



Australian Plants Society

South East NSW Group

Newsletter 176

October 2021

Corymbia maculata Spotted Gum and
Macrozamia communis Burrawang

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Next Meeting

Saturday 6th November 2021,

**A visit to Deua National Park, west of Moruya
Meet at Campbell St. Moruya at 9.30am (see below)**

Hello Everyone,

It is with great delight that I am writing this note for the Newsletter. It has taken a while but we are now able to meet again and enjoy the environment of native plants as a group.

Our current aim is to plan activities for outside and to enjoy and learn about the local environment.

To this end we are planning to visit Deua N.P. to observe the regenerating bushland, and see the changes to understory plants once the canopy is removed, as occurred during the bushfires.

Our meeting place is on Campbell Street Moruya, outside the Council Chambers just west of the Princes Highway roundabout (across from where the car yards are).



Once we are assembled, our convoy will head further west along Campbell St, to join the forest roads which lead to the park.

Whilst we all like the independence of travelling in our own vehicles, all the roads we travel are gravel surface, so it would be appreciated if, as we are all now vaxxed, we could limit the number of cars in the convoy, with a preference for vehicles with good clearance.

Depending on the weather and the wishes of attendees, we could cover 80 kms on gravel roads. Might we also suggest that vehicles carry plenty of fuel, as we use more fuel travelling slowly in low gears. Details will be sorted at the commencement of the day, but any one with concerns can contact John Knight (0434 674 347) prior to the day.

The society still needs to follow all the COVID 19 safety guidelines so at this stage you will be required to have had double vaccination if you wish to come along. You will also need to sign in with your NSW COVID Safe Check in app so don't forget your phone. Also suitable clothing and footwear for bush rambles. There are no shops or facilities, so be prepared.

APS NSW Region committee has been working behind the scenes to streamline our membership process and also to discuss future plans. The society is interested in maintaining new members when they join so if you find yourself at a gathering and meet someone new, please introduce yourself and make them welcome. Likewise if you are a new member, welcome. If you have any questions or ideas you would like to discuss please don't hesitate to contact us, either by the contact us link on the website or through the committee (see the last page of this newsletter for detail). I am hoping you are all feeling positive about the future and pleased with your gardening efforts. It has been a fabulous season for growth but that can bring its own problems. Keep up the enthusiasm

At this stage the committee is holding off programming future activities. We will meet regularly and decide in a timely manner what is our best course of actions. Your input is always valued.

Sign up NOW to buy discounted products from Neutrog

As introduced in the NSW Region September enewsletter, APS NSW has arranged a great offer with Neutrog, producers of Bush Tucker and other great products for the garden. Members will be able to buy generously discounted products from across the Neutrog range on their online store. It is expected that members will be able to buy online four times or seasons a year, with delivery four times a year to one address per APS group.

Members need to opt-in. If you wish to participate,

1. Opt-in. Please send an email to di.clark293@outlook.com with the word **Neutrog** in the subject line. We will then pass your email address to Neutrog.

2. Set up. Neutrog will send you an email about how to set up an online account on their store to access the special APS NSW prices not available to the public.

3. Order. Neutrog will then advise you when the next seasonal buying window is open. It is expected this will be in mid-October for 6 weeks, with delivery in early December.

4. Collect. Initially, Di Clark will be the delivery point for South East NSW Group, and we expect that members will collect orders from her Rosedale home, or arrange for collection at our next gathering.



The offer is arranged like this because Neutrog delivers the products ordered to only one address per group. Members then collect their order from that address.

There is no minimum order for an individual or for the group so you can buy products in small quantities first to try them. Members also get a generous discount on their first order.



Australian flora - Past present future

ANPSA 2022 Biennial Conference - Kiama



ANPSA Biennial Conference, Kiama, Saturday 10 to Friday 16 September 2022

The Australian Plants Society NSW is delighted to be hosting the Australian Native Plants Society Australia (ANPSA) Biennial Conference at the Kiama Pavilion in September 2022.

