SGAP Cairns Newsletter

April 2018 Number 178

Inside this Issue...

Meeting Report - March 2018

Annual General Meeting

SGAP Cairns Annual General Meeting was held at the Cairns Botanic Gardens on Sunday 18 March.

Tony Roberts' Presidents Report was presented in the March Newsletter.

A new committee was elected, which was pretty much the same as the 2017 committee. The 2018 committee is listed at the bottom of the page.

Thanks to Tony Castle for assisting with organising the space at the Cairns Botanic Gardens Vistor Centre.

Excursion Report - 1 April 2018

Stuart Worboys

Mount Emerald

A small SGAP group climbed Mount Emerald on 1 April. Mount Emerald forms part of the Great Dividing Range behind Tolga, and is a rhyolite peak approximately 1100 metres high. The ascent is a little steep and rough, but only requires a 400 m climb. The weather did not look promising, and our group expected a sudden downpour.

Society for Growing Australian Plants, Inc. Cairns Branch.

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Xanthorrhoea johnsonii

Hibbertia longifolia

The ubiquitous, but always lovely, *Xerochrysum bracteatum.*

Rocky outcrop near the top, with *Xanthorrhoea, Plectranthus* and *Lophostemon.*

Melaleuca uxorum, known only from hills around Mt Emerald, and a tiny patch near Silver Valley.

Nearly there. View of the peak, and telecommunications tower, from the saddle.

Vegetation on the peak is sparse and thin, kept in a natural bonsai condition by the blustery winds and thin, infertile soils. We found *Hovea*, *Pimelea linifolia*, at least three *Plectranthus* and a stunningly scarlet *Melaleuca recurva.* A lovely red epacrid, soon to be named "*Styphelia* piliflora" was encountered in a couple of places. In sheltered pockets, a *Leptospermum* (possibly *L. amboinense*) supported orchids and ferns and mosses. The walk was over sooner than expected, but we had great views, saw some lovely native flowers, and stayed dry!

Marcot success

As part of February's propagation workshop, Tony Roberts demonstrated marcotting. A month and a half on from that demonstration, the marcotted fig has produced roots, and is ready for potting. Tony recently sent through photos of the marcotted fig, showing the success of the technique.

2018 Excursions Summary

Update your diaries

15 April - Ella Bay/Bramston Beach

20 May - Emerald Creek Falls, Mareeba

17 June - Yellow Arrow Walk, Cairns

16 July - Cooktown Weekend

19 August - Brooklyn Station (to be confirmed)

16 September - East Trinity Bund Wall (to be confirmed)

21 October - Quaid Road, Wangetti

18 November - Christmas break up.

ORCHID PROPAGATION

Pauline Lawie – February, 2018

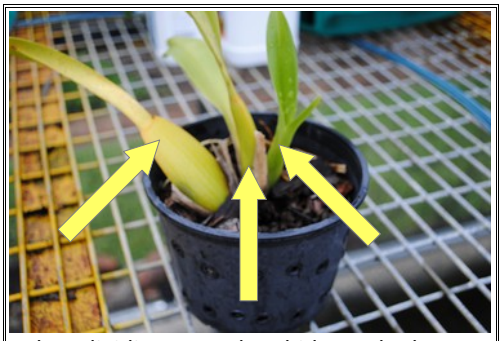
These days most orchid propagation is from seed sown under laboratory conditions and native orchids bought from specialist nurseries are in media best suited to their locality, so plants propagated nearby are most likely to thrive at home.

Each seed capsule has thousands of minute seeds which need specific conditions, resulting in even rare orchids being locally abundant in their native habitat. Ground orchids in particular rely on a discrete mycorrhiza. However, native epiphytic orchids appear to rely more on the composition of the substrate so are more amenable to pot culture, though the larger species are best attached to mounts or trees. Plants on trees get some nourishment from rain and fallen leaf litter, but mount grown **must** be fertilised. All orchids, potted or on mounts or trees, must be held securely so that the roots cannot move.

Orchids on mounts, such as this one, must be regularly fertilised.

