

Banksia Bytes

Native Plants Sunshine Coast



www.npqsuncoast.org

Native Plants Queensland

Newsletter

February 2021 Number 24

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From the editor

We have had a great summer of rain and our garden is looking very green. Sadly, our bunya pine appears to have no mature cones this year. In this newsletter, you will find an informative article, by Spencer, on these wonderful ancient giants. The recent rainy days have produced a variety of fungi, one of which (photo shown), hadn't been noticed here before. Joan has written an article on some plants that look very much like fungi. My fungi were pink and easy to see, but Joan's plants I would have instinctively written off as fungi. So, keep on the lookout for things that just aren't what they seem. Anne describes her frog hotel, which is very popular with frogs, and the Pollinator Link group have been trialling bee hotels. Included in this newsletter are photos of plants seen on people's walks in our area since August last year.

Enjoy your gardening

Wendy



Unknown fungi on the end of a log under the litter



Stenocarpus sinuatus



From the President

What a year 2020 was! Covid-19 spread rapidly around the globe and as a consequence of this disease (and the physical impacts on those infected) we've all had to change our lifestyles to reduce social interactions to limit its spread. We have been very lucky in Australia and in particular Queensland thus far, but as demonstrated in the second week of the new year, lockdowns can happen anywhere and anytime. Let us just be thankful we are all relatively safe compared to the rest of the globe.

The work and activities of NPSC were on hold for the majority of 2020. Due to the cancellation of large events such as the Queensland Garden Expo, World Environment Day, Native Plant Sales etc we have been unable to undertake our regular extension work with the general public. Our ability to meet as a group and run our monthly events was also put on hold for the majority of 2020. However, we still managed to squeeze in great walk at Bellthorpe Stays October, as conditions allowed. The mainstay of NPSC for 2020 has been Banksia Bytes. Thank you to Wendy for keeping it up and running as a beacon of green, to promote our group and keep us all in touch.

This year sees our events co-ordinator and all-round powerhouse Marie Livingstone retire after many years of direction, service, commitment, and energy to NPSC. Thank you, Marie.

As 2021 will continue to be a year of focusing on leading our lives close to home, we have a great opportunity to interact with the wildlife closer to home. As such our theme for the year is "Gardens for Wildlife", which be the focus for events we participate in and educational resources we develop. NPSC will continue to plan for the big events (although they might not happen!), and we will continue our walks as conditions and numbers permit - check out the great line-up Pam has planned.

Hope to see you at our AGM and at some stage this year. All the best and stay safe. Cheers
Spencer.

The program for early 2021

FEBRUARY 2021.

Sunday 14th, February: AGM, 10.00am at Brush Turkey Enterprises, 468 Reesville Road, Maleny. Guest speaker Eric Anderson on Bimblebox. Byo morning tea. All welcome. Enquiries: lpw3@bigpond.com or 54296845 or our website.



MARCH 2021

Sunday 14th March: 9.00am presentations, speakers Mike Donovan and Ian McMaster at Hinterland Business Centre, 38a Coral Street, Maleny, next to Barung Landcare office. Enquiries: lpw3@bigpond.com or 5429 6845 or our website.

APRIL 2021

Sunday 11th April: Excursion to the University of the Sunshine Coast Heath Translocation Site, led by Spencer Shaw

Saturday 24th April: NPQ plant market Saturday April 10, in the Samford Showground Barn. Market Set-up Friday.



Spectacular Crab Spider, *Thomisus spectabilis*.

This spider was on the bud of a *Melastoma* flower. The beautiful large flower confirms the plant is the exotic *Melastoma candidum*. The leaf of our local *Melastoma malabathricum* has 3 longitudinal veins with 2 distinct intramarginal veins, while the leaf of *Melastoma candidum* has 5 longitudinal veins with 2 less distinct intramarginal veins. *Melastoma candidum* is a weed, forming dense thickets and outcompeting native species. We will enjoy the flowers and then remove the bush.



Bunya-Bunya, have you hugged a Dinosaur today?

by Spencer Shaw

One of the truly striking trees of the Blackall Range is the Bunya – they are awesome, awe-inspiring, and awfully scary if you're under them when the cones are dropping. The cones will of course be dropping very soon, somewhere between mid-January and late February. So don't say I didn't warn you, if you are silly enough to park your car under the shade of one at this time of year!



