Banksia Bytes

Native Plants Sunshine Coast

www.npqsuncoast.org

Native Plants Queensland

Newsletter

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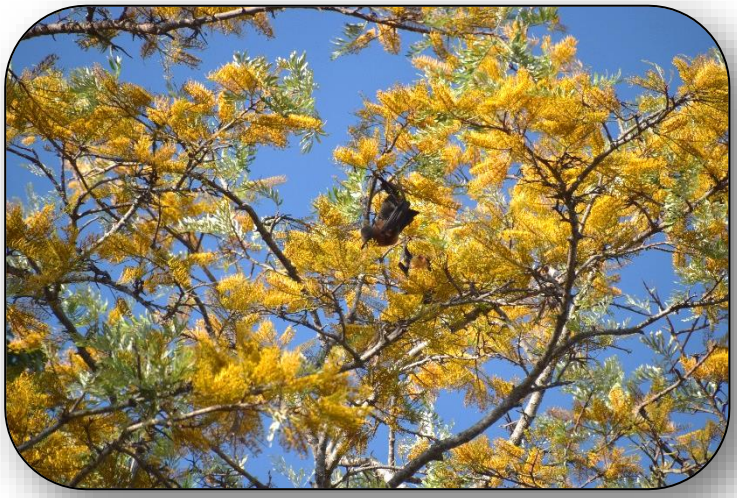
From the Editor



Have you noticed the wonderful flowering of the silky oaks this year? We have 5 mature trees and they were golden with little foliage. The birds are excited and so are the bats. The bats first arrived about 3pm. Then they stayed all day. We counted 20 on a couple of days. Tyron de Kauwe from Maroochy Council says: 'Many flying-foxes have been spotted foraging during the day and even guarding specific food trees from other animals recently. This is highly unusual behaviour but unfortunately very common at the moment due to wide scale drought and lack of available food resources for flying-foxes ranging from Port Macquarie in NSW, all the way up to Gladstone.'

Let's hope the recent rain encourages our native plants to produce the resources of good quality and quantity needed to support our diverse fauna.

Happy gardening

Wendy

Dates for your Diary

Sunday November 10 – 10am. A presentation by Mike Donovan, photographer and author of Snakes of the Sunshine Coast Region, on reptiles and amphibians we can expect to see in our native gardens and bushland reserves. Brush Turkey Enterprises, 468 Reesville Road, Maleny.

Sunday December 8 – 7.30am meet at carpark Russell Family Park, Montville for a talk and walk with Eric and Diana through this wonderful revegetated park just behind the main street. Coffee, cake/brunch at cafe afterwards for our end of year breakup.

Sunday February 9 – 10am for the AGM at Brush Turkey Enterprises, followed by a garden wander.

For Information about outings contact….

Pam	**0447 488 673**
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Some Plants in Bloom Now


Brachychiton bidwillii


Crinum pedunculatum

The Wonderful Iconic Blue Gum

by Robert Price

Prominent as a remnant tree in Tewantin where I live are Queensland Blue Gums (*Eucalyptus tereticornis*). They are recognizable by their smooth mottled grey bark which is shed in summer as the trunk grows in girth, to reveal fresh bark in shades of blue-grey and salmon-pink. Sometimes at the base, particularly of older trees, is a short stocking of rough bark.

Used in heavy construction for posts and piles, railway sleepers, etc., the heartwood is hard, durable and red, giving the tree its alternative common name, Forest Red Gum. It is closely related to the River Red Gum (*Eucalyptus camaldulensis*), Australia's most widely distributed and probably best-known eucalypt. *E. tereticornis* also has affinities with other Red Gums native to the Sunshine Coast such as *E. kabiana* (Beerwah Red Gum), *E. bancroftii* (Tumbledown Gum) and *E. exserta* (Queensland Peppermint), the latter being notable for having fibrous rather than gum bark. What they do have in common is fruit with protruding (exserted) valves and long, conical opercula (flower bud caps). It is the nature of the operculum that is described by the plant's botanical name – Eucalyptus meaning well covered (referring to the flower) and tereticornis meaning horn shaped.