For more details - austplants.com.au/ANPSA-Biennial-Conference-2022

In conjunction with the Conference, a range of pre and post conference tours has been arranged, including one to our area of the NSW South Coast, details of which have forwarded with a request to promote the tour through our newsletter



Image: Heather Miles

Sunny South Coast Pre-Conference Tour Monday 5th September 2022 to Friday 9th September 2022

This tour departs Sydney at 9am, with an additional pick up at Kiama, at 11am, before heading down the coast for 2 nights at Huskisson and 2 nights at Batemans Bay

Day one, travelling south with 2 walks, at Bomaderry and a mangrove walk at Huskisson. We may be able to fit in a walk to Wreck Bay with the focus on bush tucker plants of the area.

Day 2, we will explore Booderee National Park and botanic gardens, with your choice of a stroll at leisure around the gardens, or participate in guided walks. A visit to Cape St. George lighthouse ruins will follow, with cliff top and heathland walks. Another walk takes us along the White Sands beaches famous in this area. We can also view the newly found banksia at Vincentia.

For non-plant-oriented partners, who just want to chill out, there are several whale or dolphin watch cruises available from this scenic small port, as well as an exploration of the local waterways to bird watch or just enjoy the scenery. The Lady Denman Maritime Museum is also worth a visit or just walk along the nearby sandy beaches. At own cost.

Day 3, We will drive down the coast to Bateman's Bay to stay for another 2 nights. As before, the drive will be punctuated by stops to view and walk among representative plant communities in Murrumbidgee National Park and a visit to the Eurobodalla Regional Botanic Gardens.

Day 4, A drive to Tuross Head includes a stopover in the tiny heritage town of Mogo, where you can buy a coffee, or gift from one of the eclectic collection of cafes, galleries and shops which line the main street. We then visit 'Horse Island', the spectacular private garden which has been featured in newspapers and garden magazines for many years. Christina Kennedy, the owner, has even written a book about it. On the trip back to Bateman's Bay we will fit in a walk in either Bodalla State forest or other Reserve.

Day 5, On our last day, we now head north via another private garden and lunch in Moreton National Park and a rainforest walk. We will also stop at Ulladulla to walk the Gondwana Fossil Walk before arriving back in Kiama around 5 pm in time for you to settle into your own accommodation before the conference starts with the complimentary excursion of Kiama and its surrounds on Saturday.

More information Please note that tours are for conference participants and their partners.

Queries about the conference and tours can be directed to: **Heather Miles**, Secretary@austplants.com.au, 0408 696 356
Ralph Cartwright, Conf2022@spin.net.au, 0416 030 872 Please note: Itineraries are subject to change without notice.

Until next time, **Di Clark**

Members Musings

How to survive the lockdown – find a flora bubble buddy!

Sharon Pearson & Amanda Marsh

Our local bushwalking group wasn't able to operate during lockdown and the call of the wild was strong. So, with our enthusiasm for finding new or interesting plants, and with cameras in hand, for one day a week we dived into our local bush.

We came across a lovely assortment of orchids.



Glossodia major, Bodalla SF



Caladenia carnea, Bodalla SF



Cyanicula caerulea – Eurobodalla NP



Dendrobium teretifolium,
Eurobodalla NP

Ed. Apologies that this article was held over from last month. I can't think of a good excuse, so just sorry.

Lockdown projects

Members might recall that during the winter storms of 2020, our large *Corymbia maculata* fell, and obliterated all plants. Over the past few months I have been working on improving access to the back garden in preparation for replanting.

So here's another thing to be sorry for. During the digging and moving, I kept thinking about the AC-DC song "It's a long way to the top, when your rocks just wanna roll".



Almost half way down

Scaevola in Queanbeyan Lyndal Thorburn

I am always keen to add to our plant collection and frequently take cuttings from our forays down the coast, to add into our Queanbeyan garden. Quite frequently, I barely know what the species is but I give it a go anyway. Last year, I was taken by John's description of *Scaevola porocarya*, a West Australian Scaevola which grows is 0.2m-1.5m high on the Geraldton Sand Plains on sandstone outcrops, coastal dunes and drainage areas.

It has blue flowers in spring. I gather many grow it on the NSW coast, where it rapidly reaches 1mx1m and must be pruned to keep its shape. Anyhow, I bought one of these at the south coast group meeting sales, gave it a 20cm pot full of potting mix and fertiliser, and added it to our potted collection. It thrived during the summer.

