# Banksia Bytes

# **Native Plants Sunshine Coast**

www.npqsuncoast.org



## **Native Plants Queensland**



May 2021 Number 25

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#### From the editor

How is your garden growing in all this rain? Our ferns are loving it. Last month large numbers of birds were enjoying the flowers of the *Elaeocarpus grandis*, making it difficult to hold a conversation on some occasions. At present our *Banksia spinulosa var. collina* is one of the few plants in flower in the garden. In this newsletter, Marie has written about the tenacity of *Banksia integrifolia* to flower, despite being heavily pruned. Joan describes the beautiful Hibiscus of SE Qld, and Spencer has a positive update on 10 years of



myrtle rust. Pam poses a question regarding the identity of the butterfly/ moth which could hatch from her 'chevron caterpillar'.

Enjoy your gardening Wendy



#### The program for the next few months of 2021

#### MAY 2021.

**Sunday 9th, May**: 8.30am Excursion to two small but diverse dry rain forest reserves in the Kureelpa area. Our guides will be Eric and Diana. Byo morning tea and seating.



JUNE 2021

**Sunday 13th June**: 8.00am Excursion to private Land for Wildlife property in the Maleny area. Byo morning tea and seating.

All NPQ excursion dates are on a Sunday, details will be sent when participants rsvp (rsvp is necessary) to Pam at: <a href="mailto:lpw3@bigpond.com">lpw3@bigpond.com</a> or 5429 6845.

#### Extra date claimers:

Saturday 12<sup>th</sup> June: 8.30 to 10.30am. Join Spencer Shaw on a guided walk of Bergann's Lane in Witta. Spencer is an ecological restoration specialist who undertook the ecological restoration / wildlife corridor project at Bergann's Lane Walk (Witta, Blackall Range) 17 years ago. Spencer has worked in the native plant, re-vegetation and bush regeneration industries for over 30 years and is passionately committed not only to the preservation of rainforest through various eco-restoration works but also through education.



The walk is 2.2 km return and will take about an hour or so to complete. Please wear suitable outdoor clothing, including enclosed shoes, hat, sunscreen and plenty of water.

This walk is one of many activities in the World Environment Day Festival on the Sunshine Coast in June. See the program at <a href="https://www.wed.org.au/copy-of-program">https://www.wed.org.au/copy-of-program</a>.

**Sunday 29<sup>th</sup> August**: Spring Day 2021 at Myall Park Botanic Garden, Glenmorgan. Celebrate 80 years of planting. There will be something for everyone - Start the day with a fun run or walk; Inspect the museum to view the items used last century; Enjoy a live drama performance; Purchase something made by local children or stock up on plants for your garden.



## Malvaceae Family by Joan Dillon

I was surprised to note the number of members of this family that are found in the SEQ region (see Mangroves to Mountains index). I happen to have 6 true species plus some probable travellers from further north plus some interesting cultivars/ hybrids. All are vigorous, hardy, and

like probably any member of the family, very easy to propagate

from cuttings.

Abelmoschus moschatus, which dies down in winter (dry season) and has a tuberous root is a smallish shrub with plenty of apricot/orange flowers and hairy papery pods, which should be removed whilst green. Viable seeds, there are many, will otherwise spread in all directions.



Hibiscus geranioides

Hibiscus geranioides, provenance uncertain, is a small erect shrub producing masses of small pink flowers. Prune to encourage branching. It propagates readily from seed. It's easily pulled out when an over-abundance of seedlings appears.

'Banana Smoothie' was developed by David Hockings and its parents are most likely to have been *H. splendens* for the soft grey/green leaves and one of the yellow flowering species. Spencer may know as he took the cuttings.



Abelmoschus moschatus



An unusual cultivar is 'Aussie Delight' with red but not too prickly

stems, creamy/fawn blooms, and foliage like *H. heterophyllus*. When the flowers are spent at the end of the day the petals fold in revealing a pink stripe along the back of each one.

Hibiscus tiliaceus which probably shouldn't grow here is very large, vigorous and an inhabitant of the front paddock. *H. tiliaceus* 'Rubra' with the same flowers but dark almost purple/green leaves inhabits the garden.

Others are our locals *H. heterophyllus* and *H. splendens*, and *H. macilwraithensis* from North Qld. All are large and need plenty of space and light. 'Aussie Delight' is growing in a large pot; so far so good, but a cutting will be planted where there is more space. The back paddock comes to mind!

#### Banksia integrifolia as a shrub by Marie Livingstone

In 2001 a *Banksia integrifolia* seedling appeared in a disturbed area near our new house.

As the whole area was very bare I left it alone, even though it was going to be too tall for the site it had selected for itself.

