter reminded me of changes in the technology of our newsletter. Our newsletter has always been a great record of our group's activities, and its production and distribution reflect changing times.

When I took over as monthly newsletter editor from Maurice Haenke in 1996, he typed it on a typewriter in Courier font. It was often 14 pages. I used my Mac computer to produce it. I printed the pages and often stuck on little images of gumnuts or stamps I found before photocopying the pages. It was black and white of course. I was an early adopter of email, but contributions were often handwritten or dictated.

The task of newsletter collation every month was a big job, and was a social occasion at Aileen Phipps' with supper. Then I remember Aileen Phipps and Gwen Versegi coming round to my place (which prompted a monthly tidy up). At one stage we had 220 newsletters to fold. We had to assemble the 5 or 6 sheets of each newsletter, staple them, fold them in thirds, apply a couple of pieces of sticky tape, sit on them to flatten them, then attach an address label and later a postage stamp. We then had to bundle the newsletters into 20s and into Sydney area or regional area postcode groups, and complete an Australia Post form to get cheaper postal rates (Aileen's highly skilled job). Later we just stuck a stamp on each one ourselves. In the early days before I took over, the address labels were typed individually each month. I created a mail merge mailing list to print sticky labels, but still had to adjust the list every month.

Over time, the process was streamlined and fewer people were involved. At one stage, member Merilyn House did the photocopying. When editor again in 2008–2010 I used a copy centre (an organisation which no longer exists, before Officeworks took over) which photocopied, collated and stapled all at once. Then, as email became more popular, we encouraged members to get the newsletter by email, save postage and enjoy the full colour photos and website links. Now we are down to less than 10 newsletters physically posted every month to members by our current long-time editor Peter Shelton. We also have a few printed copies for our meetings and Joseph Banks Reserve. I do suspect people read and absorb information better from the hard copy.

Rhonda Daniels

A Greenweb feature story on Gardening Australia with a cameo to spot

This recent item on Gardening Australia featured the Greenweb in action in Grays Point and how volunteers (including APS Sutherland members) help Sutherland Council's Nursery feed the process with about 10,000 seedlings a year. Follow the link here: https://www.abc.net.au/gardening/how-to/growing-green-webs/102193740

Sutherland Group Committee report, 5 April 2023

At our committee meeting on 5 April, we discussed the following issues:

- We will investigate buying a new laptop for our meetings.
- We agreed to donate to a local WIRES group in lieu of a gift for our March speakers.
- We discussed ideas to celebrate our group's 60 years anniversary in 2023 including the Heritage Festival at Joseph Banks on Saturday 22 April, garden visits later in the year, and possibly a recipe
- · We discussed progress on the conversion of our Coastal Plants of the RNP CD with 1,200 photos of

- 300 plants to a free app. The company Identic has provided draft text which we need to review and update.
- We agreed to remind members of risk assessment at meetings and for activities, based on the APS NSW website here: https://www.austplants.com.au/Health-and-safety.
- Lisa Godden has stepped down from the board as Sutherland delegate but is continuing as enewsletter editor. John Aitken is continuing as Vice-President.
- Next committee meeting: Wednesday 5 July.

Rhonda Daniels

Which mistletoe is that?

You may remember our Zoom meeting when Peter Vaughan talked to us about Mistletoes. That was in November 2021. Here it is at our Youtube channel: https://youtu.be/ jofh9uuh6q

I've been keeping a lookout ever since. Peter spent a bit of time describing his own experiences with propagating into trees on his property; "How hard could it be?".

It's usually a bit challenging to access a mistletoe for material (or setting seeds for propagation), but I found this one growing quite low on a busy road in President Avenue, Kirrawee, at the corner of North West Arm Road. From a distance it looks like Amyema pendula (Drooping mistletoe) and that would be a fair guess. However, closer examination suggests it is probably Muellerina eucalyptoides as Dan Clarke describes in the plant table on page 5. As the name implies, it looks like Eucalyptus. However, that doesn't mean it only grows on Eucalypts and this one is growing on Chinese elm (*Ulmus parviflorus*).