The flowers, generally white but sometimes pink on older trees, are an important source of nectar and pollen for birds, animals and insects. This alone is good reason to value their place in the local landscape, but the character they lend locations such as the Noosa River foreshore at Noosaville and much of Tewantin is invaluable. They are also a primary food tree of koalas.

As older parts of Tewantin face the pressure of popularity, houses are being demolished or moved to be replaced by two or more new houses on narrow blocks of land with little room for trees. As a consequence, the spacious character of Tewantin is being lost and barely a month goes by without the removal of another Blue Gum – on footpaths, in front and back yards, even from parks. I'm aware that in some cases this is necessary if the tree is in dangerous condition. Sadly however, healthy Blue Gums that are an inconvenience are also being cut down. At least twenty in my immediate neighbourhood have been removed in the last few years and, if street trees, often replaced by Noosa Council with non-local natives such as Pongamias and Golden Pendas, both of which are becoming weedy in nearby bushland.

With this in mind, the North Tewantin Bushcare Group has been propagating Blue Gums of local provenance for planting in suitable places. Note in the photo the black seed amongst the brown chaff released by the fruit.

When Noosa Shire was nominated for Biosphere status, Tewantin was declared an area that valued its remaining indigenous trees. Although common in the bush – their natural distribution extends from Gippsland, Victoria to Laura in North Queensland – Blue Gums in urban areas all over the Sunshine Coast are steadily disappearing. I would urge anyone who has the room to grow a magnificent and iconic Queensland Blue Gum.

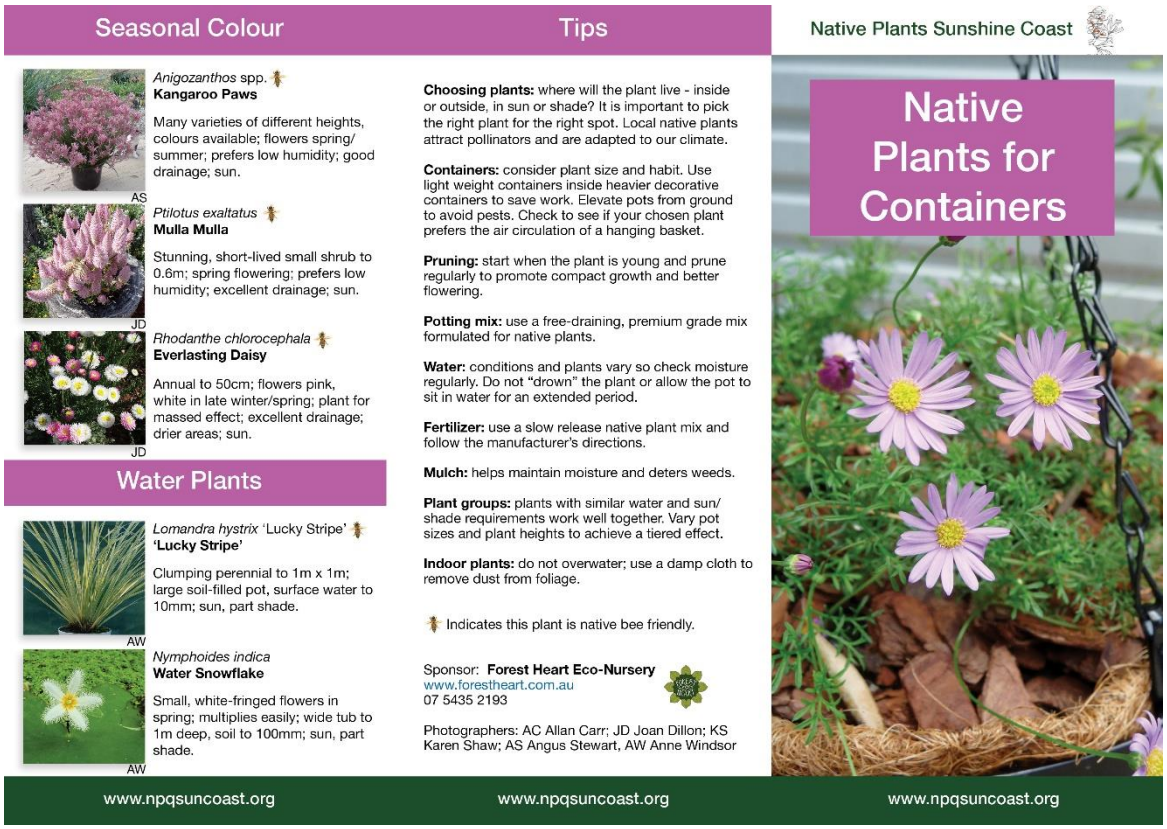
NPQ Spring Flower Show and Plant Sale at the Brisbane Botanic Garden September 2019