The solution was to keep ruthlessly pruning and see what happened. Every time it threatened to obscure the view – out came the choppers. It was surprising that it survived such treatment and the new growth was always attractive.



Most surprising of all, was that after a few years it began to flower regularly. It has now had its 20<sup>th</sup> birthday and is looking healthy and flowering happily.

It gets no additional water, no mulch, just frequent pruning. What a winner!

The lomandra next to it gives some perspective on its height and its trunk is quite substantial.



#### A Decade of Myrtle Rust by Spencer Shaw

Last year was the 10<sup>th</sup> anniversary of Myrtle Rust being brought into Australia. Note that I say "brought into" Australia, as the terminology usually used is "arrived" or "was first detected". The latter could be taken as inferring that Myrtle Rust arrived in Australia all by itself. This is clearly not the case. Myrtle rust was brought into the country as result of the global trade and travel networks of human activity. We brought it here and we also need to be the ones responsible for preserving the amazing species diversity of Myrtaceae that has evolved in this land and is now threatened by Myrtle Rust.

So just how are we going to preserve the diversity of Myrtaceae in Australia? I can only speak of our personal experiences in observing the life cycles and



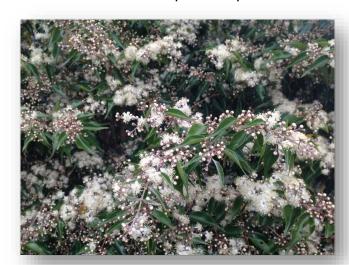
Decaspermum humile showing signs of myrtle rust in 2011

propagation of many of our local rainforest Myrtaceae in SE QLD, but I think we are onto something. And that is, that preserving species that are threatened by Myrtle Rust, can best be tackled at a grass roots level (or at least at a tree and shrub level – pardon the pun), through the work of nurseries identifying and propagating from Myrtle Rust resistant plants.

Back in 2011, when Myrtle Rust arrived in SE QLD, you could have been forgiven for thinking that nurseries were the only source of Myrtle Rust and that going near a nursery was potentially dangerous to your own health! Sure, nurseries could potentially speed the spread of Myrtle Rust due to interstate plant transport, but once it was brought into and established in NSW, it was only a matter of time before zillions of microscopic spores blew across the landscape and spread

rapidly to colonise whole new areas. To try and stem the tide, Biosecurity then quarantined a few nurseries, - but the horse had well and truly bolted. Overnight the Myrtle name was tarnished, as the fear of Myrtle Rust spread. Some production nurseries disposed of all their Myrtaceae stock rather than trying to manage the disease, as the potential damage to their business from growing Myrtaceae outweighed the cost of throwing them all away. For those who persisted with growing Myrtaceae, fungicide regimes became compulsory – although I'd argue that they mask the problem rather that treating it. What I'm trying to get to, in an albeit circuitous way, is that nurseries were perceived as the problem, when in fact I believe that nurseries and horticulturalists (native ones in particul

nurseries and horticulturalists (native ones in particular) have the tools to help assist in preserving the Myrtaceae species that are under threat.



Decaspermum humile resistant to myrtle rust in 2018

Our rainforest Myrtaceae have been significantly affected. These include species such as - Gossia inophloia, Gossia hillii, Gossia punctata, Gossia acmenoides, Gossia bidwillii, Lenwebbia sp blackall range, Rhodamnia rubescens, Rhodamnia dumicola, Rhodamnia acuminata, Backhousia leptopetala, Backhousia citriodora, Rhodomyrtus psidioides, Decaspermum humile and Archirhodomyrtus beckleri. These species have been affected to varying degrees, with populations and individuals within species showing varying degrees of susceptibility.

I believe the only real hope for us to assist in the preservation of threatened Myrtaceae species, is to assist those individuals and populations within a species that are demonstrating resistance and resilience. We (nurseries, horticulturalists, nature lovers in general) can assist these species by actively searching for, identifying and then propagating and cultivating those individuals. This cultivation whether it be in gardens, farms or revegetation projects will then assist the survival and spread of their resistant and resilient genes.

Species that we have personally had success with so far include *Decaspermum humile* and *Lenwebbia sp. blackall range*, both of which we have selected and propagated from resistant individuals. An observation we've made is that if plants that have been affected by Myrtle Rust manage to produce seed, then a good percentage of the resulting seedlings appear to be more resistant than their known parent.

The real progress in fighting Myrtle Rust is taking place out in the bush as evolutionary processes select those individuals that are Myrtle Rust resistant to survive and reproduce. The best that we can do for now is get behind nurseries and horticulturalists who are passionate about our native flora. They are the front line in preserving our vulnerable Myrtaceae species. For 10 years we've seen major impacts to our rainforest ecosystems through the damage to Myrtaceae species and the loss of flowering and fruiting abundance they provided for our fauna, let's hope we can improve that situation somewhat over the next 10 years...



