

A clear warm sunny Spring day was ideal weather for another get-together of friends to explore and appreciate our habitat. Some enjoyed the barbecue facilities overlooking Lake Morris as we gathered for a show and tell session with interesting plants brought along for identification/discussion. Dave Barrow had a flowering vine specimen which Rob identified as *Derris sp.* Claudie River, and unnamed species. *Derris* is an interesting plant: when the vine is crushed in water it makes a powerful fish poison (Beasley), the saponin-containing leaves are eaten by the larvae of the Orange Aeroplane butterfly (Townsend) thus making them unattractive to avian predators. Dave reports that the vine is prolific in the Pugh Creek area which we will be visiting next month – I may look for a cutting, though the



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EXCURSION REPORT Lake Morris, October 2014

BY DON LAWIE

seed germinate readily and I can experiment with making my own insecticide powder.

Stuart presented an insignificant, tiny flowering plant of indeterminate colour which he said was a rarely-collected saprophyte *Sciaphila*. This little wonder lives on the forest floor, in and among leaf litter. The term "saprophyte" Stuart told us, is now redundant since the plants that have no chlorophyll and which depend on decaying vegetable tissue for their sustenance are not actually eating the material but instead are parasitising the various mycorrhiza which break down the tissues for easy ingestion by the plant. Several well-known orchids such as *Pseudovanilla*, *Dipodium sp.*, *Aphyllorchis sp.* are

saprophytes, or more correctly now "myco-heterotrophs". The above orchids are reputed to be impossible to grow in artificial, garden conditions. This advance in botanical knowledge may have opened the way to *in vitro* cultivation which will be a significant boost to horticulture.

We digested this gem of information with our lunch as we strolled down to and across the dam wall, then up a steep concrete road which eventually leads to either Davies Creek or Kuranda. There are plans afoot to expand the usage of the





Oct 2014 Excursion Report (cont.)

Lake Morris area. David Warmington pointed out the site of the “village” where the workers who built the dam lived and this waterside beauty spot would be ideal for picnics, canoeing and perhaps even camping in time to come. I was again struck by the similarity of this area to Loch Katrine in the Scottish Trossachs. The loch is the water source for the city of Glasgow, the level was artificially raised in the 1800’s, and the outflow provides hydro-electric power. Limited activities are permitted on and around the loch. (I would like to volunteer to lead a study team there if Cairns Regional Council picks up the expenses). The access road from Cairns has been extensively improved but is still narrow, winding and hazardous. Opening the road behind the dam to Tablelands visitors would be a big plus for visitor amenity.

All this was batted about as we admired the roadside vegetation, some native, some

planted natives, and a few exotics. A few orchids were seen – a couple of very large *Cymbidium madidum* in deep shade, not showing either flowers or fruit – the fruit hangs on for over a year, the orchid needs light and so perhaps they had responded to their gloomy habitat by growing in size rather than reproducing by seed. Rob found a disconsolate specimen of *Dendrobium jonesii*, but Pauline could find no trace of the biggest *Oberonia titania* she had ever seen, found beside the cement road on our previous visit (Ing excelled himself on that occasion by shinnying up the slender host tree to obtain a champion photograph).

The dam water level was down by about a metre, exposing a “tide mark” on the banks and revealing a mass of adventitious roots which had developed under water on a tree trunk. Freshwater Creek below the dam outlet was dry rock. My altimeter

measured an altitude of 460 metres and we had the expected mix of lowland and upland vegetation in the rainforest beside the cement road.

Placospermum coriaceum which was prolific at Davies Creek was also seen here, again as small roadside seedlings. *Syzygium kuranda*, Kuranda Satinash fruit littered the roadside and Rob pointed out a large mature tree of the species which would have been a timberman’s dream tree. Rob also found several small specimens of the Rare and Threatened *Cleistanthus discolor* and an archaic *Bubbia semecarpoides*, survivor of the dinosaur age.