Frost, of course, is always the threat and last winter we had more frosts than we have had in a long time, plus lots of rain and cold temperatures. I was fully expecting the *S. porocarya* to turn up its toes during this time, but it didn't turn a hair - by spring, it had reached about 75cm all round, and so last week we planted it in the ground at the top of the path down to our plant igloo. And it's flowering! Its next test will be when the unseasonably wet period finishes and we enter our next drought, though I have high hopes given its origins.



In the pink Catriona Bate

It's been a season of pinks in our garden and what a delight. Everyone is saying it is an amazing season, presumably the result of all the rain over the last eighteen months. Unlike garden designers with sophisticated design plans incorporating designated colour zones, we simply plant to suit the soil and aspect, matching the size to the location. But when it comes down to it, we buy and propagate it when we see it and then we look for a spot available in the garden. In our case the pinks are scattered all over the garden, but a season like this shows you can easily have a seasonal colour theme even if unplanned.



Isopogon 'Silvertips'

Leading the pink brigade (of course!) are the pink isopogon stunners from Western Australia. We have plants of *I. cuneatus*, *I. latifolius*, dwarf forms of both these species plus *I. 'Stuckey's Hybrid'* dotted all over the garden.



Isopogon latifolius dwarf form, 'Lollypop'

They all have more blooms per plant than ever and seem to have peaked together this year. Multiple trial plantings of a new hybrid, *I. 'Silvertips'*, have flowered early and profusely. These plants are all grafted as otherwise WA species refuse to live more than a few weeks in our garden. As we've often pointed out, these are some of the easiest species of any native genus to graft.

Perhaps there is a competition on between the isopogons and other genera at Little Forest this year. Among the other pinks performing at their best in years are *Grevillea 'Collaroy Plateau'*, *Hakea francisiana*, and several thryptomenes (one is 'FC Payne' I have never thought much of the local spiky hakea, *H. sericea*, but this year

I've been won over by its clouds of delicate pale pink flowers. The pink calyxes of *Eremophila mirabilis* are a standout.

We normally manage to kill pink scaevola plants fairly quickly but this year we have one doing well, helped by the tree branch I carefully arranged over it to protect it from rampaging wombats.



Pink flowered Scaevola is a stunning groundcover



Chamelaucium x Verticordia 'Paddy's Pink'

We have added another *Grevillea petrophiloides* to the garden and both plants are bird magnets, their long pink flower canes swinging down under the weight of their enthusiastic visitors.

Tall pink grevillea stalwarts give the garden a rose-coloured framework at this time of year. They include *Grevillea* 'Elegance' which as usual is threatening to take over the entire garden, *G. insignis ssp. insignis* and *G. wilkinsonii*. The latter has a strong odour right now so it is well located far from the house. However, it is rare as well as attractive so we should all be growing it (this species comes from the Tumut River).

At ground level a new planting of the hybrid 'Paddys Pink' (a *Chamelaucium/Verticordia* cross) has been impressive. A species of what we think is *Lysiosepalum involucreatum*, covered in pale pink flowers, is very shy in comparison with the other pinks. It hides its flowers upside-down and stays in the background (well, we did plant it behind a large callistemon). For a complete contrast, *Pimelea ferruginea* injects some electricity into the colour scheme with vivid, almost fluorescent, pink flower heads, perfectly matching with (you guessed it) *Isopogon formosus*. This new planting, a startlingly bright form originally from Carolyn and Mark Noake's Glenduart garden at Moruya, should prove to be an enduring gift. Now don't get me started on the purples...

The following discussion came as a result of some questioning by Mark Noake, and he has contributed an article based on his observations, which follows this opening comment.

Can honeybees pollinate *Grevillea*?

George Taylor; Robert Whelan

Australian Zoologist (1988) 24 (4): 193–196.

<https://doi.org/10.7882/AZ.1988.001>

The likely impact of the honeybee on a native pollination system was examined by studying the effectiveness of honeybees (*Apis mellifera*) as pollen vectors of *Grevillea* × *gaudichaudii*, near Bargo, New South Wales. Honeybees were the most frequent visitors to *Grevillea* inflorescences at the study site. Bees were found to be specific in their foraging, because only one pollen type was represented in the corbicula of each bee returning to a hive but the *Grevillea* was not present in these pollen loads.

