SGAP Cairns

NEWSLETTER 216 NOVEMBER 2021

Barron River at Kuranda, Oct 2021

Helen Lawie

The October SGAP outing was an easy amble along the River Walk in Kuranda. The shady trees and cool river breeze were very welcome and with the elevation we shaved a few degrees from the steaming temperature of coastal Cairns.

We began at the Kennedy Highway bridge end of the walk, walked along the river as far as Kuranda Station, turned 180 degrees and finished where we started. Many interesting plants and trees were observed, but only a few people spotted the resident croc!

There are many ways to identify trees. Some of the most conclusive are flowers and fruit and we were happy to encounter many fruiting trees along the banks of the Barron River. The abundant fruit of Native Nutmeg *Myristica globosa* caught our eye: small chestnut coloured fruit, some partially split, others open and showing a rich red aril laced over the seed.

SGAP Cairns Branch on the steps down to the Barron River at Kuranda.

The Aussie *Myristica globosa* is labelled tasteless only in comparison to 'true' nutmeg *M. fragrans* however, our native nutmeg does have a scent. The fruit feeds many birds and homegrown website Douglas News Network goes so far as giving the Pied Imperial Pigeon the additional moniker Nutmeg Pigeon *[Editor's note - the pigeon's sub-genus is "Myristicivora", which means nutmeg eater].* Our nutmeg fruit is very similar to those of *M. fragrans* native to Maluku Islands a.k.a. the Moluccas, Spice Islands or Indonesia (not just plants get re-taxed).

In the Moluccas the fruit is cooked, and the spices of nutmeg (the dried seed) and mace (the more delicately flavoured dried aril) are used extensively. European Colonisation in the 16th century, with all its devastation, commercialised the spices and they are now grown in tropical climes across the globe. Nutmeg oil also has uses. Naturopaths recommend it as a calmative to ease stomach cramps and rheumatism. As one SGAPer can attest however, it should be avoided in large amounts as the intoxicating hallucinogenic effects are unpleasant.

We've often aligned the pepper spray Mace with the spice mace. However, my Googling suggests otherwise: the brand name 'Mace' was created in the 1960's when tear gas was added into a spray pack for

personal defence. My guess is it was named after the ancient weapon rather than the spice.

Another beautiful fruiting tree that enchanted us was a small *Prunus turneriana*. Laden with green, red, and ripe black fruit it was a picture of fertility. The fruit was in twin segments approximately the size of a cherry but can grow much larger given wet conditions. Bob told us small amounts of cyanide are present in the seeds, and so First Nations peoples processed them via leaching in water then pounding into flour. Favoured by cassowaries, among other birds and our little friend *Hypsiprymnodon moschatus*, the seeds spread far and wide enabling *Prunus turneriana* to be on the frontline as a pioneer species. Perhaps this is how it came to be growing next to the path, bathed in sunlight while big trees around it kept their identity cloaked in the canopy.

We pondered such things and many more besides in the warm companionship that is a SGAP walk.

Prunus turneriana, fruiting heavily next to the Barron River at Kuranda. It is related to the apricot *Prunus armeniaca* and almond *Prunus dulcis*, but is likely to be toxic.

Native nutmegs are common in the forest along the river. The scurfy brown fruits contain a glossy brown seed covered in a lacy red aril.

An idyllic river scene. Not shown here - the crocodile which was lurking a little further upstream.

Species List - Banks of the Barron River.

Compiled by Stuart Worboys and Rob Jago

FERNS AND FERN ALLIES

Adiantaceae
- *Adiantum hispidulum*

Ophioglossaceae
- *Ophioderma pendula*

Polypodiaceae
- *Drynaria rigidula,* basket fern
- *Platycerium hillii*
- *Pyrrosia longifolia,* felt fern

GYMNOSPERMS

Podocarpaceae
- *Podocarpus grayae*

FLOWERING PLANTS - BASAL GROUP

Lauraceae
- *Cryptocarya hypospodia,* northern laurel
- *Cryptocarya murrayi*
- *Cryptocarya triplinervis var riparia*
- *Endiandra hypotephra*
- *Endiandra montana*

Myrtisticaceae
- *Myristica globosa*, native nutmeg

FLOWERING PLANTS- MONOCOTS

Araceae
- **Epipremnum pinnatum cv. Aureum*
- **Philodendron hederaceum*
- **Syngonium podophyllum*

Arecaceae
- *Archontophoenix alexandrae*
- *Calamus moti*
- *Ptychosperma elegans,* solitaire palm

Hydrocharitaceae
- **Limnobium laevigatum,* Amazonian frogbit

Orchidaceae
- *Cymbidium madidum*

Pandanaceae
- *Benstonea monticola*

Poaceae
- **Hymenachne amplexicaulis*

FLOWERING PLANTS- EUDICOTS

Anacardiaceae
- *Blepharocarya involucrigera*
- **Mangifera indica* mango
- *Rhus taitensis*

Apocynaceae
- *Alstonia muelleriana,* hard milkwood

Aquifoliaceae
- *Ilex arnhemicus*

Araliaceae
- *Polyscias elegans*

Asteraceae
- **Ercihtites valerianifolius f. valerianifolius,* Brazilian fireweed
- **Sphagneticola trilobata*

Casuarinaceae
- *Casuarina cunninghamiana*

This towering *Casuarina cunninghamiana* was weighed down with numerous epiphytes, including basket ferns and orchids.