When dividing potted orchids it is recommended that each plant retain at least three pseudobulbs. They are then potted with the older growths to the edge of the pot. If a plant is cut into sections a few weeks before dividing, either potted or on a tree, they often have a growth spurt to both sections. Here, I'm a lumper not a splitter.

A plant that produces aerial growths is short of nutrition. These growths can be carefully removed with a sharp knife, disturbing the roots as little as possible, and potted into the smallest suitable pot.



When dividing potted orchids, each plant should retain at least three pseudobulbs. Plant them with the older growths to the edge of the pot. The illustration shows a plant with three pseudobulbs (arrowed), the oldest on the left, the youngest to the right.

The medium used for potting orchids should take into account the size of the plant, its natural growth habit, the local climate and how the plant is housed. The rule of thumb is the finer the roots the smaller the components. It is also important to have the components of fairly equal size so that they cannot compact easily. Drainage is critical, and where no organic material is included it is necessary to fertilise often; the mantra is "weakly weekly". Commercially grown plants have regulated watering systems to which fertiliser is added and usually have no organic matter in the medium.

I have never seen *Bulbophyllums* available for purchase.

Quinkan, volcanic scoria sourced from Mt Quinkan on the Atherton Tablelands, is a useful component in orchid mixes, and is available in different sizes.

Cymbidiums grow well in a mix of bark/peanut shells, perlite and quinkan. Commercial potting mix is available.

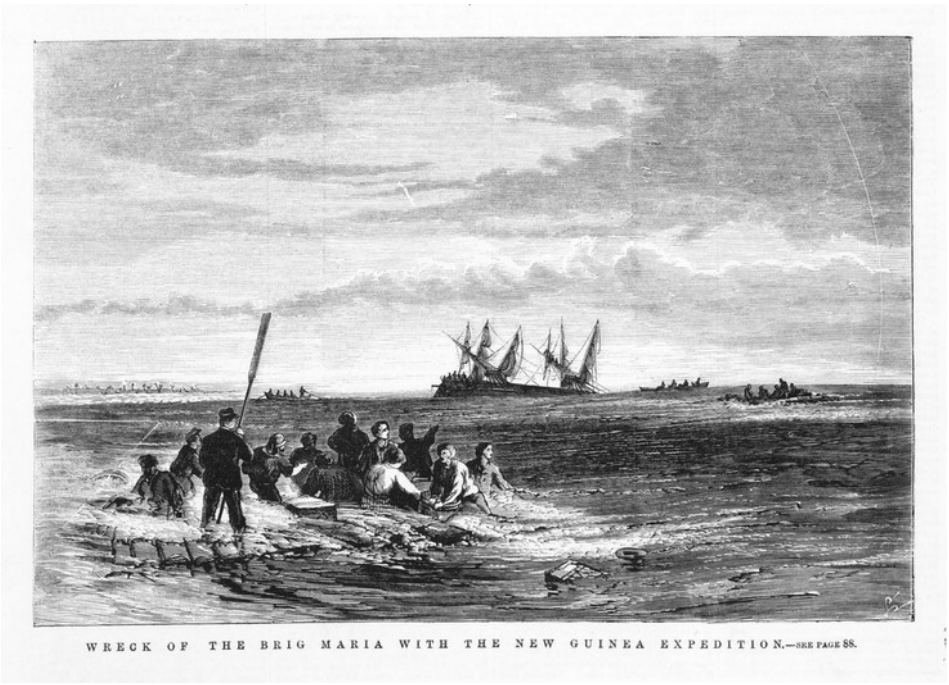
The smaller *Dendrobiums* are happy in bark and quinkan. The larger ones are better mounted, or placed on trees, as are the ones with the Bulbophyllum-like growth habit.

Phalaenopsis species are now potted into clear plastic; they don't like to dry out or remain wet. A recommended mix is 1/3rd crocks (eathernware, rocks, charcoal), topped with bark, quinkan and perlite.

All mixes are supposed to retain their structure for three years, but in the lowland Wet Tropics bark is liable to break down sooner, more so at our place than in Cairns.