It is referred to by British Settlers as the Bunya Pine, although it is not a Pine but a conifer. The name Bunya is an anglicisation of the Kabi-kabi / Gubbi-gubbi name Bonyi-Bonyi which was perhaps a widespread name throughout the First Nations of SE QLD. The botanical name is *Araucaria bidwillii* and it is a member of the ancient and noble Araucariaceae family. The Bunya has a very limited and scattered distribution in SE QLD, between Gympie in the north, Mt. Mee in the south and west to the Bunya Mountains. There are also two other small areas in Nth QLD at MT. Lewis and Cannabullen Falls where the Bunya has survived. Other local members of this family include the Hoop Pine, *Araucaria cunninghamii*, and the Kauri Pine, *Agathis robusta*. There are only two other Australian members of the family Araucariaceae, the Norfolk Island pine and the more recently discovered Wollemi Pine *Wollemia nobilis*.



But wait, there's more! The family Araucariaceae is a family of plants now scattered across the landmasses that once made up the super-continent of Gondwana. The first member of the Araucariaceae family to be recognized by western science was the Monkey Puzzle Tree, *Araucaria Araucana*, found in Chile, South America. The name Araucaria is taken from the Araucana First Nations people of Chile. Several other Araucaria are found in South America but the hotspot for Araucaria diversity is New Caledonia where there are a total of 13 endemic *Araucaria* species – amazing! There are also members of the Araucariaceae family found in New Guinea and New Zealand.

In the far distant past (approximately 175 million years ago) conifers dominated the flora of the globe and the family Araucariaceae was widespread. Fossil records of Bunya like species have even been discovered in places as far afield as Yorkshire in the UK. The semi-precious gem, Jet, that is sourced from Whitby, Yorkshire is derived from fossilised Araucaria timber. These trees well and truly are living dinosaurs and we should feel forever blessed that we are fortunate enough to have them as neighbours.

But back to the Blackall Range! This area was once referred to as the Bunya Mountains by early European colonisers and there was initially recognition of the importance of this country to First Nations people. Prior to Queensland becoming a separate colony in 1859, there was some degree of protection from squatters and timber getters. However, with the need to grow the economy of the new colony, our Bunya Mountains were opened to timber getters and settlement and the towering forests of this sacred country felled, the forests cleared, and this country subsequently

was called the Blackall Range. We must now travel to the other Bunya Mountains (200km due west of here) to get an idea of the towering forests that once covered what we now call the Blackall Range. The Bunya Trees at the Bunya Mountains are a truly awe-inspiring sight. Massive tree trunks stand like the wrinkled feet of towering dinosaurs and make their mark on these forests like no other trees can – to think as we stand at the base of these trees, that the trees that once covered what is now the Blackall Range would, in all likelihood, have stood even taller with the higher rainfall that we get here.

The Bunya loves fertile, moist soils (generally volcanic in origin i.e. basalt) and they require between 800 – 2000mm of rainfall per year. They do however also have the amazing ability to harvest cloud moisture on their leaves and direct this condensation down the trunk to their roots. This process is seen at its best at the Bunya Mountains where the altitude of 800 -1000 metres sees lots of cloud hit this range and it is harvested by the Bunya.

One of the exceptional features of the Bunya, besides the symmetrical form, is the seed and cones. The cones can be up to 300mm long by 250mm wide and weigh up to 10 kg. As mentioned before, these cones when falling from 30 - 40 metres can be somewhat dangerous, but fortunately they fall naturally for a relatively short period between late January and February and the rewards far outweigh the hazard.

The size of these cones and their ability (or should I say inability?) to spread naturally is probably one of the main contributing factors to the limited natural distribution of the Bunya. During previous dry spells in the earth's history the Bunya would have only survived in the few refugia that it finds itself in and it has had little opportunity to spread since.

The Bunya however, found a new way to get around with the arrival of humans in Australia. The seeds of the Bunya pine are a fantastic and tasty resource for hungry humans and for First Nations people, the Bunya not only nourishes the body but also the soul. The bumper crops of Bunya cones that occur about every three years led to great gatherings of people for a non-stop Bunya feast and cultural festival. It is believed that people would have spread the Bunya pine as they moved seed about the country.

The arrival of Europeans initiated, on one hand, the devastation of the Bunya forests of the coastal ranges due to timber exploitation and land clearing, but also their spread across Australia, New Zealand, and many other countries as horticultural specimens.

