

Corymbia maculata Spotted Gum and Macrozamia communis Burrawang

# Australian Plants Society South East NSW Group

Newsletter 161 June 2020

Contacts: President, Di Clark,
Secretary, Paul Hattersley
Newsletter editor, John Knight,
Group contact

dianneclark293@gmail.com paul.hattersley26@outlook.com johnonvista49@outlook.com southeast@austplants.com.au

# A message from President Di

#### Dear Members,

Welcome to our midyear newsletter. This time last year we decided not to have a meeting as so many members were likely to be away. This year is just the opposite, and we were considering attempting a meeting at two gardens, splitting the group if need be.

In light of the ever changing conditions and risks due to the Covid - 19 pandemic, the committee decided that we would hold off from any physical gatherings until we felt more comfortable. It has become a month to month decision, so we apologize for our inability to provide any detail. In the meantime, thank you to those who have provided John with articles and snippets for the newsletter. It is always interesting reading about other people's activities and perspectives. I hope you are all finding the extra time to get out in your own garden and our surrounding bush.

Best wishes,

#### Di Clark

#### In this newsletter

Page 2	<b>Snippets</b>	Podcasts and websites		Di Clark
	Manganese toxicity, Richard Tomkin.		n.	Contributed by Norm Hulands
Page 3	Seed bank, APS Victoria			<b>APS NSW Region, Heather Miles</b>
Page 4	Peter Olde OAM			Queens Birthday Awardee
Page 5	In My Garden			Anne Bailey
Page 6	Should we grow more fruit			Jan Douglas
Page 7	Recovering from fire			Lyndal Thorburn
Page 10	Traffic stoppers			Leigh Murray
Page 11	In My Garden			Marjorie Apthorpe
	The joy of N	ative Australian plants		Carolyn Noake
Page 13	The continuing Seed Sowing Saga			John Knight
Page 14	Eremophila			Lyndal Thorburn
Page 15	Artful Advocacy			Reclaim Kosci Campaigners
Page 16	Committee n	iews		

# **Snippets**

### **Seeking Inspiration**

Last month I wrote about actually gardening. This month I would like to pass on some information for online or audio inspiration. If anyone else has stumbled across any fascinating items or books, please let the group know. We are here to share information and continually learn, so keep it up.

### Firstly - A podcast or two, for those with a smartphone or tablet

The ABC has an app called **ABC Listen**. It is here that you can catch up on programs you may have missed.

One of the categories is **Science and Technology** and there is a program within that called **Science Friction**.

You will need to browse to find past pod casts (should be a magnifying glass at the bottom of the page).

Press the magnifying glass and a page comes up with programs listed by topic.

Go to **Science, Medicine and Technology**, and scroll down till you find **Science Friction**.

There are two podcasts, part 1 May, and part 2, June.

Part 1 is called "A wild and whimsical world of flesh eating plants".

Part 2 is called "The carnivorous woman - a saga from Charles Darwin to Wheatbelt Western Australia". Enjoy.



Drosera arcturi, carnivorous plant

#### Other APS group activities and talks.

The **Australian Plant Society NSW** recently conducted their annual general meeting via zoom and created a YouTube video for everyone to have access to the speaker's presentation. See below. You can access this by going to the APS website ( <a href="www.austplants.com.au">www.austplants.com.au</a>) and looking up latest stories. You will find links to YouTube, or you can just search in YouTube for the title below. I just searched for Dr Brett Summerell and found it, and then you find other interesting YouTube videos along the same lines.

#### YouTube – Dr Brett Summerell on Banks and Solander and bushfire recovery

#### **Notes relating to Gardens and Fire Retardant Plants**

I have found the **Australian Native Plant Society** website to be very informative.

<a href="http://anpsa.org.au/fire.html">http://anpsa.org.au/fire.html</a>. If you do a search for "Australian Plants for Fire Prone Areas" you should find it. There is also a list at the end of further reading and the "Landscaping for bushfire" booklet.

A side benefit of travel and meeting restrictions is the time we have to research. Norm Hulands has been catching up on past Grevillea Study Group newsletters, and in issue 61, came across this article, which he felt might be of interest.

# **Manganese Toxicity**

**Richard Tomkin runs "CHANGERS GREEN NURSERY"** a wholesale nursery in Bargara, Queensland, specialising in propagation and grafting of Grevilleas..

Forgive me if this topic has already been aired but having put up with grevilleas, grafted and cutting grown, for the past 15 years ( **This article was published in March 2002** ) that have ALL suffered from dead or dying old leaves, what LOOKS like iron deficiency, branches just dropping dead, distorted new leaves (if any) and VERY poor flowering, I thought that maybe some of you may also have similar problems and would like a probable fix.

We have all been told to mulch, avoid phosphorous, and to feed a little at a time-yes?