Bees were observed foraging for nectar on *Grevillea* plants in the study area, but had no *Grevillea* pollen on their bodies and failed to transfer pollen to stigmas of 500 flowers during two hours of observations over two days.

It is concluded that bees harvested nectar from this plant species without effecting pollination, and would therefore make the plants less attractive to native pollinators without compensating for any consequent reduction in reproductive success.

Bees and honeyeaters as pollinators of *Grevillea macleayana* Mark Noake

The rather stunning cluster of fruit shown below inspired my search on the interweb for more information on pollinators for *Grevillea macleayana*. Decline in the number of European honey-bees is often described in the press as an unfolding ecological disaster; but these bees are not always the answer to keeping a species going. What follows is an amateur enthusiast's interpretation of a very interesting academic paper.



As with other plants which evolved without social insect pollinators, *G. macleayana* has adapted to vertebrate pollination. The vertebrates in this case are honeyeaters such as Wattle Birds, Eastern Spinebills, and White Cheeked Honeyeaters among others.

This study examines the effect of European honey-bees on pollination between separate plants and within individual plants.

Honey-bees were by far the most frequent visitors to a plant and removed the most pollen, yet they deposited fewer pollen grains

on stigmas. They also tended to visit more inflorescences within an individual plant than birds but did not travel as far between plants. Therefore bee pollination tended to be less genetically diverse than that performed by birds.

The birds on the other hand travelled further resulting in outcrossing between plants which could perhaps introduce some genetic variation into the process. Birds were much more likely to make contact with the stigma, resulting in a higher chance of pollination, whereas bees seeking nectar and pollen did not always touch the stigma. In the case of *G. macleayana*, bees may be mostly pollen "thieves" with birds playing the major role in pollination.

In 2009 the study's authors said, "We are currently working on comparisons of performance of outcrossed and selfed seeds and seedlings." I wonder whether increased genetic variation could strengthen chances of a species adapting to environmental challenges over time.

The six *G. macleayana* plants thriving at present in our garden were grown by cuttings sourced originally from Racecourse Creek near Ulladulla. They are very well serviced by a rich population of birdlife including Wattle Birds, Eastern Spinebill, and New Holland Honeyeaters. Our neighbour's bees are constantly working on our plants, and yet we still see the level of fecundity displayed in our clusters of fruit.

Perhaps, for the time being, nature has found a balance while there is plenty to go around.



The study mentioned above was located at <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2701754/>

To back up Mark's observations, another paper, titled "Pollination disruption by European honeybees in the Australian bird-pollinated shrub *Grevillea barklyana* (Proteaceae)" by Glenda Vaughton, published in *Plant Systematics and Evolution* volume 200, pages89–100 (1996) states

"European honeybees (*Apis mellifera*) were less efficient pollinators of *Grevillea barklyana* than nectar-feeding birds. Nectar-collecting honeybees did not contact reproductive parts of flowers. Pollen-collecting honeybees preferentially visited male stage flowers but rarely visited female-stage flowers. Fruit set on caged inflorescences that allowed access to honeybees but excluded birds was reduced by more than 50% compared to inflorescences that were visited by both types of visitors. Further, fruit set on caged inflorescences was less than on bagged inflorescences that excluded both birds and honeybees, indicating that pollen removal by bees decreased opportunities for delayed autonomous selfing in the absence of birds. Although fruit set was not pollen-limited at the study site, pollen removal by honeybees would decrease fruit set in small populations where birds are scarce. In addition, pollen removal by honeybees would reduce opportunities for outcrossing and reproductive success through male function. Although honeybees have been in Australia for insufficient time to have exerted selection on floral traits, evolutionary shifts in response to these animals are likely to occur in the future". It is noted that *Grevillea macleayana* was previously included in *G. barklyana* as *G. barklyana ssp macleayana*, so both scientific works support Mark's views.

Just Add Water! Anne Phillips

Unable to travel, goodness knows what our coast garden is doing, but I haven't missed a beat watching the Canberra garden and its transformations since June lockdown.

Our latest cycle of rain has done wonders.

