

Banksia Bytes

Native Plants Sunshine Coast



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Native Plants Queensland

Newsletter

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OFFICE BEARERS

Spencer Shaw

Anne Windsor

Joan Abercrombie

Marie Livingstone

Wendy Johnston

Pam Watson

John Dillon

President

Hon Secretary

Hon Treasurer

Events Coordinator

Banksia Bytes Editor

Excursions Coordinator

Webmaster

spencer.shaw@brushturkey.com.au

npscsec@gmail.com

joan.abercrombie@skymesh.com.au

npscevents@bigpond.com

news.npq.suncoast@bigpond.com

lpw3@bigpond.com

npqsuncoast.web@gmail.com

From the Editor

Well it feels very much like autumn now. These are some of the autumn native fruits in our garden.



In this newsletter, Eric describes Eupomatia bennettii, which currently has a mature fruit in our garden, and we saw Wilkiea macrophylla in fruit on the Triunia Reserve excursion.

Joan reminds us that planting groundcovers is not necessarily the finishing touch as some can be dominating and might need to be kept in check. And if you need a very beautiful (perhaps anti-personnel) small tree for your garden, Spencer has just the plant for you.

Happy gardening,

Wendy

Dates for your Diary

Saturday May 11: 9.00-3.00 NPQ Autumn Plant Sale, Grovely TAFE, Woking St, Keperra

Sunday May 12: NPSC walk at Ewen Maddock dam with Kenneth McClymont, Sunshine Coast Council.



May 25: Birdlife Sunshine Coast seminar with NPSC display

Sunday May 26: 8.30am-12.30pm Natives Naturally: "Small is Beautiful" Maroochy Botanic Gardens, Tanawha. Jerry Coleby-Williams (on Cottage Gardens), Anne Windsor and Karen Shaw from NPSC will be doing presentations/workshops. NPSC will have a display.

Sunday, June 2: World Environment Day, Cotton Tree, Maroochydoore. 10am to 5 pm. NPSC and Birdlife Sunshine Coast working together to promote native flora and birds.

Sunday June 9: A walk with John Birbeck TBA.

July 12-14: Nambour Garden Expo.

Sunday August 11: A talk/walk about sedges with Rowena Thomas from National Parks.



For Information about outings contact....

Pam	0447 488 673
Anne	0417 733 991
Chrissie	0408 792 227

Capparis arborea

by Spencer Shaw

Capparis arborea was, until recently, mistakenly known as *Capparis velutina* (which occurs further north in the Bulburin and Eurimbula areas, Qld). Before that it was known as *Capparis arborea* (yes it has gone back to its original name!) and is known by the common names of Brush Caper Berry, Caper, Large fruited Caper, etc... – it really is no wonder this is a particularly prickly character given the confusion with which we name it. Nomenclature issues aside, this is one of my favourite local natives for so many reasons.



First up, the form and nature of the plant remind us that this plant evolved in a very different Australia, when spines were beneficial in protection from the large herbivorous megafauna that once grazed and browsed upon the flora of eastern Australia's rainforests. As a juvenile seedling and sapling the plants produce a spine in the axil of each leaf to produce a formidable armoury so as to dissuade herbivores from nibbling upon them. However once the plant is above head height (read: grazing height) the spines in the leaf axils are no longer produced, one would assume because they are not needed. But that's not the end of an aggressive defensive strategy for this small tree, because as they get larger they produce a unique and robust double spine arrangement on the stem that is quite distinctive and help identify the larger *Capparis* species in forests. When they are present in a patch of scrub they are exceptionally easy to find in steep country as they are invariably the trunk you grab for to help stabilise yourself on the slopes, ouch...

The flowers are spectacular, and with long white petals and even longer stamens, they are hard to miss. The large round green fruit, up to 6cm diameter, are another reminder of a their evolution with the megafauna, and are great eating if you are happy to chew on the fruity pulp that surround the numerous seeds.

Although slow-growing initially, these are a very worthwhile addition to your rainforest revegetation or garden.



Capparis arborea flower and bud

THE LIFE OF SMALL BOLWARRA by Eric Anderson

On a recent Native Plants Sunshine Coast excursion to Triunia Environmental Reserve in West Woombye we came across a few uncommon plants. The one that caught my eye was Small Bolwarra (*Eupomatia bennettii*). It appeared somewhat straggly and not alluring as is its wont. It belongs to an ancient and primitive family *Eupomatiaceae* with only one other member, the shrub *Eupomatia laurina*. I know of another plant that I have photographed over the years and thought I would share this fascinating plant with you.