The link below is a Gardening Australia story showing a propagation project in Melbourne to increase the presence of Mystletoes in central Melbourne by using another exotic - plane trees - as hosts: https://www.abc.net.au/gardening/how-to/a-sucker-for-bioiversity---mistletoe/11796786

And there are some excellent Youtube options for watching David Watson present. For example, this research update was presented by Zoom through RBG, Victoria in 2022:

https://voutu.be/nQKRkm6kOf8







Chinese Elm with mistletoe on President Ave.

Detail of very last stages of

Close up of M. eucalyptoides flowering with early fruit forming (Creeping mistletoe) (Ph. P. Shelton)

So, now that I have an accessible source I will attempt some propagation to. If you drive down President Avenue you may see me standing a bit too close to the traffic. This is because the ripening of the fruits is much slower than I expected and I am making weekly visits for more ripe seeds. If I have any success I will be sure to share some baby photos, but it is going to take a while.

There's plenty of fruit there if anyone else wants to have a look, and should be into May. It is definitely possible to find accessible places to propagate without the need for a ladders. Even a bit of guerilla gardening may be in order, just choose carefully. Listen to Peter Vaughan's tips.

Peter Shelton

Your photographic skills are valuable. See this article at The Conversation website

Thousands of our native plants have no public photographs available. Here's why that matters

Thomas Mesaglio, UNSW Sydney; Hervé Sauquet, UNSW Sydney; Will Cornwell, UNSW Sydney

Thomas Mesaglio, UNSW Sydney; Herve Sauquet, UNSW Sydney; Will Cornwell, UNSW Sydney

Almost 4,000 Australian plant species have never been photographed in the field, particularly in remote corners of the country. Without a proper record, they could die out without us even knowing.

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We have produced a <u>searchable list</u> of Australian native plants lacking photographs. We hope this work stimulates both professional and citizen scientists to track down these species and add photographs to public, discoverable repositories such as <u>iNaturalist</u>.

This is a just a brief excerpt; follow the link(s) for the whole story especially if you want some homework.

At the Quarterly Gathering, Bundeena

Garden visit at Bundeena – notes from the gardeners

Gardening in Bundeena, even with native plants, is a challenge. Sandy soil, little depth and low nutrients, feral deer, salt spray from the coast, hungry possums and cockatoos all make it difficult.

We started planting a few trees when Sandra's dad owned the original cottage as a weekender 40 years ago. Hence we are now able to enjoy a mature *Agonis flexuosa*, Banksia integrifolia, Angophora costata and Melaleuca linariifolia. Later we added Stenocarpus sinuatus, Callistemon 'Reeves Pink', C. citrinus and C. viminalis.In 2025 we moved into our 613 sq m block full time, after removing the original Fibro cottage and building our 2 storey retirement house. We retained some of the large excavated rocks and heaped up the excess soil to build mounded gardens. The lawn and soil at the rear was removed to reveal a large rock shelf which now forms a sunken gravel walkway, large frog pond, fern, orchid and rainforest garden.



Doryanthes palmeri (Giant spear lily)



Tecomanthe hilli (Fraser Island creeper)



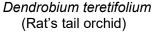
Macrozamia communis (Burrawang) (Ph: R. Laney)

Our garden has cyprus pine mulch paths, a gravel dry creek bed to give form and drainage and a mixture of some family heritage exotic plants and mainly native plantings. Sandy soil has allowed me to grow various grevilleas, and flannel flowers, *Actinotus helianthi*, which self seed year after year. Smaller plants are planted according to drainage, soil moisture and sun /shade preference. Recently I have tried mass plantings of *Rhodanthe* with good results and now *Blandfordia grandiflora* in a tall pot. Favourite plants are Calothamnus quadrifidus (Woolly Net Bush) which has lasted almost 20 years, *Dendrobium speciosum*, both arboreal and terrestrial forms, with spring flowering of up to 150 spikes, *Macrozamia commonis* (70 yrs old grown from seed, moved house to house), *Bakea virgata nana* and *Tecomanthe hillii* (Fraser Island Creeper). I constantly try new smaller-growing plants and make use of the Council Nursery at Gymea through the <u>Green Webprogram</u>.