The auditorium was a blaze of colour; the plant buyers were keen; the questions were many and varied.

Along with many other Branches, Sunshine Coast put on a display. Joan Dillon's floral arrangement and the Ozothamnus 'Colour Surprise" (at the bottom left of the display photo) were great hits.

'Colour Surprise' is one of a range of native plants marketed under the Aussie Colours label. https://aussiecolours.com.au which is part of the University of Queensland's UniQuest initiative. A surprising range of plants is being developed for the horticulture market – check it out.

Native Plants for Containers Brochure is now in print!



Native Plants for Containers is a major revamp by NPSC of the NPQ publication Australian Plants for Containers. It is now a sister publication to our Native Plants for Native Bees and Native Plants for Birds.

The Publications team are a hard working and talented group. We have many years of gardening experience to draw on and some wonderful photographers.

Thanks to Joan Dillon for so many of the plant suggestions and descriptors, Anne Windsor for water plants and editing, Wendy Johnston for ferns, Allan Carr for so many of the photos and Deb Wagner for her stunning skills at layout.

Without our sponsors, Spencer and Karen Shaw of Forest Heart Nursery, and this great team, there would not be a publication.

And a very special thanks to Marie Livingstone as the driving force behind the project.

Our challenge to you all is - "try photographing Hoya next time you see it in flower!"

Myrtle Rust – Is There Hope in the Backyard?

By Deb Wagner

When we purchased our land in 2011, it had growing along one boundary 6 mature *Syzygium jambos* trees infected with myrtle rust and very unhealthy. The intention was to remove them but the job was going to be huge and the task kept falling to the bottom of the work list.

This year there has been a noticeable change. One of the trees had a branch overhanging a lime tree so it was lopped off. Once on the ground it was noticed that not only did the foliage contain myrtle rust, but also the remains of numerous blossoms and fruit. The other trees were then closely inspected and they too were found to be in bloom and bearing fruit. The overall foliage on all the trees was looking much healthier than in past years.

The hope is that the jambos trees have turned the corner and have not only survived the rust but are beginning to thrive and produce seed. It will be interesting to see if other landholders are noticing similar changes to their rust-susceptible trees.

The photos are all from the lopped branch, showing the new growth still affected by myrtle rust, a forming fruit and a spent blossom.

Blossom

Fruit

Rust

Moths were here!

by Wendy Johnston

We visit a property near the Balonne River, just upstream of the dam, every year about this time. The drought is severe with the Balonne in this area reduced to large waterholes. I realised today there are very few moths. Usually moths are a feature here in summer – you know the signs: opening doors at night quickly to avoid the influx of moths; birds scavenging under the verandah light in the early morning; windowsills full of dead moths. But there are none of these signs this year. I am assuming the drought has dried up the moths' food resources? A question for our Moth expert.

There are no moths to photograph.

The Bee Pond

by Anne Windsor

As many of you know, I love native water plants, and grow a great variety in tubs both at the Sunshine Coast and out in the country near Kingaroy in the South Burnett. This story relates to water ponds at the Kingaroy property, but I think it is relevant everywhere in these dry times.

As I'm sure you know, it is an exceptionally dry time out here, drier than I have seen in the past 25 years I have lived here. However, I am lucky to have enough water to share it with the local fauna - kangaroos and wallabies, goannas, and many other creatures come to a small trough for a drink. A multitude of birds use the birdbaths, and frogs rely on my water tubs for habitat.

What I was unprepared for was the number of insects which use the water in my tubs. And what was even stranger was that the majority of these insects were visiting just one tub.