To enhance the views from various vantage points inside the house, mainly from my crossword and reading desk, we have lowered the top branches on the persimmon FuYu in order to see the *Hakea grammatophylla* (from central Australia) flowering now in its sixth month. And we have removed the lower branches on the *Melia azedarach* to expose the *Leptospermum rotundifolium*, now two metres tall, which I grew from seed collected at Tianjara Falls on the Nerriga Road. And some shrubs are pruned into a fan-shape to allow the eastern sun to slant across to provide light to others.

Hakea grammatophylla



One well-performing plant is *Grevillea iaspicula*, from nearby Wee Jasper. About two metres high with red and cream flowers in terminal clusters, it was only discovered in 1980. Its status is 2E, endangered due to land clearing and stock grazing. But in our garden it seeds readily, makes a good hedge and the Eastern spinebills and wattle birds love it, as it flowers all the time.



Grevillea iaspicula

My garden is a mixture of natives and exotics. I have so many herbs and bulbs from a long-time friend who turned 100 years in June. I've been regularly helping her son tidy up her beautiful garden, which I've been visiting for 50 years and where I never left empty-handed. I tasted my first fresh walnuts, raspberries and asparagus from this richly-mulched cornucopia.

A garden gives so much joy and nourishment. There is always something interesting to witness. It represents a collection of your life chapters and encounters, preferences and colour palette.

Graft-chimeras in eremophilas Russell Wait

A couple of our members have been perplexed by, and reported on some unusual growth occurring on grafted eremophilas, and this article by Russell Wait, previous leader of the Eremophila Study Group, and reprinted from **Growing Australian APS Victoria March 2021** discusses this issue, which might prove informative.

One graft-chimera occurred in a friend's garden (Drysdale, Vic) with a root stock from *Myoporum insulare* and the graft scion material of *Eremophila hygrophana*. The new organism began as a grey shrub with small lilac corolla, and then part of the shrub changed from grey to green with a white myoporum corolla.

As sometimes occurs, this chimera is quite unstable, however it remains alive, and now has mostly green foliage. There is some thought that this mutation could be caused simply by a bite from an insect, or even sun exposure on the stem causing damage to the cells. These assertions are not supported by scientific evidence, and reasons why this occurs remain unknown;

however it is common knowledge that pruning can initiate these changes.

A graft-chimera exists at Curlewis, Vic. The eremophila scion species is unknown, with details lost over time, but my impression is that it is either *E. hygrophana* or *E. mackinlayi*.



Curlewis graft-chimera 4.5 m high x 6 m wide.

The first new organism, growing from the graft union, looked like myoporum but had grey foliage. The original grafted eremophila scion grew to a massive size and was pruned hard, which then produced an unusual large-leaved growth. Attempts to propagate from this growth were unsuccessful. Although the original plant died, cutting propagation from the second eremophila scion growth was successful and eventually planted. The plant, which has beautiful purple corolla, looks like an eremophila but is the result from propagating a graft-chimera. It is 4.5 m high by 6 m wide in contrast to *E. hygrophana* and *E. mackinlayi* which only grow to about 1 m high.

The sheer size of this plant suggests that it has some genetic material of myoporum and makes it unstable for propagation. Cuttings taken from this plant, particularly when pruned, can produce green shoots which appear to be myoporum. The plant is still growing at Curlewis, and keys out in part to *E. hygrophana*; however, I have observed cuttings from this plant which key out more like *E. mackinlayi*. The instability is further indicated by the occurrence of three flowers in a leaf axis, while at other times there is only one showing.

I have observed a plant, labelled an eremophila, which is a known cutting propagated from the Curlewis plant. Because of its size and close proximity to the house, it was pruned to a more manageable size. This process resulted in green and grey shoots which appear myoporum in size and shape

The new growth is significantly more vigorous than the original plant and may indicate that the genetic material from the myoporum may have become the more dominant.

Just to add to the curiosity and observed instability, I am aware of another graft-chimera on a plant obtained as an eremophila and from the Curlewis plant. It is now displaying four types of foliage, all occurring after pruning.

Unlike the selective removal of rootstock growth, removal of a graft-chimera growth is a continual and repetitive process. Removal of a graft-chimera requires shoot removal from the graft union which in turn could trigger the 'aggressive-growth' genetic material.

Without due diligence, it can outgrow the original plant. In my opinion, there are plants labelled and sold by some nurseries as either *E. hygrophana* or *E. mackinlayi* which have originated from the same plant at Curlewis that grows to an exceptionally large shrub.