But nobody explained exactly what ACID soil is. To most people it implies that as 'natives love acid soils' surely the more acid the soil is the better! Our soil here is around 4.3 and all our grevilleas grew very well for a few years until we mulched again for the umpteenth time and slowly the whole garden containing 230 grevilleas) went "off".

All of the aforementioned symptoms developed over the next year or so with a number of slow deaths. After many attempts to FIX the problem (it looks like iron or magnesium deficiency) we took a huge bag of leaves for analysis to be told that Manganese was the culprit.

At a PH of 6 or less Manganese becomes more available, and even if you have not added any knowingly, it is quite possible that your MULCH has. Most (all?) wood-based mulch has a high manganese content and the worst, by far, is PINE BARK! Freshly mashed-up so-called Bush or Tree mulch is not much better either.

Compounding the problem is the tendency for all mulches to acidify the soil as they break down which, in turn, makes the manganese more available. So what we thought was good garden practice was killing our plants.

THE CURE. Shift your pH up to 6 or 6.5.

Use Dolomite not Lime. Add loads of GYPSUM. The calcium will help to suppress the manganese. Water it all in and wait for a few months. We do not advise using ANY N.P.K. fertilisers during this time; there is probably quite a bit still in the soil but is not available due to the low PH. You don't have to have a pH as low as ours either, 5.5, with a heavy wood mulch, is quite enough (to cause problems). After 2 years of Dolomite spreading I think we've got it beaten.

Have any members noticed a similar deterioration in the health of Grevilleas over time? It would help if you could let others know of your experiences through the newsletter.

#### **APS VIC Seedbank available to NSW members**

By Heather Miles

APS Victoria has reconfirmed that seeds are available to APS NSW members. An updated seed list is available from your newsletter editor upon request.

#### How this evolved

The enterprising David Drage of Northern Beaches recently wrote to APS VIC to see if NSW members could purchase seed from them.

Chris Long, the APS Vic President has advised they are happy to provide seed to APS NSW members on the same conditions as apply to APS VIC members. These are detailed in the seed list, and are basically a maximum of six packets of seed per quarter. Please note that the postage price is \$1.10 for the smaller packs of seeds

Chris and the committee from APS VIC look forward to helping NSW members with their seed requirements, believing it is important to help each other where we can.

Thanks to David for his initiative and to the generous Victorians!





The Eurobodalla Regional Botanic Gardens are to reopen soon, after the summer bushfires and covid 19 restrictions.

Watch for announcements.

# Peter Olde awarded OAM for service to native flora



Peter Olde, here admiring *Grevillea* 'Superb', is an acknowledged world expert on the Genus. Picture: Margaret Olde

Peter is a well known and widely respected member of the Australian Plants Society community. This award is overdue and certainly earned.

The following article is from the Leader News, Sutherland Shire

When Peter Olde, a newly returned Vietnam War veteran, was establishing gardens in his Illawong home in the 1970s, a friend suggested growing plants native to Australia was the patriotic thing to do.

"That rather took my fancy," he said as he looked back on how his interest in native flora developed.

"I had never thought about it before, but it seemed that it was like running the flag up for Australia and doing something important for the environment at the same time."

Peter not only embraced the idea, but embarked on a voyage of discovery that led to him becoming a world expert in this field and pre-eminent in knowledge of Grevillea.

His contribution to the knowledge of Australian native flora, made in a totally voluntary capacity, led to him being awarded the medal of the **Order of Australia** (**OAM**) in the Queen's Birthday Honours.

Peter joined the Australian Plants Society (APS) Sutherland group in in 1977, quickly becoming president and serving until 1982.

He became leader of APS's Grevillea Study Group in 1980, a position he continues to hold. In recognition of his commitment and service to APS, he was appointed **NSW life member** in 1998 and received the **Australian Plant Medal** in 2015.

Peter said his interest in Grevillea was aroused by the ability and power of the genus to attract native birdlife to his garden.

He has since co-authored the three volume **Grevillea Book** and, from 1993, been **Honorary Research Associate** at the **National Herbarium of NSW** at the Botanic Gardens.

Having collected over 5000 Grevillea specimens from all over Australia, he has described and named many new species of Grevillea. In recognition of his botanical work, *Grevillea oldei* was named in his honour in 1986 by Don McGillivray, National Herbarium of NSW.

(The plant occurs on the NSW Central Coast. *G. oldei* is a diffuse shrub of about 1m high, with arching branches and well displayed terminal flowers. Hardy in most gardens, the plant is quite happy in semi-shaded situations, and provides a focal point for smaller honeyeaters.)

In 2003, he and his wife Margaret established a hobby farm at Oakdale to display native plants to their full potential.

Silky Oaks, as it is called, was a regular participant in the ABC's Open Gardens Australia program, which ended in 2015

The park-like garden, which is filled with hundreds of native plants, including many species and cultivars of Grevillea, can still be viewed by appointment.

"Our aim was to create a garden that would display the best of Australia's native plants in the most beautiful manner possible," Peter said.