Small green bud on slender upright shrub



Solitary yellowish perfumed flower



Immature green cup-shaped domed fruit



Mature yellow cup-shaped domed fruit



The fruit contains many black seeds which germinate slowly

PLANTS OUT OF PLACE by Joan Dillon

I have a groundcover problem and they (definitely a plural) are local natives. First our great forest grasses *Oplismenus/Ottochloa*, White Root, *Lobelia purpurascens*, and Pennywort, *Centella asiatica*. The latter also appears to have a couple of as yet unidentified cousins that behave similarly. In the same area, a natural drainage line, is *Goodenia paniculata* a long way from its freshwater wetland habitat but planted experimentally and doing very well.



I've found that the grasses, which are a great groundcover in the revegetation so long as they stay there, can be "mown" close to the ground using a line on the brushcutter and make an attractive green path. On the edges of the path they can be cut a little higher to form a border but after that they start to climb over every handy shrub. Trying to remove any of these 'plants out of place' is an impossibility so the only solution has been to lift the skirts of low shrubs and rip out surface and climbing plants from underneath. Under sprawling but prickly grevilleas this necessitates gloves and long sleeves while avoiding the *Goodenia* which fortunately has narrow erect foliage and is easily recognised, but shallow rooted. Large gardens with moist soil are certainly a challenge especially after the prolonged wet period we have experienced!

Added to the mix in adjacent areas are a few things I actually planted such as *Lobelia trigonocaulis* and *Goodenia rotundifolia*. They are doing very well under larger shrubs, produce attractive flowers, and can be tolerated. They are gradually joining the problem plants so I shall see what happens next. *Mazus pumilio* is a really dense and very low ground cover doing its best to spread across a gravel path. At least it also has plenty of flowers in season.

Anyone requiring cuttings of any of the ground covers is welcome to come and help with the weeding.

Moths I have known: by Ian McMaster

I thought I might share with you my most recent obsession - butterflies and moths. This obsession grew when we had to record plant and animal species on our property as part of our application for Nature Refuge status. We realised that while we knew our plants and birds pretty well, and had some idea of mammals and reptiles that were around, we knew practically nothing about our most abundant life form, insects. Now, two years and over two thousand species later, we are slightly better educated.

So why moths? Well, because they are easy to observe. All you need is a fluorescent lamp, and a willingness to wander round your windows in the middle of the night, and they come to you. They even sit still to be photographed!

My subject this time around is the Hepialidae family: ghost moths and swift moths. These are large and sometimes spectacular moths that are often around at this time of year. Australia has about 120 species in this family, out of about 500 species globally, so we are particularly well endowed. These moths have a number of interesting

characteristics. Their larvae live either underground, (*Abantiades* genus) feeding on leaf litter or roots, or as borers in a number of native tree species (*Aenetus* genus). The adults emerge, generally all at the same time, immediately preceding heavy autumn rains, and as a result have come to have a reputation as rain predictors. Some species will be seen in a particular area for one night only, then not again until similar conditions occur the following year. The adults have no feeding parts, and so live for only one day, their sole purpose being to mate and to lay their eggs.



This species is *Abantiades atripalpis*, or rain moth. Females can produce huge numbers of eggs, with one being recorded as depositing over 40,000. The eggs are laid while in flight, allowing them to be scattered over a large area.



This next species, *Abantiades argyrosticha*, is another large moth with a wingspan of around 10cm. Its larvae feed on the roots of casuarinaceae and eucalypts.



Aenetus species bore holes in trees, which they seal over with a hard plug when pupating. The adults emerge from the hole, and will often sit, like this *Aenetus ramsayi*, waiting for their wings to dry.



This species is from the genus *Oxycanus*, which, like others in the family, are quite large moths. This genus is the most extensive in the Australian Hepialidae, with about 50 known species. Unlike their more spectacular cousins, they are a boring brown in colour.

Please let me know if you see any of these moths in the next few weeks, I would love to have a photo.

Meeting Reports

Fascinating Facts; science meets nature, March 2019

Almost 60 people gathered at the Maroochy Gardens to hear our speakers: Garry Thomas on myrtle rust in *Lenwebbia* spp; Hilary Pearl on her ground-breaking work on heath conservation; Ian McMaster on the Unseen inhabitants of your backyard; and Brittany Elliot on What the bees are up to in the Wallum.

The underlying message in all these fascinating presentations is how much we don't know about so many aspects of our natural world and how much dedicated work goes into the research.

Many thanks to these 4 researchers for the contribution they are making to what we do know and for sharing their knowledge and enthusiasm.



Audience enthralled by Brittany



Lenwebbia with myrtle rust Garry Thomas



Hilary Pearl at work



Presenters and MC March 10

Triunia Environmental Reserve, April 2019



On a fine morning a large group of us met John Birbeck at the gates to the Reserve.