The wreck of the brig Maria

Don Lawie, Rob Jago, Stuart Worboys



Engraving from the "Illustrated Australian News for the Home Reader", 23 April 1872

On 25 January 1872, the brig Maria left Sydney with a contingent of fortune hunters bound for New Guinea as part of the "New Guinea Prospecting Expedition". It never made its destination: it encountered much foul weather on its course, and sank after running onto Bramble Reef. Several souls were lost at sea, others made it ashore on rafts. On 1 March 1872 a raft bearing eight survivors came ashore at Ella Bay (five occupants of the same raft drowned), near the site of current-day Innisfail. Here they were assisted by (presmumably) members of the Wanjuru,

and eventually rescued by HMS Basilisk under the leadership of Captain Moresby (for whom Port Moresby was named).

The story told here aims to identify the food plants utilised by the eight survivors at Ella Bay during their short stay, based on scanty records available to us.

Food plants eaten by Maria wreck survivors at Ella Bay, March 1872

In her 1973 book, *Hurricane Lamps and Blue Umbrellas*, Dorothy Jones recounts the story of the survivors' short stay at Ella Bay. Reading between the lines, Rob Jago has guessed some of the plants that might have been sampled by the hungry castaways:

- Page 48: " *bringing some nuts from the screw palm*" Probably *Pandanus cookii* as it is in fruit in March, but could also be of another species of *Pandanus*.
- Further on p. 48: "*These were like a small apple, oblong and white, which Forster identified as a type of myrtle.*" Probably *Syzygium cormiflorum* - Bumpy Satinash.
- P.49: "*Coyle and Phillips found them next morning and had some more of the white fruit.*" Probably *Syzygium cormiflorum* again.
- 49: "*Coyle picked up a bulb and bit it, only to gasp for water.*" Probably *Alocasia brisbanensis,* Cunjevoi
- 49: "*Here grew a small red fruit about the size of a cherry*". *Syzygium tierneyanum,* River Cherry.
- 49: "*At the head of this bay was another fruit tree, with fruit also red but smaller than the previous one. It had a pleasant acid flavour with a flat hard stone inside much like the shape of a plum stone.*" *Antidesma bunius,* Herbert River Cherry.
- 49: "*Further on they found what Forster called a Queensland Nut tree. The nuts had green husk, were not unlike a walnut except the shell was exceptionally hard.*" *Elaeocarpus bancroftii,* Ebony Heart or Kuranda Quandong.
- 50: "*On one species of mangrove they found a fruit as large as a shaddock* [pomelo], *filled with seeds, each enclosed in a hard pulp.*" *Xylocarpus granatum,* Cannonball Mangrove or Monkey-Puzzle Nut.
- The wild bananas mentioned in the story are probably *Musa banksii*. The baskets and prawn traps were probably made from *Calamus caryotoides,* Fish-tail Waitawhile.
- 51: Haydon and Phillips gathered some more red berries to round out the meal." Probably either *Antidesma bunius* or *Syzygium tierneyanum*.
- The Black Bean mentioned is *Castanospermum australe*.
- 52: The beans that made them sick may have been *Vigna marina,* Coastal Bean.
- Yams: a wide range of tubers and roots that were eaten are available at that time of year.
- 52: "*Next morning Coyle joined the blacks on a food finding expedition and returned with some bright green fruit, the size of a plum with yellow flesh and from four to five black seeds in the centre. These were roasted and eaten hot but although of a slight bitter flavour were quite good raw.*" *Planchonella pohlmaniana var. pohlmaniana,* also called *Pouteria pohlmaniana,* Yellow

Boxwood.

Don Lawie's perusal of Peter Maiden's 2000 book, "Shipwreck of the New Guinea Gold Explorers" suggested other items that required closer investigation.

- Page 129: "*There was a particularly attractive berry , which grew in profusion along the beach. The natives gave it a wide berth but it seemed to have a tasty look about it. Forster and Coyle eventually decided to try it, with unfortunate results. 'We were both taken ill with violent pains in the stomach, and vomited a great deal.*'" Could this be *Vigna marina* again?
- 137: (In thick scrub which bordered the beach): "*There they knocked over a grass tree and pulled the leaves from it. The whites were invited to sample the white vegetable substance which remained and they found it edible*." The Grass Tree, *Xanthorrhoea johnsonii* grows in a drier climate. It will be interesting if we find one at Ella Bay. I much doubt that we should "knock it over".
- 138: "*The chef washed clean a small rock hollow then took a palm leaf and filled it with green ants and their eggs. He poured fresh water into the hollow then mashed the ants and eggs , allowing the juice from the mixture to run into the rock hollow. Dessert was now ready. They were given a share of the concoction to taste, followed by a drink of the milk-like juice of ants. 'It was a very pleasant flavour', according to Forster, 'with a slight acid somewhat resembling lime juice and had evidently been left until last as a great delicacy.'*"