"We now have one of the largest collections of Grevillea in Australia."

# In My Garden

# Anne Bailey, Lilli Pilli

We were hoping to visit Anne's Garden in May and discuss the differences between starting a new garden, to the problem President Di has of dealing with an existing Garden.

Anne's house was also designed by Geoff Lovie (Geoff and Lesley Vincent), whose garden and house the group has previously visited.

#### Beginning a New Garden

So often when we move house, we inherit someone else's garden which can mean a mixed bag of luck. Less often we get to start with a 'clean slate'. Which is what I was lucky enough to gain when I moved to Lilli Pilli in December of 2018.

The block has a NNW orientation with a back drop of the beautiful trees of Halo Creek, and three distinct areas, full sun, dappled shade and full shade.

My aim was to develop a native garden in a white, yellow and mauve colour scheme with a couple of old (exotic) favourites, and productive areas as well.

I also felt it was important to work with the solar passive design of the new house, by developing a waterwise garden.

There have however been challenges to overcome. **The thick clay** that after rain became sodden as moisture drained down the block towards the creek, and **the wallabies** that saw a new garden as a nice place for an evening snack.

Soil improvement was tackled with fresh soil and gypsum being used in planting holes, and for some plants sand was also added. Over time, and with the addition of chip bark mulch, the soil improved significantly. Netting plants became the only way to ensure protection from the wildlife while plants were young. While a couple of plants were not successful and others required repositioning, the garden has now thrived and along with native plants conveniently



appearing naturally, the gardens are now becoming quite full. A range of plants now fill the garden, a variety of westringia, hardenbergia, grevillea, correa and kangaroo paws mix with



The 'clean slate', a time of excitement and maybe trepidation. Just where to start.



In the beginning, there was.... mulch. And someone had to supervise!



Now May 2020, not far into the journey, and Anne is making significant headway.

Weeping Cinnamon Wattle (*Acacia leprosa*), Dwarf Lemon Ironbark (*Eucalyptus staigeriana*) and Soft Tree Fern (*Dicksonia antarctica*) as well as many more. A new garden is a garden of hard work but also one of delight and learning.

Eucalyptus staigeriana is a lignotuberous iron-barked tree which occurs naturally in woodland on the eastern ranges of Cape York Peninsula. Copious Essential oil with a fruity lemon fragrance is distilled from the leaves, and is used in perfumes and aromatherapy. Interestingly, most of the oil produced from this species comes from South America. Hopefully, Anne's dwarf form will not achieve the growth of typical trees at Cape York, which often grow to 15-20m in height.

# Should we grow more fruit

# Jan Douglas

It seems to me that when we plan and plant our ornamental or habitat native gardens, and when we talk about them to each other, we focus mostly on the flowers.

If we are interested in bush foods, then fruits as well as leaves and flowers become a focus.

But I wonder whether most of us may be missing an opportunity for more colour, interest and habitat-value because we don't think enough about fruit.

What do you think? Have you chosen native plants for your garden because of their fruit? Do you see fruit of native plants as a common feature in other people's native gardens? What are your favourites?

**Fruit is a very wide term.** If we use it to mean anything that holds seeds, then it includes hard pods like those on Brachychitons and Wattles and many of the pea plants, and other seed-holding structures like Casuarinas have. Many have very attractive shapes and subtle colours. It also includes Banksia cones, and cones of Isopogon and Petrophile.

Then there are the soft fruits, like Davidson Plums, Lilly-pillies and Finger Limes.

Some of the most colourful are the **berries**, and many of these have the advantage of belonging to quite small plants, so we can fit more of them into our gardens! Below are a few berry photos from our garden and other fruit photos taken in various places.



Dianella sp. - Flax Lily



Austromyrtus dulcis - Midgen Berry Callicarpa pedunculata – Velvet Leaf



Casuarina sp

Royal N. P.



Hakea laurina - Pincushion Hakea In cultivation, NSW South Coast



.Eucalyptus preissiana – Bellfruited Mallee Kings Park, WA



Persoonia sp Geebung **Royal National Park** 



Macrozamia communis **Burrawang NSW South** Coast



Telopea speciosissima **NSW Waratah Blue Mountains** 



Pittosporum revolutum **Hairy Pittosporum NSW South Coast** 

# Recovering from Fire

# Lyndal Thorburn

Our 7-acre block at Surf Beach was burnt by the Mogo fire on New Year's Eve 2019. It was, before the fire, a forested site on a very steep slope facing east, looking out to the ocean and immediately east of the Deep Creek Dam and the Eurobodalla Botanic Gardens. We believe the areas is classified as Southeast Coastal Gully Shrub Forest by the NSW government. (Vegetation – Bateman's Bay – 8926, <a href="https://www.rbgsyd.nsw.gov.au">www.rbgsyd.nsw.gov.au</a>, NSW Department of Environment, Climate Change and Water)

This forest is dominated by *Acacia falciformis*, *A. mearnsii* (both of which grow to 10m), and *Eucalyptus muelleriana* (which grows to 40m). However, our block also has a few *Corymbia maculata* and a lot of *Macrozamia communis* (Burrawang), which also aligns it with Batemans Bay Cycad Forest.