Our botanists and enthusiasts may have gone on up the mountain further but the group feeling was that afternoon smoko was calling. We retraced our steps, chatted even more, then headed for home with heads awash with information and memories.

FUTURE OF THE ATH. The Australian Tropical Herbarium was established as a joint venture between the State Government, CSIRO and James Cook University. Although based at JCU, it is an independent entity.

The initial Joint Venture agreement comes to an end in March 2015 – all too soon. We are hoping the funding agreement will be renewed for the facility. At the moment all the signs are good., but nothing is certain until pen is put to paper.

OPEN TO THE PUBLIC.



A reminder that the ATH has a freely accessible public reference collection. The collection comprises well over 2000 specimens representing most of northern Queensland’s flowering plants. The reference collection can be used by members of the public wishing to identify plants. There is also a small library, and internet access is provided. The Public Reference Collection is open on business days, between 9:30 and 4.



The spectacular pompom flower cluster of Syzygium wilsonii



The unspectacular flowers of Guioa lasineura.



This paperbark tree was once growing on the lake shore – falling water levels have left it stranded.



A native gardenia – Gardenia ovularis.



The beautiful juvenile leaves of Cissus penninervis.



Hunting for rainforest ferns on the roadside banks.

OCTOBER 2014 SPECIES LIST

Compiled by Rob Jago and Stuart Worboys.

For those who were taught botany in their school years, you will be familiar with the traditional division of the flowering plants into 'monocots' and 'dicots'. The monocots – lilies, grasses, palms, orchids – had one seed leaf, long strap-like leaves with parallel veins, and usually flowers with 3 or 6 petals. The dicots – all the remaining flowering plants – had two seed leaves, broad leaves with net-like veins and flowers with 4-5 petals.

The revolution in our understanding of plant evolution over the last 20 years has forced a rethink of this simple dichotomy. We now see the evolutionary tree of the flowering plants in a different light. At the base of the tree are several very, very distantly related groups – *Idiospermum*, the laurels, the custard apples, *Austrobaileya*, etc. – which can be conveniently called ancient flowering plants. The Wet Tropics World Heritage Area contains the greatest diversity of ancient flowering plants anywhere in the world. Don't call them primitive – that word is unfashionable nowadays! The next branch in the evolutionary tree is the monocots. Finally, the topmost branch is everything else, now called the 'eudicots' (I like to think of them as the 'new dicots'). This branch contains the silky oaks, the peas, the daisies, the eucalypts and so on – all of the familiar flowering plants which fill our gardens and salad bowls.

FERNS AND FERN ALLIES

CYATHEACEAE

Cyathea cooperi (tree fern)

GLEICHENIACEAE

Dicranopteris linearis

HYMENOPHYLLACEAE

Abrodictyum obscurum

LINDSAEACEAE

Lindsaea brachypoda

LYCOPODIACEAE

Lycopodiella cernua

LYGODIACEAE

Lygodium flexuosum (climbing maidenhair)

THELYPTERIDACEAE

Macrothelypteris polypodioides

ANCIENT FLOWERING PLANTS

ANNONACEAE

Xylopia maccraei

LAURACEAE

Cryptocarya corrugata (corduroy laurel)

Cryptocarya grandis

Cryptocarya lividula

Cryptocarya mackinnoniana (Mackinnon's walnut)

Cryptocarya murrayi (Murray's laurel)

Cryptocarya vulgaris

Endiandra palmerstonii (black walnut)

Endiandra wolfei

Litsea bindoniana

Litsea leefeana

Neolitsea dealbata (bollywood)

MONIMIACEAE

Austromatthaea elegans

Palmeria scandens

WINTERACEAE

Bubbia semecarpoides

MONOCOTS

ARACEAE

Pothos brownii (candle leaf)

ARECACEAE

Calamus australis (lawyer cane)