  There is no mention of the ferocity with which Green Ants defend their nest, and a clue is given in "*Spinifex and Wattle*" page 32, where sub-inspector Johnstone quotes: "*This man had a small palm leaf parcel, which we had been curiously observing for some time. He now took hold of it and led us to some rocks. He then carefully washed out a small hollow in the stone, and, filling it with water opened his parcel. What was our surprise when we found it contained a nest of ants and ants' eggs, as they are commonly called – they are really pupae chrysalides He then emptied them into a basket and commenced mashing them with his hand , letting the juice through into the pool of water. When he had expressed all the moisture he began eating the dry mass left in the basket giving us all a share. When we had finished this we began to drink the water, which was as white as milk; this preparation had a very pleasant flavour, slightly acid, somewhat resembling lime juice, and had evidently been reserved to the last as a great delicacy. These ants are of a pale green colour, about half an inch long, and stingless; they are, I think, found in dead wood.*"

Summary - Ella Bay plant list

Acronychia vestita (Hairy Aspen). Small tree. Edibility unknown.

Alocasia brisbanensis (Cunjevoi). Understorey herb. Large (to 2 m) triangular leaves. All parts toxic. Reputed to alleviate stinging tree stings.

Antidesma bunius (Herbert River Cherry). Tree to 10m. Fruit February to October, 12 – 25 mm long, hanging in bunches, red or white when ripe, smell like apple, solitary seed.

Archontophoenix alexandrae (Alexandra Palm). Tall palm. Fruits not edible.

Barringtonia racemosa (Mango Pine). Tree. Fruit edibility unknown.

Benstonea monticola (Scrub Breadfruit). Small understorey pandanus. Fruit edible.

Breynia cernua (Fart Bush). Shrub. Fruit ediblity unknown.

Calophyllum inophyllum (Beach Calophyllum). Large strand tree. Fruit inedible.

Castanospermum australe (Black Bean). Tree to 35 metres. Fruits in bunches, wet season, very large beans, brown when ripe. Distinctive.

Chionanthus ramiflorus (Native Olive). Tree. Fruit inedible.

Connarus conchocarpus (Shell Vine). Robust vine. Fruit inedible.

Cordyline cannifolia (Palm Lily). Shrub. Fruit inedible.

Cryptocarya spp. (various laurel species). Nine species listed for the area. Fruit inedible.

Davidsonia pruriens (Davidson's Plum). Small tree. Fruit edible [*Editor's note - it needs sugar*}

Dysoxylum (various mahogany species). Eight species listed for the area. Fruit inedible.

Elaeocarpus bancroftii (Ebony Heart; Kuranda Quandong). Tree to 30 m. Fruiting any time. Rounded, 40mm, dull green, thin flesh, seed angular, very hard.

Elaeocarpus grahamii (Graham's Quandong). Tree. Fruit edible.

Elaeocarpus grandis (Silver Quandong). Tree. Fruit edible.

Endiandra spp. (various walnut species). Eight species listed for the area. Fruit inedible.

Eupomatia laurina (Wujigay). Shrub. Fruit edible.

Eustrephus latifolius (Wombat Berry). Fruit inedible.

Ficus spp. (Figs). Eleven species listed for the area. Fruit edible.

Freycinetia scandens (Climbing Pandan). Vine. Fruit edible.

Garcinia warrenii (Warren's Mangosteen). Tree. Fruit edible.

Gmelina dalrympleana (Grey Teak). Tree. Fruit inedible.

Gmelina fasciculiflora (White Beech). Tree. Fruit inedible.

Hornstedia scottiana (Native Cardamon). Giant herb. Fruit edible.