Thankfully, the Bunya is regaining its cultural importance in our area and many are being planted or even regenerating in cow paddocks, where it is one of the few trees that repel cattle due to its prickly foliage. Take pride in this special tree in whose country we now call home, keep your eyes out for some cones to grab some seeds from them to feast on the bounty of Bunya.



Boiled Bunyas

Boil Bunya nuts in salty water for approximately 20 minutes. Remove from water, cool briefly till you can handle them and then slice in half from the pointy end down to the rounded end with a very sharp knife (take care as this can be more dangerous than standing under a Bunya Pine when it's dropping seed if you're not careful!). Scoop out the halved Bunya seed from their shells and serve while still warm with a dash of butter to taste - simple but tasty - yum!



A few flowers seen at Emu Mt, August 2020



Allocasuarina emuina



Patersonia glabrata

Balanophora by Joan Dillon

Several years ago, I noticed clusters of a strange plant/fungus? in and under the leaf litter (see photo). Our dry vine forest ecotype is a subset of the former sub-tropical lowland rainforest designated for this area, and cleared from the 1890's on. Whilst there are some remnants, most of the present forest is either re-growth or has been planted in the last 25 - 30 years.

A characteristic of the dry vine forest is a sparse understorey and a LOT of fallen branches and other woody material. I therefore assumed that the apparently new arrival (I hadn't seen it before) was a saprophyte of some description. A search of Mangroves to Mountains revealed that our plant is in fact a flowering plant and rather than a saprophyte is a leafless root parasite on nearby trees, with scales replacing leaves.

Its full name is *Balanophora fungosa*, for obvious reasons. To quote M to M, a ring of tiny white male flowers forms below the pale brown female flowers. It's been appearing fairly regularly, mostly in late spring, but this year there were thousands in moderately large colonies. Apparently, the conditions over winter and early spring were perfect for this uncommon plant, presently dry and black and progressively disappearing under the latest layer of leaf litter.

I'll look for it again later this year and am now well and truly on the outlook for other strange inhabitants of my own "backyard".



Balanophora fungosa

The Frog Hotel By Anne Windsor



I came across an article a while ago, (<https://www.abc.net.au/news/rural/2018-04-27/frog-hotel-on-outback-station-becomes-social-media-hit/9699092>) which described how a hotel solved the problem of green frogs coming inside the premises, by creating a 'frog hotel' in the hotel. The frog hotel was simply constructed by putting several pieces of pvc pipe into a bucket filled to one third with water. The frogs were relocated to their hotel, and took readily to it.



We don't have a frog issue inside our house, but we do have lots of frogs around outside, possibly due to the number of waterplant tubs nearby. Since we don't have a lot of trees or much vegetation near the house - due to a combination of drought and fireproofing - the frogs often take up residence in quite inappropriate places: under buckets of potting mix; inside folding chairs; inside pot plant reservoirs and watering cans etc. etc.

In the midst of the drought last year, I decided the frogs needed a better place to live. Using the article's design as a starting point, Jim and I created our hotel, and began to relocate frogs into it as we came across them. The main design difference with ours is that some of our pipes have elbows attached. The elbows just mean that it's difficult to see into the pipes, but it gives the frogs an opportunity to rest horizontally as well as vertically. We placed gravel into the bucket - approx 5cm - which stabilises the pipes, and we keep the water level just over the top of the gravel. You need only to remember to top up the water every few days and your frogs will be very happy, as the pictures illustrate.



The hotel is located in full shade on our verandah, near the kitchen, so every night there are plenty of moths close by for the hotel residents to feed on. I love seeing them emerge in the evenings, mostly little ones but sometimes a big one too.



So far, Green Tree Frogs (*Litoria caerulea*) are the only species that have taken up residence. And I think they like it!

Post Script: Apparently I wasn't the only one to be inspired. Check out these other links for lots of variations on the theme, and have fun building your very own 'frog hotel'.

<https://brisbanelocalfood.ning.com/forum/topics/frog-hotel>

<https://www.miragenews.com/how-to-build-a-frog-hotel/>

<https://www.ipswichfirst.com.au/how-to-check-your-frogs-into-a-hotel/>

Native Solitary Bee Home Trial

Posted on 14/01/2021 by Mt Gravatt Environment Group

By: Michael Fox

Australia has over 2,000 species of solitary native bees of which twelve have been identified within

Mt Gravatt Conservation Reserve. My first introduction to these special locals was wondering about the green insect flying past while we were having coffee outside. A video captured a female Leafcutter Bee flying into the back of the cat's scratching post with pieces of leaf rolled between her legs to make a nest for her eggs. Solitary native bees do not form colonies or make honey.