One edge of our property embraces a small triangle of Mogo State Forest. We had a grassy and rather weedy, green, mown easement, under which the main piped water supply to Batemans Bay runs. Along the edges of this easement the *A. falciformis* are evident but follow the "live fast die young" strategy. When old, they lean and fall, and are therefore something of a hazard in our environment. *E. muelleriana*, however, is a rough-barked Eucalypt and the trees are very firmly rooted in the ground. We have had some wild storms through the area and some of these trees have been torn apart by the wind, maybe 5 metres up the trunk, but they rarely fall over. A gully starts at our property and the water flowing downhill from there eventually joins the water course flowing into the ocean at Surf Beach.

We bought the block in 2008, at the height of the last drought, and it has been a green, leech-infested place with plenty of rain, and a good assortment of typical birds – Eastern Shrike-Tit, Eastern Yellow Robin, Grey Fantail, Rufous Fantail, Kookaburras, Whip Birds and a range of parrots – ever since. We bought it because it was a wet and green oasis in time of drought, but also for the view, in part, out to the ocean.

Over the years, the area that was once cleared for a house site has been reclaimed by the Acacias and the view has been somewhat obscured. When we build, this view will be restored, as we are required to clear around



Original forest in the gully, 2008

 $3,000\text{m}^2$  of our  $30,000\text{ m}^2$  of land in line with current fire safety requirements. Our claim to fame before the fires was having all six NSW species of gliding possums in the region (not necessarily on our block), and our personal sighting of a Pacific Baza in 2016 – this is a migratory, crested raptor which, until then, had not been seen south of the Illawarra.

We have spent the last ten years (slowly) putting up fences and, more recently, planning to build the house. We erected two temporary sheds to store some personal belongings, building materials and maintenance equipment. At the time of the fire, we had a power pole, the sheds and their contents and a water tank on the site.

We didn't get to visit our burnt block until the end of January, when the King's Highway re-opened. Everything was very dry and crunchy!! Our two sheds were still upright (barely) but everything inside them (fridge, microwave, wheelbarrow, fencing materials...) had burnt, as had our wooden power pole. We had an interesting time fossicking amongst the debris and trying to work out what the remains represented. The ground was bare and the winds that were evident during our drive down that day had swept all the dry leaves off the burnt trees and they were swirling along the roadsides – so the area would have burnt again if another match had been struck. We had to give dead, leaning Acacias a wide berth.



Amongst the devastation, the burrawangs (Macrozamia communis) had already started shooting, less than three weeks after the fire.

We have been tracking emergence of plants since and recording them on the Budawang Coast Nature Map. We have been excited to see the range of native species re-appearing.

By our visit in mid-February, the established Eucalypts had sent out epicormic shoots along their stems and from the roots. Epicormic shoots are dormant under the bark and are



There were also thousands of seedlings emerging: Eucalyptus, Acacia and many unknown species.



Epicormic shoots on Eucalyptus muelleriana

released when the bark is thinned by fire. At that stage those from underground were over 30cm long, and the shoots along the trunks were starting to stick out all around, making the trees look like they had been affected by static electricity. Most of the *E. muelleriana* were shooting all the way up the trunk, but it was interesting to note our few Corymbia were shooting from the crown. None of the A. falciformis, however, had shot and we have since spent some time felling those that are close to where we walk, to make the site safe. At the same visit, the shoots on the burrawangs were bright green and over 60cm long, and bracken had emerged on the lower slopes where the old forest was thickest.

Twiners and lilies had also started to emerge, mostly along the easement, but it was, at that stage, hard to work out which was which. We could identify Glycine tabacina (Purple Glycine), Eustrephus latifolius (Wombat Berry), and Rubus rosifolius (Native Raspberry), but most of the green sheen that covered our easement was grass. We were delighted to find the insects and arthropods returning and at every visit we checked on the welfare of a trapdoor spider that lives close to our sheds. If we

sit still, she will come to the entrance to her woven burrow and wait for some unwilling victim to walk past.



Stephania japonica (Snake Vine)

At the end of February, on yet another trip to the block, we marvelled at the paddocks around Braidwood, which had been hit hard by both the drought and the terrible Currowan fire in December. By this stage we'd had significant rain, and the whole landscape had turned green.

Down at the coast, we identified a couple of twiners, neither of which we had been aware of before the fires.



Tylophora barbata (the purpleflowered Bearded Tylophora),

Unfortunately, weeds were also prolific, and we despaired at the amount of *Bidens pilosa* (Farmer's Friend – that nasty thing with the black, hooked seeds that stick in your socks) and *Sigesbeckia orientalis* (Indian Weed) emerging with great vigour along the easement and across the old house site.