Weeds are a constant problem and I try to manage them with mulch and by hand weeding when they first emerge as seedling, preventing them from setting seed. I also use weedicides judiciously.

We have also planted out part of the verge with deer resistant plants including *Doryanthes excelsa* (gymea lily) and *D. palmeri*, *Banksia robur*, *Angophora hispida* (dwarf apple), *Crinum asiaticum*, *Hibertia scandens*, *Atriplex isatidea* (coast saltbush), *Glochidion ferdinandi* (cheese tree), *Acacia baileyana* prostrate form, and use minimal cord fencing.







D. speciosum, short canes Bird (Sydney rock orchid) (Photos: R. Laney)



Bird bath, billy buttons
.aney) (Ph: P Shelton)

We don't use auto watering at present but hand water utilising a 6,000 litre tank of rainwater and a solar powered pump.

Richard Laney

(Note: some photos were taken at different times)

Dendrobium speciosum: My Experiences Growing Rock Orchids.

I grew up in Sydney with a clump of neglected "Rock Lilies" in our suburban garden. Despite little attention they survived and flowered profusely each spring and were even used in my aunt's wedding bouquet.

My specimens have been handed down through a couple of generations of the wider family so they have some history. I have short cane and long cane varieties. The long cane variety, which grow high up in the rainforest canopy, came from the Dorrigo area and would have been collected from the wild around 1910 when my great grandfather pioneered a dairy farm. This was first at Deer Vale, then Bostobrick and later just above Dorrigo township. I recently saw similar plants flowering in the canopy of rainforest west of Forster. They grow best in part shade in rotted bark and like a regular feed. They need air around their roots.

The short cane variety grow on rocks and leaf litter in full sun and also in part shade, so they are "rock orchids", not ground orchids and can tolerate more sun. Mine would have come from the Central Coast and Sydney areas around 1935 and later. A few came with the purchase of our original cottage at Bundeena. We can now have up to 150 spikes of *D. speciosum* flowers each spring and some have delightful fragrance.

Containers and Growing Medium

Large plastic pots and troughs are ideal. They can be moved out of hot sun in summer and back for winter. Winter sunshine is essential for good flowering. I bury large pots half into the garden to prevent the pots drying out and I erect shade cloth over them during the hottest times to prevent sunburn. Long cane varieties cannot tolerate hot sun. I use large size pine bark, rotted if possible for medium and apply some dolomite and regular feedings of blood&bone, general fertiliser or Osmocote during warmer months, with watering. Only occasional water is required in winter.

Dendrobium beetle pests. The **Dendrobium beetle** is enemy number one. This small orange and black beetle will eat the surface of young soft leaves and later lay eggs in the soft tissue of new tubers. The hatching lavae eat the tuber from the inside and the tuber soon collapses into a green mush. Twelve months growth gone forever. Look out for freshly damaged leaf surfaces. The beetles always appear in pairs so I visually check new leaves regularly in the growing season. When I spot a beetle I look for its mate then carefully put one hand under them and pick it up with the other hand. Usually the beetle will react by rolling into a ball and dropping off the leaf, hopefully into my hand for disposal. Then catch the second one.

If the numbers are too large to catch by hand or if they are into the tubers, a systemic pesticide such as Richgrow Bug Killa, may be your last resort to save your collection. Only use small amounts. Half a teaspoon or less of granules is sufficient for a large pot. It is harmful to bees so do not use on flowering plants.

Slugs and Snails can also have an impact. As soon as you see flower spikes developing, apply a little snail bait amongst the bulbs. Slugs and snails will eat you precious buds while you sleep.