These so called eremophila differ in the type of hairs on the sepals; notably sepals of *E. hygrophana* have glandular hairs and *E. mackinlayi* without glandular hairs.



A graft-chimera, from the Curlewis plant, with four types of foliage.

One requirement for cultivar registration is the ability for the plant to be reproduced in the same, stable form, which this one does not. A graft-chimera is not a hybrid, as that happens through cross pollination of two species. This graft-chimera, due to the inherent instability, is only a curiosity and should not be called an *eremophila*. Sharing plant material is a feature of belonging to a group of like-minded gardeners.

I would suggest that care should be taken, when selling/trading/sharing plant material from a graft chimera, or plants with the name *E. hygrophana* or *E. mackinlayi*.

Cutting or scions from a graft-chimera could be used unwittingly.



Corollas on the Curlewis graft-chimera.

The plant described on the label might not be what you wanted and you may be disappointed, especially after pruning, because of the graft-chimera instability.

Worth pointing out here is that graft-chimera can also occur on *E. revoluta*, *E. prostrata* and *E. warnesii*.

Garden Pots Some Advantages in Containing Plants Margaret Lynch

I have generally avoided growing plants in pots or hanging baskets as this can require higher maintenance and more frequent watering. But both tasks can be made less onerous by choice of container and/or plant to be used.

The use of containers can allow specific requirements of soil composition and drainage to be met easily. This enables the keen gardener to have more success growing those “must have” favourites. Containers can also be placed in optimum positions of aspect and of sun/shade for the plant without competition from tree roots. Contained plants can even become a feature of an entrance, courtyard or verandah.

Among my favourites growing happily in pots are the flannel flower (*Actinotus helanathi*) and the waratah (*Telopea* sp). I had limited success with both in the garden when we moved into town and so resorted to pots. The flannel flowers self- seed into the sandy soil of their pots so old plants are regularly removed allowing fresh young ones to flourish. On a visit to a local nursery I was fortunate to find a low growing, compact waratah hybrid, *Telopea* “**Essie’s Gift**” now growing well in a large container in a protected position with morning sun.



Sometimes it is also useful to limit the size of plants and I have done this with my 3 bush food specimens by containing them in medium-sized pots.

Lemon myrtle (*Backhousia citriodora*), pepper bush (*Tasmannia lanceolata*) and finger lime (*Microcitrus australasica*) are grouped together in a shady spot and are pruned to keep them low and compact.



My other container plants include a variety of native orchids grown in well drained pots and hanging baskets. These epiphytes which usually perch in trees, and lithophytes which grow on rocks, can withstand weeks without water, the ultimate low maintenance container plant!

So give them a go, plants can do well in containers given the right conditions.

And one last thing; pots placed in a group of different sizes or a few hanging baskets at varied levels creates far more effect than a simple row of either.



Dendrobium kingianum

Changes at Horse Island Christina Kennedy

My desire to reduce the acres of Kikuyu at Horse Island has to be sated gradually, bit by bit.

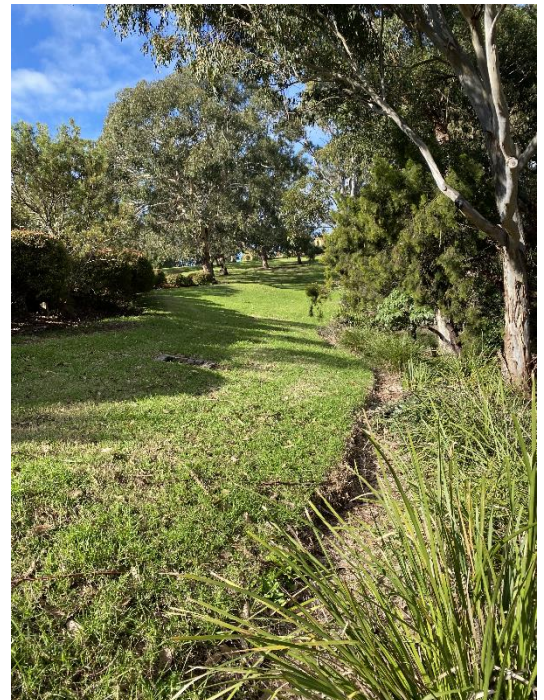
This Winter we were on the job again, starting with a big area of around 600 sq. metres between the lakeside bush and the long line of clipped *Agonis flexuosa* separating the area from the driveway to the house.