By mid-March, about 10 weeks post-fire, plants had started flowering. We could identify *Lobelia purpurascens* (which we have since discovered is favoured by butterflies). A mysterious prickly thing that we had been watching turned out to be *Solanum prinophyllum*. We also had a lily (possibly *Arthropodium sp.*) in full flower, *Passiflora sp.*, *Pelargonium australe* and some ferns emerging (*Adiantum atroviride*, Common Maidenhair, and *Blechnum sp*).



Lobelia purpurascens (Whiteroot) also known as Pratia purpurascens, is prolific following disturbance such as fire, but is subsequently shaded out by regenerating scrub. Gardeners might consider it a bit weedy, as it vigorously grows through mulch in plant beds, and resists all attempts at eradication.



It looks prickly and uninviting, but Solanum prinophyllum (Forest Nightshade) is an important and prolific component of forest ecology. It flowers throughout the year, flowers attracting insects, and the fruits feeding birds.

By even later in March (the last time we were able to visit, because of COVID-19 restrictions) the Eastern Yellow Robins and Grey Fantails had both re-established and were hunting for insects on the charred ground, using the blackened branches as



a perching spot. Kookaburras called from our Eucalypts.

Other Acacia species were re-shooting from underground. And those rotten weeds were flowering!

We even found a frog (*Litoria peronii*) in the remains of our plastic tank!! It must have worked its way uphill from unburnt forest closer to the ocean, as there is no still water suitable for tadpoles nearby. I can also hear a lyrebird across the way, in Mogo State forest.

We will continue to track the recovery of our bush block, and the gradual re-establishment of its structure and wildlife, with the help of the helpful volunteer moderators at the Budawang Coast Nature Map. It is exciting to see the recovery and we are pleased to watch our wet forest come back to life, less than three months since one of the most destructive fires recorded in the region. We look forward to it returning to its former glory. At least this time we will know much of what is growing there!



Easement looking north east, in 2008.



And today. There is much to be done

# In My Garden

# Leigh Murray

#### **Traffic Stoppers**

Our gardens at Queanbeyan and Tuross are both pretty scruffy. But despite this, we have a few traffic stoppers (by our standards).

A plant that has been grabbing my attention every time I walk down one track in our Queanbeyan garden is *Callistemon phoeniceus*.

It's an elderly, sparse plant, growing in quite unsuitable conditions (it's said to like sunny, damp spots; ours is growing in shade under big eucalypts, on a dry rocky ridge). But for what seems like months, it has borne 2 beautiful scarlet flowers that light up the whole area. It really is beautiful. The photo really doesn't do it justice.

What we know as *Olearia persoonioides* is another favourite plant, and it's usually a mass of flowers in Spring. It's a small, neat plant, maybe 50cm high and wide, planted over 30 years ago in full sun on our rocky ridge. It has plugged along through multiple severe droughts, just sitting there tidily most of the year, and then flowering profusely in Spring.

I said "what we know as" because when I try to look it up on the Net, it is shown with white flowers. We got it from SGAP (delivered, as we remember, by Lyndal Thorburn) so I'd have thought the naming was accurate. A small mystery, but a wow of a plant.

(**Ed.** I contacted Leigh to discuss the identity of the Olearia, because what I remember of *O.persoonioides* is that it's a fairly robust subshrub growing in higher





elevations in Tasmania. It was grown by Austraflora nursery when I worked there in the 1980's. The plant had oval shaped leaves and definitely white flowers. So I sent Leigh on a mission, and she replied a couple of days later that she had found the original label, so back to her to tell the story.)

The original label is metal, that I printed on laboriously back then, firmly attached by wire; it's been buried for years under leaf litter.

All it says is **OLEARIA PERSOONIOIDES Autumn 88.** I wouldn't have gone to all that labelling trouble if I hadn't been sure I knew what it was. Back then, before we'd become fully aware of just how harsh our conditions were, and how poor we were at keeping plants alive, we were really diligent at labelling plants.

It is strongly likely that we got the plant from SGAP, though I don't have any written record of where it came from. The photo of the foliage shows the leaf surface is discolorous, and appears to be covered with warty protuberances.

Leigh's partner David wonders if it could be a form of *O. iodichroa*.

The challenge for members is to come to the rescue with a determination.

Regardless, if the plant is over 30 years old it is certainly a survivor, and would be a great addition to any garden.



# In My Garden

# Marjorie Apthorpe

#### More fire recovery forest observations at Currowan.

The gravel and clay of our burnt driveway entrance continues to surprise with small plants popping up. Amongst them are several plants of *Schelhammera undulata*, "Lilac Lily", a low-growing herb with striking flowers about 15 mm across. To the south, I can only find a record in the Bournda National Park, north of Merimbula, but further north between Moruya and Nowra there are many records on the Budawang Coast Nature Map (budawangcoast.naturemapr.org). The photos online show a variable flower shape, so perhaps there is more than one species involved?