Calamus moti

Linospadix minor

HEMEROCALLIDACEAE

Dianella atraxis

Dianella odorata

ORCHIDACEAE

Cymbidium madidum

Dendrobium jonesii

PANDANACEAE

Freycinetia excelsa (climbing pandan)

Pandanus monticola

RIPOGONACEAE

Ripogonum album

SMILACACEAE

Smilax glycyphylla

EUDICOTS

ANACARDIACEAE

Blepharocarya involucrigera (rose butternut)

APIACEAE

Mackinlaya ?macrosciadea

APOCYNACEAE

Alstonia scholaris (milky pine)

ARALIACEAE

Polyscias australiana (ivory basswood)

Polyscias elegans (celerywood)

Polyscias murrayi

Polyscias purpurea

ASTERACEAE

**Crassocephalum crepidioides*

**Sonchus oleraceus* (sow thistle)

**Sphagneticola trilobata* (Singapore daisy)

**Youngia japonica* (Japanese hawkweed)

CUNONIACEAE

Gilbeea adenopetala

DILLENIACEAE

Tetracera nordtiana (fire vine)

ELAEOCARPACEAE

Aceratium megalospermum

Elaeocarpus bancroftii (Kuranda quandong)

Elaeocarpus grahamii

Sloanea langii (white carabeen)

ESCALLONIACEAE

Polyosma hirsuta

EUPHORBIACEAE

Macaranga involucrata var. *mallotoides*

Macaranga subdentata

Rockinghamia angustifolia

FABACEAE

Acacia celsa (brown salwood)

Acacia cincinnata (Daintree wattle)

Acacia mangium

Caesalpinia traceyi (mother-in-law vine)

Vandasina retusa

ICACINACEAE

Apodytes brachystils

Citronella smythii

LAMIACEAE

Clerodendrum grayi

MALVACEAE

Franciscodendron laurifolium

MELASTOMATACEAE

Melastoma malabathricum (bluetongue)

MORACEAE

Ficus septica

MYRTACEAE

Archirhodomyrtus beckleri

Rhodamnia percostata

Ristantia pachysperma

**Syzygium jambos*

Syzygium Kuranda (Kuranda satinash)

Syzygium luehmanii (small-leaved lilly pilly)

Xanthostemon whitei (red penda)

PASSIFLORACEAE

**Passiflora edulis* (passionfruit)

PHYLLANTHACEAE

Breynia stipitata (fart bush)

Cleistanthus discolor

Glochidion sumatranum

PROTEACEAE

Alloxylon wickhamii

Cardwellia sublimis (northern silky oak)

Carnavonia araliifolia

Grevillea baileyana

Opisthiolepis heterophylla

Placospermum coriaceum

Stenocarpus reticulatus

RHAMNACEAE

Alphitonia whitei

ROUSSEACEAE

Abrophyllum ornans (native hydrangea)

RUBIACEAE

Atractocarpus hirtus

Gardenia ovularis

RUTACEAE

Flindersia bourjotiana (Queensland silver ash)

Flindersia pimenteliana

Melicope elleryana

SAPINDACEAE

Cnesmocarpon dasyantha

Mischocarpus grandissimus

Guioa acutifolia

Guioa lasioneura

Toechima erythrocarpum

SYMPLOCACEAE

Symplocos glabra (white hazelwood)