We try not to use chemicals unnecessarily so we laid down large sheets of black plastic which we anchored with rocks leaving it for nearly 2 months. An additional mini application of herbicide helped with residual growth.



Every gardener needs one

The dead thatch was broken up with an excavator followed by rotary hoeing. A big load of compost was dug in and it was all covered with coir netting to hold the soil in place. We used coir rolls to hold the steep banks.



Structural elements were strategically placed before we started planting, with big rocks which we hauled in from another place and various hollow logs which were filled with soil and arranged around the rocks.

With a shade house bursting with plants which had been propagated over the last couple of years there was plenty of material ready to go out, including *Thryptomene saxicola*, various **Prostantheras**, mainly *P. rotundifolia*, *Diets robinsoniana*, **Xanthorrhoeas**,



Lomandra Lime Tuff, prostrate *Casuarina glauca* for cascades over the rocks and some *Eucalyptus pulverulenta* **Baby Blue**. A huge number of *Dianella caerulea* **Gangbusters** is due to arrive in the next month.

It will be a few years before the result of all the effort is visible from a distance but in the meantime I hope it will probably bear some close scrutiny from interested members of our group, who can come and offer ideas for further improvement!

Preparation is the key to long term success



Planting under way, with gardener Julian Nimmo joining Christina's pride and joy, young granddaughter Bronte, a happy little future Australian plant advocate.

PROTEACEAE PROJECT

Di Clark

A few months have passed since the group was able to meet but I am pleased to report that we are commencing working bees again in October.



Bountiful results of a previous propagation working bee

working bee. John Knight has drawn up a very colourful and well thought out landscape plan and we will be using this as our guide. The plan includes plants that are readily available and frequently propagated at the ERBG and also some plants that we will add to our wish list. Members are working in conjunction with ERBG to try and source and grow these more difficult to source plants.

So stay tuned for more action and results now that we are able to visit the gardens and get involved.



Isopogon anemonifolius

The Staff and volunteers at ERBG have been looking after the plants that were propagated and I can report back that plants have been potted up and are growing.

We have also had water connected to the garden site again. We may get to plant a few plants at the next

(this reminiscence by long-time member Jenny, recently retired as Curator of the Herbarium at ERBG, offers a little insight to her dedication to her volunteer work.)

Offshore islands like the Tollgates carry a diverse group of plant communities in locally restricted patches according to the substrate and degrees of exposure to salt laden winds. Soils on the Island are generally loams and clays. Loams are usually stained black with organic matter, because the high salt content slows decomposition, especially closest to the sea where salt levels are highest.

A number of physical adaptations to the harsh environment are evident, such as uniformity of gradation in shrub height, and variation in leaf types, such as hard and small in *Westringia fruticosa*, fleshy in *Myoporum boninense* and *Carpobrotus* species. Grasses generally have hard, pointed leaves; *Austrostipa stipoides* is a good example.

It was 2007 – seems a lifetime ago – when I and a young volunteer who worked with me in the Wallace Herbarium at the ERBG (David Wallace) thought it would be an interesting trip if we could manage to get across to one of the Islands. But I knew that they were closed to the public, so how to get there? I tried the National Parks, who were willing to allow us access while they were present, but because they were spending a few days spraying Bitou bush we would have to make our own way across from Batemans Bay.

The then President of the Friends of the ERBG, Don Walton, enlisted the aid of a gentleman who owned a sailing boat to ferry us across from Batemans Bay to the island. This was great fun until it came to ‘disembarking’. There were small waves breaking on a steep sandy beach, so we had to judge the opportune moment to leap off the boat and land as near as possible on dry sand. Not an easy manoeuvre; one that I failed to make successfully, and which resulted in me falling on my face into the water. So I spent the rest of the day in sodden clothes.