A drive up the ridge nearby on severely burnt Pig Rd has yielded a couple of beautiful plants of *Scaevola ramosissima*, a species I have tried in vain to grow.

Also in the gravel along the edge of the road was one plant of *Stylidium graminifolium* in flower. These small delicate species on the edge of the road are conspicuous because the ridge was so severely impacted by fire that little of the shrub and tree layer has regenerated.



# In My Garden

# Carolyn Noake

#### The Joy of Native Australian plants

The Australian Plant Society encourages "People from all walks of life with a passion to learn about, share, grow and conserve Australian native plants and their habitats". (https://austplants.com.au),

Our South Eastern NSW group endorses these aims, and through meetings and garden visits, informs its members about the horticultural value of native plants, and acts as a social group for members. We learn from our interactions, and can implement these ideas into our own gardening practices.

Currently our activities as a group are restricted due to the covid-19 pandemic. However, whilst staying at home, many of us are spending more time playing and working in our gardens. There has been so much to do. Although enjoying the beauty of flowers is always a pleasure for the all the senses.

Some of our favourite flowering plants are Grevilleas.



*Grevillea* 'Dorothy Gordon' is a hybrid between *G. sessilis* and *G. paradoxa* and grows 1.5m x1.5m.

This plant in dry, tough conditions is on its own roots and flowers well, with attractive purple and pink conflorescences over an extended period.

We have another young grafted plant, yet to flower, growing in moister, protected conditions



Grevillea leptobotrys is endemic to South West Western Australia where it gets hot, dry summers and cool, wet winters. It predominately occurs in eucalypt woodland. Here on the South East coast of NSW we are able to grow it because it is a grafted plant. We have had limited success with plants on their own roots, with plants lasting a couple of years and gradually becoming less happy.



Grevillea longistyla is a great favourite, it seems to be always flowering in my garden. Flowers are quite large, always well displayed and constantly attract a range of honeyeaters.

It is a species from south east Queensland and performs really well in our local area, growing into a shrub 3m x 3m approximately.

We are also keen on other plants in the diverse **Proteaceae Family**, such as **Isopogon** and **Petrophile**.

Having learned to recognise the difference between these two closely related genera from Catriona and Phil, two very knowledgeable members who happen to lead the Study Group on these genera, Phil also taught us how to graft plants on a recent visit.

**Petrophile pulchella**, (conesticks), is a common shrub found locally. It grows on shallow sandstone soils in open forest or heathlands near the coast, though in our garden it tends to be happy growing anywhere.

On one of our group excursions we saw these plants in the wild; no wonder they are called **pulchella** because they are so beautiful.

This plant is about 18 months old and powered along in the drought and was able to tolerate the rains as you can see.

• The drought saw the loss of plants, though indigenous plants seemed to be the happiest of all and continue to thrive.

The ongoing drought and the fires over spring and summer had a huge impact on our native flora and fauna.



Many people lost their homes and some people lost entire gardens. We all saw the devastation first hand in nearby grasslands and forests. Much of the flora is coming back luckily; for the survival of the human race depends on the work of our inter-related ecosystems. The onset of rains, whilst welcome to all and sundry, saw the loss of more dry loving and dry tolerant plants.

This plant is a *Scaevola aemula*, purple fan flower. It came through drought, fires and rains. You can see some burnt leaves in the mulch though the plant itself is growing and flowering beautifully now that it has rained. It evens seeds itself—great for a cottage garden effect.

There has been a lot to process; our emotional, mental and physical health has taken a battering but I hope we can all still get down and dirty in the garden.

Enjoy the beauty and peace of plants.



#### **Continuing A SEED SOWING SAGA**

Last month Norm Hulands described the issues of germinating *Crotalaria cunninghamii* the green birdflower.

A while back I purchased a rock tumbler, the kind that lapidary people use to polish stones. In nature, many hard coated seed occur in harsh environments, and using the example of seed being blasted by seed in desert areas, I thought that this idea had some merit. I also had the idea that being able to regulate the amount of scarifying a seed was subjected to could offer some clues as to how to germinate difficult species. Rather than damage the



The tumbler. Note the post cylinder inside the tumbler. This is loose, and as the tumbler revolves, the inner cylinder also revolves, with the seed scraping on the sandpaper liner continuously. It is an efficient method of sanding the seed coat, without rubbing the skin off one's fingers.

polycarbonate cylinder, I cut down a poster cylinder I purchased at the post office. The cylinder is 60mm in diameter. Into this I inserted a piece of 80 grit sandpaper, so that the seed would be continuously in contact with the sandpaper as the cylinder turned. The end caps provide a tight fit so even small seed would not escape.

Norm gave me 10 **Crotalaria** seed, which was tumbled for 40 minutes. The time was just a guess, but when the seed was removed for inspection, the seed coat appeared scratched all over, so I am guessing that it might have been long enough.