Dendrobium beetle D. (Ph: J. Howes, <u>APS website</u>)

D. speciosum (long canes) site) (Sydney rock orchid)

D. speciosum in pots (Photos: R. Laney)

Invasive ferns

We like ferns, but not in our orchid clumps. Weed out any ferns and grasses before they take hold. I noticed a large clumps *D. speciosum* at The Royal Botanic Gardens recently, growing on a large rock, eaten by beetles and invaded by ferns; a poor example of a beautiful native species.

Richard Laney

Ann Young on Mosaics of Vegetation – the rocks and dirt story

Why do different plants and communities form mosaics or patterns across a landscape?

At the macro scale, there are global patterns including global climate (equator vs polar), continents (coastal vs inland) and topographic influences. At the micro scale, there are also differences as seen within Dharawal National Park which is entirely on Hawkesbury sandstone, but vegetation varies. Even within the same vegetation structure such as woodland or heath, the same structure can be floristically different across areas.

Sediment + Water + Organic matter accumulation = Vegetation.

Soil is a "living, breathing, occupied, busy place". This reminded me of Doug Rickard's talk on all the millions of critters in the soil. In soils, most of the activity is in the top layer and animals have a large role. Nutrient recycling and bioturbation occurs mostly by ants in the southern hemisphere (but earthworms in the northern hemisphere). Larger creatures such as wombats also have a role, but there are no burrows in shallow or wet soil. There are complex relationships at work. Mycorrhizal fungi

and proteoid roots expand plants' access to nutrients. *Drosera* (sundews) trap and dissolve insects to get extra nutrients.

Soil colour is a good indicator of conditions:

- Red = dry, low organic matter, high in iron oxides
- Yellow = moist, low organic matter
- Brown = good (moist, good organic matter)
- Black: moist, high organic matter.

The Liverpool Plains in north-western NSW have premier organic soils for agriculture, and there is little native vegetation left. However, highly fertile soil doesn't always mean woodland. The Liverpool Plains were originally savannah and grass lands.



Several aspects of soil structure can affect erodibility and dispersability:

- How hard is it for plant roots to get into the soils? Push a pencil into the soil with the palm of your hand to test.
- Toss a spade of soil on the ground: does it break up vs stick together?
- How does soil or a lump behave in water?

In summary, water controls both soil development and vegetation. Geology and topography lead to soil parent material and water flows, which in turn leads to a mosaic of patterns with "intricate and beautiful variation".

Ann has authored several books on *geology* and related topics. Contact Ann at <u>aryoung1453@gmail.com</u> for her books. Alternatively, some are available here: https://www.friendsofroyal.org.au/shop/

Rhonda Daniels

Mangroves at Bonnie Vale, Bundeena

Our walk at Bonnie Vale on the northern shore of the Royal National Park was a great place to see 2 different mangrove species growing side by side. Surprisingly, they are in different genera.

Avicennia marina is the grey mangrove, and grows in saltwater in intertidal zones. It is the dominant mangrove in coastal NSW. Remember, *marina* means marine. It has grey, duller leaves, and is taller (4–6 m) than the other species. The common name refers to the grey undersides of leaves or to the grey colour of the timber.

Aegiceras corniculatum is the river mangrove, found in less saline water. It has brighter green leaves, and is shorter (3–4 m). The photo below shows some horn-shaped parts. Peter Olde broke one open, and it felt soft like a flower bud, although the species is named for the fruit. The genus name is from the Greek for goathorn, from the shape of the fruits, while *corniculatum* also refers to the horn-like fruit – obviously a distinctive feature. We also saw grains of salt on the leaves of the river mangrove.



Aegiceras corniculatum (river mangrove)

(Ph: Bruce Simpson)

Rhonda Daniels

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If undeliverable, return to: Australian Plants Society, Sutherland Group 169 Peninsular Road Grays Point NSW 2232

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Breaking news – Joan Zande at the Easter Show with a Champion ribbon

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