From dawn to dusk they came - mostly European bees, and not just a few, but an almost constant stream, along with many different native bees, and wasps of all shapes and sizes. It was the most extraordinary sight, and the whole area around this one particular tub hummed.

Then we had an inch of rain, and suddenly no creatures came to visit the pond. I'm almost certain they will return if there is no follow up rain, so I'll keep the pond topped up, ready.

So why this one particular tub? I think the vegetation in the tub is the answer. It is, as you can see in the photos, almost completely filled with plant material. Other tubs have areas of open water in them, which don't seem to appeal to the insects. Do they feel more protected from predators? Do they feel less likely to drown? Whatever the reasons, the pond does feel kind of magical. And it is so important for so many small creatures. Every backyard needs a magical pond. The wildlife will thank you.

Poison in Paradise or Fruits of Death!

By Spencer Shaw

What a dramatic and attention-grabbing headline! There's nothing quite like a bit of fear to bring out the voyeur within. Given the recent removal of a White Cedar from a park in Maleny, I think however that it may be timely to again look at some of our poisonous plants.

Over the millennia, plants have evolved various means to stop us greedy herbivores and omnivores getting too carried away and eating them all into oblivion. Some are prickly – such as the tendrils of Lawyer Cane *Calamus muelleri*; some are hairy – such as the fruit of Foambark *Jagera pseudorhus*; some are tough – such as the leaves of *Wilkea macrophylla* and some are … poisonous!

Well actually, most if not all plants have developed some form of chemical defence systems. Take many of the leafy vegetables we eat such as spinach or silverbeet. Their leaves are laced with oxalic acid, an irritant that is removed when we dispose of the water we cook them in.

Quite often survival comes down to the tolerance and adaptation that animals develop to the range of chemicals that plants defend themselves with. For example, 1080 or sodium fluoroacetate is a chemical commonly used for poisoning feral animals in Australia. It also occurs naturally as a defence chemical in some Australian plants and consequently many of our native herbivores have developed varying degrees of tolerance to it.

Another interesting example of a specialist plant-animal relationship is that of the Richmond Birdwing Butterfly and its host plant. The Richmond Birdwing, *Ornithoptera richmondia,* has evolved with its local food plant *Pararistolochia praevenosa,* the Richmond Birdwing Vine. The vine *P. praevenosa* has a powerful chemical arsenal that keeps most other herbivores away, however the Richmond Birdwing has developed a high level of tolerance to these chemicals, and its caterpillars can feed on the new growth. This degree of specialisation by plant and animal has many advantages. For the plant, its toxicity allows only specialist herbivores to feed upon it; and for the animal, if you can adapt and specialise to the consumption of highly toxic plants, you often have very little competition. The specialist adaptations of the Richmond Birdwing however have left it very vulnerable. The loss of its specific food plant to habitat clearance has been a major blow, but on a more sinister level the introduction of a South American vine species *Aristolochia elegans*, the Dutchman's Pipe, has been its greatest threat. *A. elegans* is related to our local Birdwing food plants but contains much higher levels of toxins – ironically, the same toxins that attract the Richmond Birdwing in the first place! The butterflies lay their eggs on this vine but the caterpillars soon succumb to the higher levels of toxins.

So far we have mainly discussed (very briefly) the chemical defences of plants against herbivores. The protection of their leaves and stems from the greedy herbivores is understandable, but what about fruit - surely they wouldn't be poisonous when they need to be eaten to be dispersed? Or would they?

Birds and mammals are the main seed dispersers, and both groups of animals have quite different digestive systems. Birds are often better seed dispersers because their digestive systems allow seeds to pass through quickly and unharmed. Many birds also appear to have developed greater tolerances or immunity to fruit toxins as opposed to many mammals that are a better guide to us as to what is and isn't edible.


Melia azederach

Generally, we can taste what is all right to eat in regard to fruit, but this is not always the case. Fruits such as those of White Cedar *Melia azederach*, Chain Fruit *Alyxia ruscifolia* or Tie Bush *Wikstroemia indica* don't taste too bad at all from personal experience, but apparently are listed as poisonous. Even more insidious is the Finger Cherry *Rhodomyrtus macrocarpa* of Nth QLD. Its tasty fruit are documented as causing blindness when consumed. However it is possible a fungus present on the skin of the fruit may cause this injury. To add more confusion to the issue, many fruit that are apparently edible, taste – well let's be honest, awful! The Native Grapes *Cissus* spp. are extremely astringent and to my mind are far from edible, but it is quite likely that birds do not even detect this discomfort and the astringency merely acts to speed the travel of the seed through the bird's gut, preventing digestion of the seed.