The seed was soaked overnight, and by the morning 2 seed had expanded to 4 times original size. These were removed and sown, and the other seed soaked till the next day. 3 more swelled, and were sown, but after now 7 days, the remaining 5 seed refuse to show any sign of imbibing water.

It could be that some seed exhibit additional germinating barriers, but this I doubt as all the seed is from the same batch.

Anyway, I will keep tracking the germination of these, and other Fabaceae seed which I have treated, and hope to find the best length of time of scarifying using this method.

A number of Genera respond to scarifying, and over the coming months the tumbler will be earning its keep as I attempt to determine how much damage the seedcoat needs to allow successful germination.

If any member has experience in this field, I would appreciate shared knowledge.

# Eremophila

As leader of the **Eremophila Study Group** for ANPSA, and keen Eremophila enthusiast, I try to grow as many Eremophila varieties as possible - currently something over 100 (there are 236 described species and maybe double that in varieties and hybrids).

While most people think of Eremophila as a desert loving genus (and it is!), it grows well in many wetter areas and we have quite a bit of success in Queanbeyan in our rather shady site. While our plants never seem to get to the same size and vigour as in the wild (we have very poor soil, frost and lots of shade) they still grow and flower.

Winter is commonly a time of food scarcity for many birds and I was pleased to walk around the garden in early June and find we had **43 Eremophila varieties** flowering - some just the odd flower here and there, but some in full flowering glory. The red and yellow flowers are adapted for bird pollination and we regularly see Eastern Spinebills and Red Wattlebirds sampling our specimens. The mauve, pink and cream flowers are adapted for insect pollination - fewer of these flower at this time of year. In the wild, the purple varieties seem to dominate so we presume most species are insect pollinated out in their desert habitat.

There will be a special issue of the Australian Plants Journal on Eremophilas later in 2020. **If you are** interested in finding out more, the ANPSA Eremophila page is at <a href="http://www.anpsa.org.au/eremophilaSG/">http://www.anpsa.org.au/eremophilaSG/</a>.

A reminder that Lyndal is keen for members to let her know what species of Eremophila are being grown in our area. I know that some of you have a fair collection assortment of these in your gardens, and Lyndal would appreciate your input to her work as Study Group Leader.



Eremophila clock. The 43 species that are currently flowering in Lyndal's garden. Quite an impressive collection.

List your collection in an email to Lyndal, <a href="mailto:lthorburn@viria.com.au">lthorburn@viria.com.au</a>.

# Fire Response Information

Last month I asked for members to send some information about how plants have recovered from damage caused by the recent bushfires. I know from experience that this can touch a raw nerve, however if you can add to our store of knowledge, the information will benefit us all into the future.

Please can I encourage you to record which plants in your own garden, and local area, were affected, and to what degree.

Plants may have been killed outright, but seedlings have appeared. Plants may have suffered significant damage, then resprouted from either epicormic buds or suckering from roots.

Plants may have just been lost entirely.

Collating this knowledge will be of help to everyone, so I ask that you take the time to record how your plants have performed so we might all learn. I know some are making a list, checking it twice, but please don't keep this information to yourself. Send your list or report to the editor over the next couple of weeks so this work can begin.

# Herbicide Usage

So far, 3 members have advised that they have used Slasher on winter annuals with excellent results. I am unsure whether its use is to be recommended for persistent perennial weeds, but certainly for plants like Flickweed, (Cardamine hirsuta, also known as Hairy Bittercress), Mouse Ear Chickweed (Cerastium glomeratum) and Winter Grass, (Poa annua) 100% success was achieved. Also, very good results were achieved on early germinating Bindii, (Soliva sessilis).

#### **Artful advocacy**

In the campaign to save **Kosciuszko National Park** from feral horse damage, volunteers around Australia have taken up their sewing needles and paint brushes. Some have created stunning, hand-sewn replicas of *Calotis pubescens* (Max Muellers Burr Daisy) and *Ranunculus anemoneus* (Anemone buttercup), two of the alpine plants that are threatened by horses. Others, more skilled with a paintbrush, have produced beautiful paintings of *Discaria nitida* (Leafy anchor plant), alpine orchids and other species.

Calotis pubescens is a typical example of the dozen or more rare Kosciuszko plants that are listed by the Office of Environment and Heritage (OEH) as threatened species. Its known distribution is limited to five sites in the Snowy Mountains. According to the OEH, feral horses threaten this delicate flower in three ways – it is trampled by the horses, sometimes eaten by the horses, and is being out-competed by the invasive ox-eye daisy, which is spread by the horses.

Some of the craft works and paintings will be presented by **Reclaim Kosci Campaigners** to politicians, once the easing of coronavirus restrictions allows more face to face meetings.

Some will be used for fund-raising.

The Reclaim Kosci campaign, led by the Invasive Species Council, is seeking repeal of the Kosiuszko Wild Horse Heritage Act and an urgent and significant reduction in the number of wild horses in Kosciuszko National Park.