THYMELEACEAE

Lethedon setosa

VITACEAE

Cissus penninervis

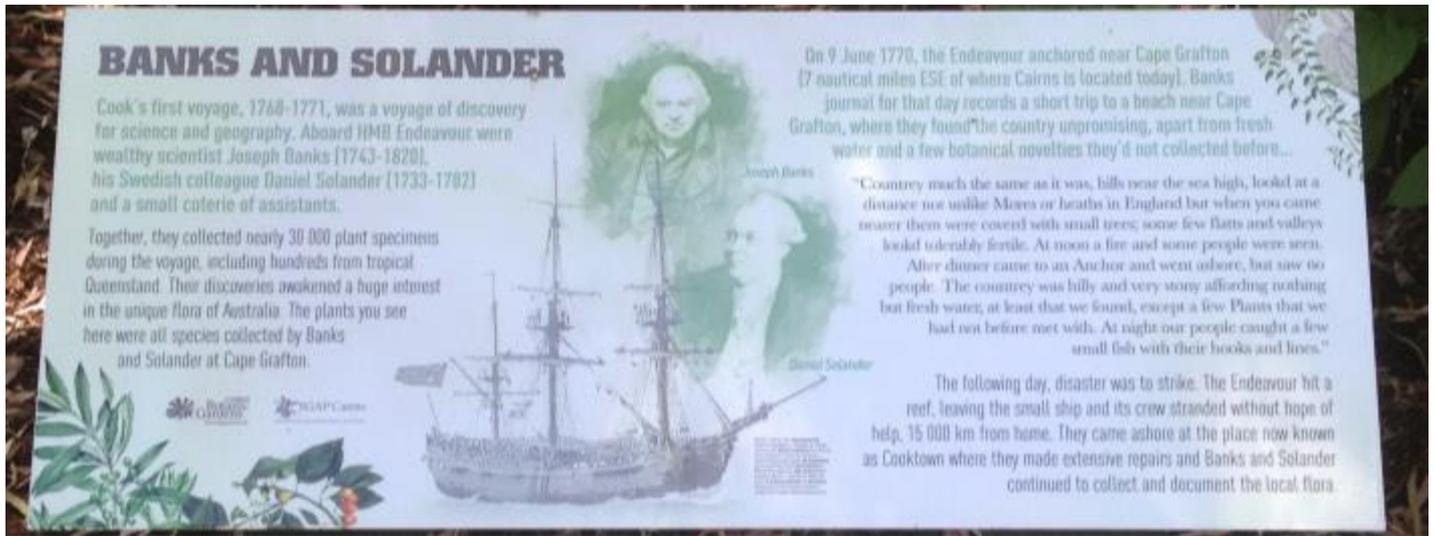
Botanical Explorers. Commemorative Beds at the Cairns Botanic Gardens



Sunday 7 September, Father's Day, also saw the hugely popular Carnival on Collins festival. Cairns SGAP chose this day to make a start on the long-planned botanical explorers plantings – enabling us to get a bit of exposure to the passing public, and ensuring the garden was planted and signposted (see the photo on the next page) for the State Botanical Gardens Conference in October.

The plantings carried out on 7 September were aimed at creating a new “Banks and Solander” bed. Most of the plants we put in were collected by Joseph Banks at Cape Grafton in 1770, although some Endeavour River collections were included. We now have an attractive display of *Grevillea pteridifolia*, *Dodonaea polyandra*, and the wonderfully bizarre *Lomandra banksii* on display for garden

visitors. Happily, we were also able to source the glorious *Dendrobium discolor*, growing wild in a tree a few metres away.



The final sign – words by SGAP and Cairns Botanic Gardens.

Next year we hope to create more commemorative beds, perhaps recognizing the efforts of Eugene Fitzalan, Hugo Flecker , W.A. Sayer and John Dallachy.

Thanks to Kuranda Envirocare, Yuruga Nursery, Treeforce and the staff of the Cairns Botanic Gardens for their help in making this happen.



The finished garden, a month after planting.



Upcoming Events

CAIRNS SGAP

Sunday 16th November

12 noon. Final meeting for the year, Christmas break-up and plant walk. To be held at the property of David Barrow, 85 Upham Road, Mirriwinni (see map).

Bring a plate of something Christmassy to share.

TABLELANDS SGAP

Meetings on the **4th Wednesday of the month.**

Excursion the following Sunday.