Celastraceae
- *Elaeodendron melanocarpum*

Combretaceae
- *Terminalia microcarpa,* damson

Convolvulace
- **Distimake tuberosus*, wood rose

Dilleniaceae
- *Tetracera nordtiana,* fire vine

Elaeocarpaceae
- *Sloanea langii*
- *Sloanea macbrydei*

Fabaceae
- *Castanospermum australe,* black bean
- **Inga edulis,* ice cream bean
- *Pongamia pinnata*

Meliaceae
- *Dysoxylum gaudichaudianum*

Menispermaceae
- *Hyperspa laurina*

Moraceae
- *Ficus benjamina,* benjamin fig
- *Ficus variegata*
- *Ficus virens,* banyan fig

Myrtaceae
- *Syzygium hemilamprum*
- *Syzygium tierneyanum*

Oleaceae
- *Chionanthus ramiflorus,* northern olive

Phyllanthaceae
- *Cleistanthus apodus*

Pittosporaceae
- *Bursaria tenuifolia*

Proteaceae
- *Grevillea baileyana*
- *Placospermum coriaceum*

Rosaceae
- *Prunus turneriana*

Sapindaceae
- *Castanospora alphandii*, brown tamarind
- *Cupaniopsis anacardioides,* tuckeroo
- *Cupaniopsis foveolatus*
- *Guioa acutifolia*
- *Rhysotoechia robertsonii*
- *Sacropteryx reticulatus*

Sapotaceae
- *Planchonella chartacea*

Solanaceae
- **Solanum lasiocarpum*
- **Solanum torvum,* devil's apple

FROM DON: SOME IDEAS FOR FIRST HALF OF 2022

1. Take a boat trip. There is a boat hire company that has a range of self-drive boats which require no licence. There is a toilet on board. Isuggest that we take a boat of a size to suit our party and circumnavigate Admiralty Island, paying particular attemtion to the southern end . We can stop anywhere to have our lunch but I doubt that we could go ashore. Much of Admiralty Island is a monoclture of *Rhizophora stylosa* but here is more varietty on the eastern side. Cost will not exceed $20 per head and may well be less.
2. The month following the boat trip. Drive to the bottom of the inlet via Pine Creek road and explore the vegetation types which confronted the early settlers and packers. Target: Packers Camp/Alleys Landing area. It will be interesting to try to match on ground observations with on water . We can attempt to identify vegetation changes wrought by incomers.
3. And finally. Now that we are familiar with the area- let's try to hammer the exact spot at which Captain Cook landed in June 1770. Yes, I know that we have long planned this . Rob & Tony have each done a lot of research, and armed with Cook's, Banks' and Solander's journals plus the list of plants collected, we should be able to make a good effort of it.

East Russell, October 2021

Anonymous

Editor's Note: Last month's excursion proved very popular with attendees, and I was very pleased to receive not one, but two trip reports. This report, sadly unsigned, and accompanying photos, were received too late to include in the October newsletter.

It was a pleasantly mild day when we gathered for lunch under the cool of Don and Pauline's carport. After a chatty lunch passing the fly swat to catch the September march flies, we car pooled back to Babinda Farmstay leaving Don to rest and recuperate after experiencing serious surgery just a few days previous.

Michelle and Norm Harris cordially greeted us after giving instructions re: parking. Their son Beau appeared after a few minutes from the scrub on the other side of Meringula creek. He had been finding fruit for us to identify. Near where we parked a large multi trunked *Cerbera manghas* was adorned with numerous star shaped white flowers and several large red fruit.

From there we made our way along the southern side of the creek where large rainforest trees grew along with lush vines and creepers of all descriptions. Beau had found a brilliantly red fruit from a large *Syzygium* tree just on the other side. Along the creek were numerous beautiful *Cyathea cooperi,* growing alongside *Cyathea rebeccae*. There were many examples of vines including flowering and fruiting *Freycinetia scandens* along with *Pothos longipes* with its candle flame-shaped leaves. There were also looping strands of the orchid *Bulbophyllum baileyi,* however no flowers. There were also burney bean (*Mucuna gigantea*) and matchbox bean (*Entada* sp.) twirling through the trees. Hanging from a fallen tree across the creek was a large specimen of

Psilotum complanatum or Flat fork Fern.