To the volunteers who created each hand-sewn flower, Reclaim Kosci provided a kit of petals and leaves, laser-cut to prevent fraying. Unfortunately, social distancing requirements have limited the organisers' access to the laser-cutting facility, so there are now some delays in producing the kits.

For the paintings, there are no delays – volunteers provide all their own materials. There are no particular requirements for media or backing. So far, most of the art works have been water colours on paper, but all media are welcome: acrylic paintings, pastel sketches, ceramics, mosaics, screen prints. The aim is to demonstrate to a politician or a major donor that someone feels strongly enough about protecting our vulnerable alpine flora to spend considerable time and skill in creating something.

All the volunteers working on this project are using slightly different approaches – an excellent way to reflect the natural variation between individual flowers. Volunteers are very welcome to frame paintings if they wish; otherwise Reclaim Kosci will frame them.

The works do need to be robust enough to be posted to the organisers, once completed.

If any APS South East members have art or craft skills and would like to contribute to this project, they are very welcome to contact Linda Groom, <a href="mailto:lindagroom@invasives.org.au">lindagroom@invasives.org.au</a>

Thelymitra cyanea, Striped Sun Orchid, fabric collage by Kerry Moir



Calotis pubescens and Ranunculus anemoneus
Photo Sharyn Wragg



Discaria nitida, by Gillian Carter

*Prasophyllum keltonii* by Cheryl Hodges



Wasophyllian kelkus



#### Committee News

Let's hear your stories. Send a contribution for the next newsletter, so everyone can see what you have been up to. Meanwhile, maybe you could contribute an article, no matter how small, or detailed, about your garden, or a special plant, or any other topic which would be of interest to members. Don't feel that you lack the knowledge or experience to tell your story. Also if you come across an item of interest, why not let others know.

To help the editor, it is best to provide your article as an email attachment in word, not PDF format, and pictures as separate jpg.

Your committee would welcome any suggestions about future activities. If you have any ideas on what excursions the group could undertake, or ideas about meeting topics, please contact any, the details of which are listed below.

#### FJC ROGERS SEMINAR WEEKEND (24 & 25 OCTOBER, 2020)

#### Prostanthera galbraithiae



**Mint Bushes** 

Due to social distancing and travel restrictions caused by the covid19 pandemic, the organisers have had to change the format of this seminar. Those who were intending to travel to Victoria for this event should contact the organisers for updated details. Email: fjcrogers@apsvic.org.au Website: https://apsvic.org.au/fjc-rogers-seminar-2020/

**The Prostantheroideae** is a subfamily of the mint family, and it is exclusive to Australia. The group is chiefly recognised by the popularity of *Prostanthera* and *Westringia* in horticulture. However, these two genera make up less than half of the subfamily's approximately 300 species, some of which bear such dissimilar characteristics that they were originally not considered as mints.

# Australian Native Plants Society Australia (ANPSA) Biennial Conference at the Kiama Pavilion in September 2021, hosted by The Australian Plants Society NSW

These conferences are held every two years and are hosted by each state in turn. The very successful 2019 conference was held in Albany, WA, with around 325 delegates attending.

In 2021, the conference is being hosted by the Australian Plants Society NSW and is being held at the <u>Kiama Pavilion</u> in the beautiful village of Kiama on the pristine south coast. To register an expression of interest, contact **Heather Miles, Secretary@austplants.com.au** 

A series of tours before and after the conference are being planned, and will likely include World Heritage Blue Mountains, Spectacular Lord Howe Island, Dramatic Warrumbungles and Pilliga, Surprising Sydney sandstone flora, and Sunny South Coast

#### **COMMITTEE CONTACT DETAILS**

President, Vice-Presiden Secretary, Minute Sec.,	Di Clark t Geoff Gosling Paul Hattersley	Ph 0402 555 330 Ph 0438 286 382 Ph 0412 426 413	<ul><li>e. dianneclark293@gmail.com</li><li>e. geoff.gosling@bigpond.com</li><li>e. paul.hattersley26@outlook.com</li></ul>
Treasurer, Membership Publicity Members	Geoff Gosling Jenny John Carolyn Noake Marjorie Apthorpe Norman Hulands John Knight Sally Power Website.	Ph 0438 286 382 Ph 0437 304 173 Ph 02 4474 3135 Ph 02 4478 1142 Ph 0427 276 803 Ph 0434 674 347 Ph 02 4474 3600	<ul> <li>e. geoff.gosling@bigpond.com</li> <li>e. peteandjenny.john@gmail.com</li> <li>e. carolyn.noake@westnet.com.au</li> <li>e. marjorieapthorpe@gmail.com</li> <li>e. normanhulands@bigpond.com</li> <li>e. johnonvista49@outlook.com</li> <li>e. sallymcdonald9@gmail.com</li> <li>southeast.austplants.com.a</li> </ul>