Irvingbaileya australis (Cloud Fruit). Tree. Fruit inedible.

Linospadix minor (Walking Stick Palm). Dwarf palm. Fruit edible.

Medinilla balls-headleyi. Vine. Fruit edibility unknown.

Melia azedarach (White Cedar). Tree. Fruit inedible.

Musa banksii (Native Banana). Plant large, similar to cultivated bananas. Fruit in large or small bunches, first part of year, individual fruit 85 – 135 mm long, skinny, filled with large seeds.

Myristica globosa subsp. muelleri (Nutmeg). Tree. Fruit edible.

Niemeyera prunifera (Milky Plum). Tree. Fruit inedible.

Omphalea queenslandiae (Russell River Nut). Vine. Fruit edible, although seed reported to be a purgartive.

Palaquium galactoxylum (Cairns Pencil Cedar). Large tree. Fruit edible.

Pandanus cookii (Screw Palm). Formerly *Pandanus whitei*. Grows 6 – 10 metres height, Wet Tropics, beach front dunes, swampy areas. Male and female plants. Fruits November – March, fruit, pineapple size, orange-red when ripe.

Pandanus tectorius (Beach Pandan). As for *Pandanus tectorius.*

Phaleria clerodendron (Scented Daphne). Small tree. Fruit large, red, attractive, and completely inedible.

Pittosporum rubiginosum (Red Pittosporum). Tree. Fruit inedible.

Planchonella pohlmaniana or *Pouteria pohlmaniana var pohlmaniana* (Yellow Boxwood). Tree. Fruit green, 15-30x12-20 mm, green, 3-5 seeds. Late in wet season.

Pothos brownii (Candle Vine). Vine. Fruits edible.

Premna serratifolia (Coastal Premna). Tree. Fruit inedible.

Scaevola enantophylla (Climbing Fan Flower). Vine. Fruit edibility unknown.

Scaevola taccada (Cardwell Cabbage). Shrub.

Fruit edible.

Siphondon membranaceus (Ivorywood). Tree. Fruit edible.

Syzygium cormiflorum (Bumpy Satinash). Tree to 30 metres. Flowers/fruits sporadic, wet season, borne on trunk or branches in "bumps". Fruit 25 35mm diameter, white to pink. Thin flesh.

Syzygium forte subsp. forte (Flaky Barked Satinash). Tree. Fruits borne on leafy branches, similar to *S. cormiflorum*, edible.

Syzygium hemilamprum subsp. hemilamprum (Blush Satinash). Large strand tree. Edible

Syzygium tierneyanum (River Cherry). Tree to 25 metres. Fruits in the wet season. Fruit edible, in bunches, axillary or ramiflorous, white or pink or red. Solitary seed.

Tabernaemontana pandacaqui (Banana Bush). Shrub. Fruit inedible.

Terminalia microcarpa (Damson). Tree. Fruit edible.

Terminalia muelleri (Little Sea Almond). Small tree, fruit edible.

Vigna marina (Coastal Bean). Vine, pea family. Prostrate, three leaf segments, fruit a bean, green/brown.

Xanthophyllum octandrum (MacIntyre's Boxwood). Tree. Fruit inedible.

Xylocarpus granatum (Cannonball Mangrove or Monkey-Puzzle Nuts). Tree to 25 m, mangrove areas. Fruits January - September, large, rounded, 120 mm diameter, brownish. Splits into intricate seed segments.

Notes

Don Lawie writes: It is surprising that Blue Quandong *Elaeocarpus grandis/angustifolius* are not mentioned. They should litter the ground in early March. The outer flesh is edible, and breaking the inner kernel between 2 stones reveals a nutritious "nut".

Beach Almond, Damson Plum etc are species of the genus *Terminalia*. Fruits are numerous and also required cracking, but a castaway has little else to do and the results are well worth while.

Beach Calophyllum *Calophyllum inophyllum* are not mentioned. They should be in Ella Bay, and the fruits are prolific. They are also toxic, but if I were a castaway I'd have a go at them.

Coconut *Cocos nucifera* are exotic and had not been introduced to this pristine area in 1872.

Cocky Apple *Planchonia careya* may be in the area, and are reasonably edible. Perhaps March was too late in their fruiting cycle.