Wikstroemia indica

In finishing, I hope I haven't left you all feeling that our native forests are full of 'poisonous potential', with toxic fruit ready to jump down your throat at every bend in the trail, or stinging tree leaves waiting in ambush! After all your average domestic exotic garden can be a far more dangerous place, with a whole suite of garden plants that you take for granted, being extremely toxic! Plant poisons are in fact a part of life. Without them the herbivores would know no limits and deserts would be our domain. Hmmm, *limits* - now there's an interesting concept for us humans…

ANPSA 2019 Albany by Joan Dillon

What a great conference. The themes KNOW, GROW, CONSERVE were exactly what we are all about and the excursions were really beyond description in terms of wildflowers and landscapes. Not that we don't have a lot to offer too but WA does have some spectacular coastal national parks.


Dampiera sp.

John and I participated in the "Coasts and Forests" pre-conference tour from Perth to Albany with guides Bronwen and Greg Keighery, botanist, plant ecologist and social historians. Each participant for all tours was provided with a small hard cover spiral wire booklet providing the itinerary, background information and an indicative plant list for each site visited. The latter was very useful in the evenings as we checked through our photos!


Diplopeltis sp.

The WA Wildflower Society extended their annual show in Albany by a day to allow tour participants to see it. Many of us took photos of plants and their labels to help further in identifying what we saw once we were back home and embarking on photo sorting and labelling – a big but rewarding task.

A wide range of topics relevant to each theme was covered during the conference, from exploring the fossil records to surprising differences in floristic diversity on three geographically close Bush Heritage Australia properties within Gondwana Link; to specific genera. We learned that few of WA's diverse eucalyptus flora, particularly the mallee gums, are in cultivation (and some have stunning flowers) whereas many banksias are well known in horticulture.


Hibbertia sp.

The AJ Swaby address by conservation biologist Professor Steve Hopper was a highlight. His focus is on old, climatically buffered infertile landscapes (Ocbils) such as granite outcrops. The local Noongar people call these landscapes kaat and it seems they have always been largely off-limits as they have rich endemic flora and require special management. New research using both western science and Aboriginal studies has revealed fresh perspectives on wildflower evolution, ecology and conservation.

We enjoyed an in-conference tour to the Stirling Range which has widely diverse flora due to differences in climate (rainfall) and altitude. Colourful "gardens" abounded. I could go on, but a few photos will help!

Reports for Outings and Events

September 15: Propagation Workshop, led by Karen and Spencer Shaw at Brush Turkey Enterprises.

26 enthusiastic plant folk, ranging from the professional to the rank amateurs, gathered to soak up knowledge from the Shaws.

Karen's teaching background was on display with wonderful charts to support her talk on the various reproductive methods of plants. The challenge in a production nursery is to mimic what happens in nature and do it on an industrial scale.

After a scrumptious morning tea with a bush tucker flavour – including home made jam, Spencer shared his extensive experience in gathering material and persuading plants to reproduce. He has a very inventive streak and shared excellent tips. Many were busily making notes.

Karen put us to work doing cuttings and some groups quickly filled trays with very neat straight cuttings, others – well, we got there in the end.

Karen will have to let us know what our strike rate was!

Karen with a bucket of *Rhodosphaera rhodanthema* seeds

October 20, Lyola Pavilions in the Forest

Sixteen members met at the entrance to Lyola in Wootha. This area is very hilly with areas of rainforest and wet sclerophyll forest. We walked up the hill from the entrance to the resort, identifying trees, shrubs and vines and listening to Spencer's very informative commentary. Around the resort itself there are some interesting plantings, most notably a huge *Lepidozamia peroffskyana*. Thanks to Spencer for sharing his knowledge with us.

Find the bird …

"People watching bird watching people"