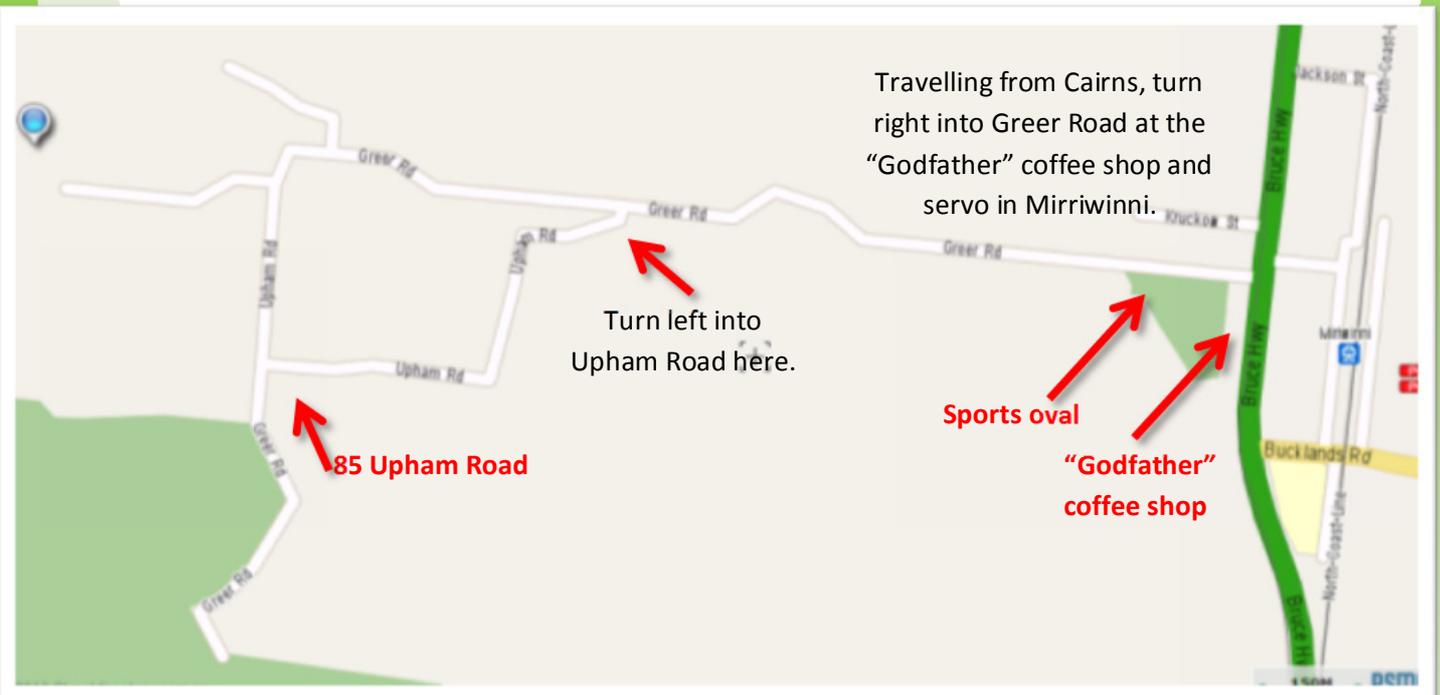
Any queries, please contact Chris Jaminon on 4091 4565 or email hjaminon@bigpond.com

TOWNSVILLE SGAP

Meets on the **2nd Wednesday of the month**, February to November, in Annandale Community Centre at 8pm, and holds excursions the following Sunday.

See www.sgaptownsville.org.au/ for more information.

OTHER EVENTS OF INTEREST



www.sgapcairns.org.au

SGAP CAIRNS 2014 COMMITTEE

Chairperson	Boyd Lenne
Vice-chairperson	Pauline Lawie
Treasurer	Stuart Worboys
Secretary	Boyd Lenne
Newsletter	Stuart Worboys
Webmaster	Tony Roberts