After saying goodbye to our ferryman, we scrambled up a steep cliff that was almost covered with stunted coastal wattle (*Acacia longifolia ssp sophorae*) – very difficult to get through and very scratchy on the legs - and walked south along the eastern cliff edge. Looking eastward, we could see silhouetted on the crest of the land what, for all the world, looked like a man’s whiskers. David said he would scramble up through the wattle, spiky grass and various saltbushes – *Atriplex cinerea*, *Chenopodium (Einadia) nutans*, *Rhagodia candolleana* – to bring back a piece of the ‘whisker’ plant. He reported that they appeared to be all the same species of stunted tree, all the same height (obviously the effects of prevailing salt winds, but with fantastically entangled and contorted roots on the surface of the ground, making it impossible to walk in.

We were both surprised later when the ‘whiskers’ turned out to be stunted *Ficus obliqua*, normally a huge rainforest tree. Whether they all have the same genetic make-up; i.e. originating from the one seed, or are all different individuals, is something I think is worth investigating. Its environment could not be further from its usual littoral and subtropical rainforest surroundings. Another question is how the first plant arrived on the Island. I can only think that it must have been a bird, after feeding on the species on the mainland, flew eastward, pausing to rest a moment on the Island.

The North Island is divided into two sections, connected by a narrow ‘isthmus’, roughly about 1 1/2 metres wide and with a steep drop to large rocks on either side. To get to the northern section, we had to get across this narrow pathway; for me it was probably the most scary thing I have ever done.

The northern section has the highest species diversity, natives as well as weeds. This is probably partly due to the fact a portion of the of the southerly half is regenerating after the NPWS has poisoned the Bitou bush. Most of the species are those often found on black organic loams, such as *Myoporum boninense*, *Lomandra longifolia*, *Kennedia rubicunda*, and the exposure resistant sprawling shrub *Alyxia buxifolia*. *A. buxifolia* grows very low to the ground when exposed on a cliff face, but can take on the form of a shrub when growing in a more protected situation.

On the southerly portion of the northern section, where the Bitou bush had been removed, some species, such as *Marsdenia rostrata*, that grow in a moist shaded environment were seen under the canopy of a dense stand of Acacia that had colonised the space previously occupied by Bitou bush. Also seen on this section was the not often seen *Carpobrotus aequilaterus*. There is some debate over the status of this species; is it native to Australia, as well as other southern hemisphere countries or introduced here? Some references have it as introduced from Chile,

others include South Africa, and some also as native to Australia. This unsatisfactory situation is probably caused by confusion with other *Carpobrotus* species. We were pleasantly surprised by the quite small number of weedy species. Out of a total of 28 recorded species, only six were considered introduced weeds.

To get back down to the shore on the northern section of the island, where we were to be picked up by our boat transport, we had to, in my case more or less, abseil down a very, very steep slope covered with thickly growing Acacia. This was another quite scary exercise. However, it was completed without mishap. Our transport arrived in good time and back at the ERBG, I was still rather wet and muddy, after an experience not given to many.

Membership Notes Jenny John

This month we are pleased to welcome 2 new members to our group, **Anna Jarrett** of Longbeach, and **Anna Kearey** of Broulee. We hope to see you at our future gatherings.

Anna Jarrett sent this note to Jenny to let members know of her interests.

Hello Jenny

Lovely to join the group. I look forward to the walks when they start up. I'm a casual high school teacher & horticulture student (Moruya TAFE) as well as a Landcare volunteer (Long Beach landcare mostly Cullendulla - a very special littoral rainforest, estuary & dry forest environment). I've also got an expanding native garden which is growing well now after years of struggling with clay soil, kangaroos & weather erosion. I do a lot of wild walks, mapping habitat & love to create mini habitats in my suburban yard. I'm a former Discovery Ranger for National Parks, a bird lover and a shorebird educator. I'm loving the 17 years that I've lived here & call the south coast HOME!! I grew up in sandstone country, Sydney, and have deep love of the bushland here.

I'm looking forward to getting practical tips about growing native plants like banksia & grevillea & designing all native displays. I'm having lots of success with grevilleas now that I know a bit more about soil. Wanting to establish a new banksia garden and attract more small birds. I've been a volunteer guide at the Botanic Gardens (ERBG) for years & love it as a learning place & story place. Post bushfires is a whole new chapter & I'm wanting to learn lots more about native plants response to fires.

Anna Jarrett

Teacher-Storyteller-Consultant-Writer-Guide

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Anna enjoying the Flannel Flowers at South Coast Heathland Flora Reserve

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