### Who am I? By Pam Watson

I found this colourful caterpillar on my native yam, *Dioscorea transversa*, the other day. My brother took the photo but I had to remove the caterpillar from the vine first, so no photo of the native plant. I have not been able to identify

him/her from any of my butterfly books - does anyone know what it is? We call him the chevron caterpillar.



#### **Book Review**

Australian Rainforest Seeds

A Guide to Collecting, Processing and Propagation

Authors: Mark Dunphy, Steve McAlpin, Paul Nelson and Michelle

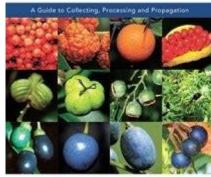
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Photographs: Hugh Nicholson

**CSIRO** Publishing

ISBN: 9781486311507





Mark Dunghy, Steve McAlpin, Paul Nelson and Michelle Chopin

Twenty-two years ago, when we started out as a rainforest seed collection business in SE QLD, a book like this would have been very, very, very handy. For many decades many of us have been building the knowledge base of identifying, collecting, growing and revegetating subtropical rainforest plants. Through trial and error, the secrets of collecting, cleaning and germinating rainforest seed have been discovered for many species ... although this has involved lots of walks through tick and leach infested forests, fermenting of fruits that produce some very interesting odours...getting the odd bit of Jagera hair in the eye etc...

Now at last the secrets of rainforest seed are revealed thanks to the amazing team of Mark, Steve, Paul, Michelle and Hugh, in this long overdue book, that focuses on literally where it all begins for rainforest restoration, with the seeds.

This book is a boon for new and old seed collectors / nursery folk, with over three hundred species covered. The format provides space for 2 species per page, with details that include name, image, fruit and seed type, fruiting period, collection, processing, sowing and germination details. I must admit some bias, but I just love photos of fruit and seed and this is a standout publication with photographs primarily supplied by renowned rainforest plant photographer Hugh Nicholson.

Approximately 80% of this text is dedicated to the 300 individual species covered, but it also includes so much more general information about rainforest seeds, in chapters on Biology and Ecology; Collecting; Processing; Storage and Propagation. Technically, this book literally writes the book on rainforest seed and their treatment, being the first of its kind. This relatively specialised field of rainforest seed treatment has a language all of its own and in it you will learn about Dehiscent, Dormancy, Macerating, De-winging, Wet Composting and much more.

As with so many CSIRO publications, this book is a standout piece of knowledge, accessibility and beauty. A must have for anyone restoring rainforest in Northern New South Wales and South East Queensland.

Spencer Shaw, Brush Turkey Enterprises 6/02/2020

# Background reading for the excursion in April 2021 to the site at USC for the Translocation of Wet and Dry subtropical Coastal Heath

Taken from: Shapcott A. Wet and Dry subtropical Coastal Heath translocation

The species (community) includes approximately 15 hectares of coastal heath (10 ha 'dry', 5 ha 'wet' heath), habitat for Ground parrot (*Pezoporus wallicus*), Lewin's rail (*Rallus pectoralis*), vulnerable Acid frogs (*Crinia tinula, Litoria freycineti, Litoria olongburensis*) and five plant species that were listed as vulnerable or rare within Queensland at the time the project commenced; *Acacia attenuata* (vulnerable), *Acacia baueri*, *Boronia rivularis*, *Blandfordia grandiflora*, *Schoenus scabripes*.



The aim of the translocation was to compensate for the loss or damage due to the proposed development of 15 ha of coastal heath and establish populations (of the five listed plant species) equivalent to the ones being impacted by the proposed development. An additional aim was for the translocation to replace equivalent appropriate habitat for the listed bird and frog species.

We opted to translocate entire turves of heath in a systematic manner and their locations on the recipient site as best matching habitat specificities and original proximity as was possible. The parts of the development site that were translocated captured the largest sections of the populations of the listed plant species, and other sections were relocated within the site to conservation zones. Individual plants of the listed plant species were propagated from material on the development site and used to supplement plants that did not survive the translocation. The recipient site was scraped clean of weeds and topsoil prior to placement of the turves to remove weeds and to lower the soil level to minimise changes in drainage. There were distinctive management sections created within the translocated site according to different parts of the source site. These divisions were maintained to enable fire breaks between different management units within the site.

A detailed fire management plan for the site was developed. Each management block has its own fire schedule and the USC has been able to engage with the local rural fire brigade to use the site as a training site.

In total, the Brightwater Heath Translocation took 14 months to relocate vegetation and was completed in February 2009, months prior to any other development activity.

Photos from the excursion:















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