The initial aim of the Pollinator Link® project was to create wildlife links between urban bushland with Water, Food and Shelter in backyards, balcony gardens, schoolyards, etc. Pollinator Link® team is proactively increasing invertebrate diversity with the Guardian Bee Home project and promoting the importance of [Plant Local to Feed Local](#).

The support of Cr Fiona Hammond (Marchant Ward), allowed a trial of solitary Bee Homes based on the UK Mason Bee Guardian Scheme. Eighteen Guardian Bee Homes were installed in Terry Hanson Reserve at Chermside, and Crosby Road Bushcare at Albion.

Part of the trial was to test the effectiveness of the Mr Fothergill's Small Bee And Insect House from Bunnings, which we believed were poorly designed: tubes too short and diameters too large, and likely to damage to our native bee population rather than help. Bunnings "Bee Houses" were co-located with the Guardian Bee Homes for comparison.

The target species for the Bee Homes are "Boarders" like Leaf-cutter and Resin Bees which find a suitable hollow to make a nest. For the trial we used a mix of tubes from UK Mason Bees (7mm), Crown Bees USA (7mm) and simple paper straws (6mm) from BigW.

The tubes 15 to 16 cm long allowing for a healthy mix of female (laid first) and male eggs. Male bees hatch first then wait for the females to hatch. The females are also the most important: they do all the work, so having male eggs at the front of the tubes adds a layer of protection from attack by predators. The UK and USA tube have removable inners that allow for filled tubes to be sent to a central location for processing and distribution to other locations. Replacing the inners each season reduces the risk of parasite build-up keeping keep the solitary bee population healthy

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Leaf-cutter Bees at Crosby Road Bushcare used leaves of Native sarsaparilla *Hardenbergia violacea*. The female cuts circular sections out of the leaves before rolling up to carry off to their nest site.

The most successful Bee Homes were installed between 1 and 1.5m above ground, received morning sun with shade during the middle of the day and afternoon.



Native sarsaparilla
Hardenbergia violacea



Thanks for the nice home out of
the rain.

The design successfully handled multiple storms without damage to the bee tubes. However, they did not survive the attention of an enterprising Ringtail Possum, *Pseudocheirus peregrinus*, who threw out the bee nesting tubes and moved in.



Ant Invasion

As we expected the Mr Fothergill's Small Bee And Insect House from Bunnings were not effective with some actually falling on the ground. The only insects that used these houses were Grass-carrying Wasps and ants.

Read the final report: [Native Solitary Bee Home Trial](#)

The next step is a larger scale Guardian Bee Home trial with Pollinator Link® gardeners.

***Carronia multisepalea* for Southern Pink Underwing Moth**

Extracted from the Cairncross Connect Community Newsletter, November 2020



Southern Pink Underwing Moth



Larva of Southern Pink Underwing Moth

So what can we do to help reverse this decline in the carronia vine and the Southern pink underwing moth? As part of their 'Back from the Brink' series, Natura Pacific are working with Native Plants Queensland's Dr Bonni Yee and retired honorary CSIRO fellow Dr Don Sands, to propagate 10,000 carronia vines to repopulate suitable rainforests across South East Queensland. Growing the vine from seed has been a great challenge, with most not producing any plants and the seeds themselves being almost impossible to find. Consequently, stem cuttings are being used instead. The cuttings are taken from a number of private sites around South East Queensland and then propagated in a laboratory. Once grown, male and female carronia vines along with a small syzygium or lillipilli species will be provided to local councils and private landholders within the moth's native range. The vines will provide the food plants for the caterpillars and the lillipilli, the food for the adults, which like to suck the sugars from damaged and decaying rainforest fruits.

The aim is to establish healthy, genetically-vigorous male and female vines along with fruiting lillipillis to increase potential breeding spots for the moth. Ultimately, the hope is to replicate the huge success of the Richmond birdwing butterfly and vine project nurtured by Dr Don Sands throughout the past 20 years. To register your interest in planting the vines on your property please email the project coordinator mark.runkovski@natura-pacific.com.