Walking further up we came to a concrete bridge spanning the creek. This lead to a small relatively cleared valley with the creek circling its border. Here we found the smaller *Alpinia modesta* along with *Hornstedtia scottiana*. *Licuala ramsayi* stood out with their circular fronds. There was a small Hairy Gardenia (*Atractocarpus hirtus*) on the creek bank. We found an abundance of the orange/red fruit of the *Cryptocarya oblata* on the ground. A very large tree had fallen along with its bounty of epiphytes one of which was the most beautiful *Asplenium laserpittiifolium* or Johnstone River Maidenhair. We came across a small *Diploglottis bernieana* with its large compound leaves.

There were many more species of plants endemic to these parts but it needs someone with more knowledge than me to identify them all. Michelle invited us for a sumptuous afternoon tea under the shade of their picnic area. It finished off a lovely afternoon of bush wandering.

A magnificent *Psilotum complanatum* growing out of a basket fern. Photo by Patsy Penny.

Freycinetia excelsa. Photo by Patsy Penny.

The peculiar fruit of *Apodytes brachystylis,* or Buff Alder.

Doryphora aromatica or Northern Grey Sassafras. We always knew when the sawmill was cutting sassafras because of its strong odour when cut. Was used instead of pine in cabinet making because it is borer resistant. Photo by Patsy Penny.

CSIRO ARBORETUM TOUR

Tour of the CSIRO Arboretum with Matt Bradford. Photo by Rob Jago.

Documenting north Queensland's incredible rainforest tree diversity must be one of the greatest scientific works ever undertaken in northern Australia. The work was led by forestry botanist Bernie Hyland, a meticulous scientist who spent decades roaming the rainforest logging coupes in search of novel specimens. He accumulated a massive collection of pressed, dried plants, which was housed at CSIRO's Research Station on Maunds Road Atherton. The collection became the foundation of the Australian Tropical Herbarium, and provided reference material for the development of the Rainforest Key (https://apps.lucidcentral.org/rainforest/text/intro/index.html). Based on these collections, Bernie described 77 genera, species and subspecies, including 17 *Syzygium* and 48 species in that most challenging of rainforest groups, the Lauraceae.

But Bernie's work didn't just consist of collecting herbarium samples. He collected wood samples, and seed when it was available. The seed would be germinated in the Research Station's shade houses, and the germination times carefully monitored. Seedling morphology was described, and that information was used to construct the seedling identification section of the Rainforest Key. Starting in 1971, a few of those excess seedlings were planted into the grounds of the Station, with their location and identity carefully mapped. Driven by the herbarium staff's need for reference material, the seedling collection grew, and the seedlings themselves grew into the forest that now dominates the site. With the species and precise origin of each tree documented, the Arboretum has proved a valuable resource for researchers unable to reach rare species that are often located in remote rainforests. Sadly, tropical ecology research is no longer a priority for CSIRO, and the long-anticipated decision to close down the site has been taken.

On 7th November, SGAP members from Mackay, Innisfail, Tablelands and Cairns (surely the most geographically diverse gathering we've ever had outside of a conference!) met for a guided tour of the Arboretum. Led by former CSIRO vegetation ecologist, Matt Bradford, we were told the story of the forest, and its uncertain future. A small group of locals will keep the trees tagged and maintained in the short term. Its long term fate remains unknown.

What's Happening...

Cairns

Sunday 21 November: 12 noon: Helen has kindly offered her home at 17 Manilla Place, Mt Sheridan as venue. Talk by Stuart Worboys on the award-winning tropical mountain flora conservation project.

After the talk, we'll have a "**Show and Tell**" - so if you have any beautiful natives flowering in your garden, or pot plants to show off, please bring them along.

Sunday 5 December: 12 noon. SGAP Cairns Branch - Christmas breakup. 17 Manilla Place, Mt Sheridan. Bring a plate to share.

Remember to bring prizes for the Christmas raffle!

Tablelands

Meetings on the 4th Wednesday of each month at 7:30 pm, Tolga CWA Hall. Excursions the following Sunday.

Excursion officer: Peter Radke, 4091 4565.

Townsville

Meeting of Native Plants Queensland - Townsville Branch at Oonoonba Community Hall (Shannon Street Oonoonba).

Pictured here is an old rainforest leaf. The muck and rubbish covering the leaf surface comprises living plants - mosses, lichens and liverworts. The habit of growing on leaves has a special name - they are epiphylls.
Some epiphyllic liverworts have an attractive aromatic smell. Andi Cairns writes "Many leafy liverworts are scented — they contain volatile turpenoids or other simple aromatic compounds in their oil bodies... they are likely to be Lejeuneaceae species." These aromatic compounds may deter grazing by insect larvae.

SGAP Cairns Branch 2021-2022 Committee

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