Spencer gave us an idea of what interesting plants we might see and then we wandered through open forest and patches of rainforest discussing the identity and characteristics of some of the plants. We found several specimens of *Zieria bifida*, an endangered species. There were ferns for the fern fanciers and fungi for those who like fungi, as well as plenty for the native plant enthusiasts. We didn't get as far as Triunia NP but stopped at a very attractive site where the track divides, had a quick branch meeting and turned back. Thanks to Spencer and John for a good walk in the forest.



Triunia Fungi

from Gretchen

Here are 2 of the many fungi seen as we walked along the Triunia track.

1. *Russula* sp. (which means red)

Russulas are very common and one of our members has so far found 46 unidentified species in the Sunshine Coast region.

Not all Russulas are red. They can be white, pale greenish or grey. One way to ID them is if you try to break the stem, it usually snaps like a piece of chalk. Also the cap often shows signs of having been eaten.

2. *Cantharellus* sp.

They are often partly buried in litter but are visible by their yellow-gold colour. They have a kind of funnel shape and instead of gills they have folds running down the stem. Known as Chanterelles, they are widely eaten in Europe, but do not try eating these unless you check the spore colour first. It should be white.

From the editor: I believe Gretchen said this third fungus is a *Lactarius* sp. and if you zoom in you may see the white milky exudate in the broken edge.



From the Glasshouse Country and Maleny News – more fungi

Super smut to combat weed

In a bid to help save forest floors from an invasive South American weed, the CSIRO plans to release a new fungal biocontrol agent. Wandering trad (*Tradescantia fluminensis*) has become a significant environmental weed in parts of eastern Australia where it forms dense carpets on forest floors, smothering native vegetation and clogging waterways.

The first release of the new biocontrol agent will be in the Dandenong Ranges in Victoria.



Addendum from the Caboolture newsletter:

SNAKE BITE UPDATE - Some important new information.

Article submitted by Carol Heyworth

Extract from "The Australian Bee Keeper" - March 2019 Edition.

Snake Bite Source : Rob Timmings # ECT4Health

3,000 snake bites are reported annually in Australia. Of these 300-500 need hospitalization. There are two to three deaths annually in Australia from snake bite. The average time from bite to death is 12 hours.

All snake venom is made up of huge proteins (like egg white). When bitten, a snake injects some venom into the meat of your limb. (Not into your blood.) This venom cannot be absorbed into the blood stream from the bite site. It travels in a fluid transport system in your body called the lymphatic system. (Not the bloodstream.)

Now this fluid (lymph) is moved differently to blood. Your heart pumps blood around, so even when you are lying dead still, your blood still circulates around the body. Lymph fluid is different. It moves around with physical muscle movement like bending your arm, bending knees, wriggling fingers and toes, walking, exercise etc.

Now here is the thing. Lymph fluid becomes blood after these lymph vessels converge to form one of two large vessels, (lymphatic trunks), which are connected to veins at the base of the neck.

Back to the snake bite site. When bitten, the venom has been injected into this lymph fluid, (which makes up the bulk of the water in your tissues). The only way the venom can get into your blood stream is to be moved from the bite site in the lymphatic vessels. The only way to do this is to physically move the limbs that were bitten. **Stay still!** Venom can't move if the victim doesn't move. **Stay still!**

Remember, people are not bitten into their blood stream. In the 1980s a technique called Pressure Immobilisation bandaging was developed to further retard venom movement. It completely stops venom/lymph transport toward the blood stream.

A firm roll bandage is applied directly over the snake bite site. **(Don't wash the area.)**

Technique: Three steps - keep the patient still.

Step1: Apply a bandage over the bite site, to an area about 10cm above and below the bite.

Step2: Then using another elastic roller bandage, apply a firm wrap from finger/toes all the way to the armpit/groin. The bandage needs to be firm, but not so tight that it causes fingers or toes to turn purple or white. About the tension of a sprain bandage.

Step 3: Splint the limb so the patient can't walk or bend the limb.

DO NOTS:

Do not cut, incise or suck the venom.

Do not EVER use a tourniquet.

Don't remove the shirt or pants - just bandage over the top of clothing.

Remember: Movement, (like wriggling out of a shirt or pants), causes venom movement.

DO NOT try to catch, kill, or identify the snake!

This is very important. In hospital we **NO LONGER NEED** to know the type of snake - it doesn't change treatment. Our newest antivenom neutralises the venoms of all the five listed snake genera, so it doesn't matter what snake bit the patient - one injection for all snakes! Polyvalent is our one-shot wonder, stocked in all hospitals.

Effects: Australian snakes tend to have three main effects in differing degrees:

Bleeding internally and bruising.

Muscles paralysed causing difficulty talking, moving, and breathing.

Pain. In some snakes, severe muscle pain in the limb, and days later the bite site may break down forming a nasty wound.

FINAL TIPS:

Not all bitten people are envenomated, and only those starting to show symptoms above are given antivenom.

Allergy to snakes is rarer than winning lotto twice.