Plants seen on people's walks since the last newsletter:

Marcoola to Yaroomba path, January 2021

There were quite a few *Geodorum densiflorum* (pink nodding orchid).



Seen at Maroochy Regional Bushland Botanic Garden, October 2020

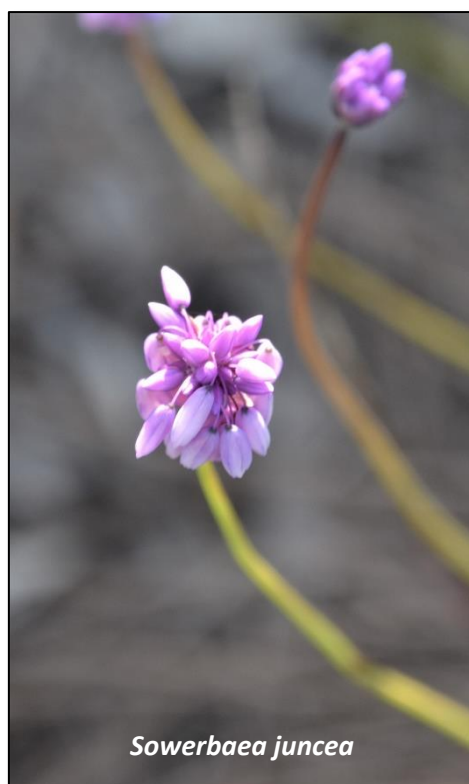


Maroochy River Conservation Park

There is a path which starts opposite the entrance to the Novotel on Ocean Drive which goes through the Maroochy River Conservation Park to Mudjimba. We didn't make it to Mudjimba because a section of the path was under water. It starts off in melaleuca forest [with other vegetation], then the land rises a little and there are grass trees and gradually more open forest of mixed tree species, often with a lot of epiphytes, then into thick melaleuca forest again on lower land [flooded track]. It is a lovely walk with lots of different plants for the experts to contemplate.



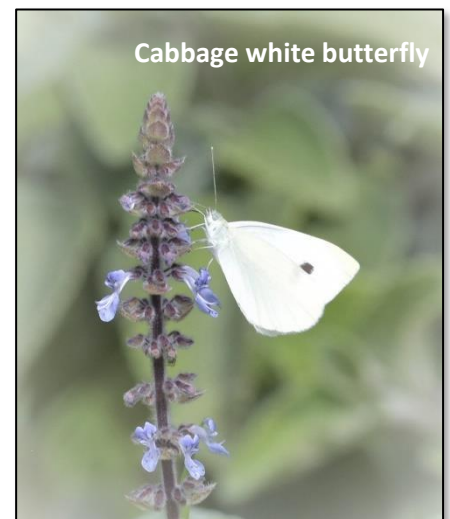
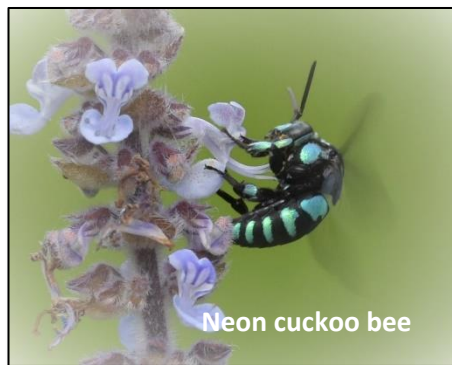
Mooloolah NP, August 2020



The value of *Plectranthus* flowers

By Wendy Johnston

We have a large patch of *Plectranthus* flowering beautifully at present, and it seems to be a magnet for insects. I've photographed a few. There were other insects there as well but they were far too flighty to pose for a camera. I would appreciate help identifying these critters.



Excursion to Bellthorpe Stays, September 2020

The NPSC group had a wonderful walk at Bellthorpe Stays this month. Many thanks to David, Wendy and Dodge for sharing this very special property with us. Some pictures below - showing some of the tall forests, waterfalls and views we enjoyed. Thanks to Ann Moran for building a great species list.

From Pam: It was a wonderful morning and several of us stayed on for a picnic lunch. Our hosts were great company. Several of the walkers later booked cabins for a longer stay later in the year. My brother and I stayed for three nights in November and managed to see a male Riflebird working away on the bark of a tree, quite low down and very visible.



End of Banksia Bytes 24