I compiled the attached list from Rob Jago's Ella Bay Plant List, "*Plants observed at Ella Bay 16 May 2009*". The list included about 490 species in over 120 plant families. I looked at the list from the attitude of a shipwrecked mariner cast ashore at Ella Bay in early March. He would have no knowledge of plants of the area, was very hungry after several nights adrift on the raft and would try to eat anything that looked vaguely edible.

I made a list of about 90 plants that are known to grow in the area and that have fruit that would appear to be worth trying to eat. I then culled all that would not be in fruit in the early part of the year. All exotics were eliminated also – they would not be there in 1872. About 55 plants remained. Many are not edible, some are quite toxic, and some of the fruits are only partly edible . I pity the poor castaway faced with such a choice, albeit the *Maria* men were helped by the local aborigines.

The summary lists the remaining plants by botanical name (names updated 2017 Census of Queensland Plants), Common Name, whether edible, non-edible or edibility unknown. The edibility status is conservative, and some of the plants listed as inedible may be ingested in

small quantities. Conversely, some listed as edible may be deleterious in more than a small amount e.g. *Omphalea* nuts are very tasty – and very laxative!

When we walk Ella Bay beach and dunes it will be instructive to discover how many of the plants on this list are present, how many of those are in fruit, and whether those fruit are easy to find and gather from the point of view of a debilitated castaway.

There are some inconsistencies between the previous list that I compiled from historical records; these can be explained by the more than 150 years interval. Would it be possible, given the 150 years, cyclones and climate changes, for some original trees to be still standing? Cairns Pencil Cedar, White Beech, Calophyllum and Terminalia, among others, can all live a long life....

I'll be glad to hear comments on the above. I emphasise that I could not have got this far without the help of Dr Rob Jago, but any mistakes in my lists are mine alone.

Don Lawie donald.lawie@gmail.com 6 April 2018

Tina's Mosquito Repellant

Tina Morton

Before I forget, I mentioned that I would share the mosquito repellant recipe with everyone after I checked the recipe at home. It is a good thing I did.

The following recipe is for a mosquito repellant that appears harmless to plants from my experience and works to repel mosquitos from the region that you spray it.

Home made mosquito repellant

- 1 large bottle of blue coloured mouthwash (I've used both multiple brands and it seems to still work).
- 3 cups Epsom Salts
- 3 stubbies of cheap beer

Mix all together ensuring Epsom Salts have dissolved. Spray lightly around sitting area or area you would like to repel mosquitos. It smells pleasantly minty and keeps mosquitoes away for a few months.

Perhaps it would be good to include Emma Finney's kind advice regarding mosquito repelling as well. She advised that at Limberlost they used to spray pyrethrum as a surface spray on the underside of tables and chairs in sitting areas just before departing for the day. Reportedly, it made a huge difference in reducing the mosquito population around their sitting area.

So, there are two solutions to the mosquito plague some of us are facing at the moment. I would appreciateit if one of you could circulate it to the other SGAP members please (or even include it in the newsletter).

Innisfail Branch

Meetings at 4 p.m. on the second Wednesday of each month at 1 Stitt Street, Innisfail.

Contact: innisfail@npq.org.au

Townsville Branch

Meetings at 8 p.m. on the second Wednesday of the month, February to November, in Annandale Community Centre.

Excursions the following Sunday.

Contact: johnelliott@sgaptownsville.org.au

www.sgaptownsville.org.au

Image by Keith Townsend

Tablelands Branch

Meetings on the 4th Wednesday of the month. Excursion the following Sunday.

Contact: Chris Jaminon on 4091 4565 or email hjaminon@bigpond.com

Cairns Branch – Next Meeting

Sunday 15 April 2018 - Ella Bay

Meet 12 noon at at picnic area beside boat ramp at Flying Fish Point for a BYO lunch and discussion, then carpool to drive to roadhead at Ella Bay.

The aim is to identify, photograph and GPS any food plants, particularly those that helped sustain the eight men of the "Maria" raft that landed in Ella Bay on 1 March 1872. A long walk is not planned – perhaps a kilometre or so, dependent on weather and attendees stamina.