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August
2013

CARNIVAL ON COLLINS 2013

A Cairns Fathers Day tradition: Carnival on Collins showcases the best of the Botanic Gardens precinct with an enormous street fair.

Carnival on Collins is a great family fun day featuring loads of free entertainment for people of all ages. Local art, craft, produce and heaps and heaps of interesting (and often exotic) plants are available at a diverse range of market stalls. No doubt the Friends of the Botanic Gardens will be holding their usual plant sale.

A featured event on the Cairns Festival program, Carnival on Collins is a sustainable community event.

COST: FREE

TIME: 9AM – 3PM

VENUE: TANKS ARTS
CENTRE + BOTANIC
GARDENS + COLLINS
AVENUE

SGAP Cairns

Society for Growing Australian Plants, Cairns Branch



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EXCURSION REPORT WALSH'S PYRAMID, JULY 2013

By Don Lawie. Photos by D Lawie, I Walker & S Worboys

Walsh's Pyramid, with a height of 922 metres is reputed to be the world's highest solitary granite upthrust. A defined track to the peak follows a prominent spur on the NNE face and we set out along the track after a convivial lunch beside the nearby Mulgrave River. Stuart printed Rob's eight page Pyramid plant list in our newsletter, which was very handy and something to do for future trips if a list is available. I was able to bone-up on what to expect, and Rob was pleased to make extensive additions to the list on the day.

Vegetation on the Pyramid is generally dry sclerophyll forest type with pockets of rainforest plants, ferns and orchids in niche areas. The early part of the climb passed familiar trees – Pink Bloodwood *Corymbia intermedia*, Moreton Bay Ash *Corymbia tessellaris*, Red Ironbark *Eucalyptus crebra*, growing with an understorey of sparse Kangaroo Grass *Themeda triandra* accompanied by Rattlepod *Crotalaria goreensis*, their inflorescences matured to the familiar pea

fruit. A rainforest vine *Ichnocarpus frutescens* looped through some lower branches. This vine has become an invasive pest in our home garden, overgrowing all that it contacts with a maze of roots making it difficult to eradicate. Another vine was Striped Cucumber *Diplocyclos palmatus*, an attractive tendril climber with fruit that mature from green/white to pinkish stripes. This vine appeared en masse in our garden after Cyclone Winifred in 1986 then disappeared. Perhaps *Ichnocarpus* will do the same one day?

Sportspersons participate in a race each August from Gordonvale to the top of the Pyramid and return. Our trip took place before the entire mountain is burnt each





July Excursion report

year to facilitate the race operation, and numerous plants exhibited multi stems as a result of repeated fire damage. One such was a delight to find – from the Rubiaceae Family *Pogonolobus reticulatus* was abundant, its tough leaves resistant to desiccation. This was a favourite plant of Tony Irvine, one of our Tableland SGAP Gurus who led us on many an expedition over the years. Tony would exult in finding the “O” Tree, and would roll the long name off in a sonorous chant. What a

Teacher he was!

There are numerous extensive soilless granite shields where only herbaceous plants can survive in accumulated leaf litter. Such places are the growth choice of the Resurrection Fern, *Cheilanthes*. Several species of this small plant grow as clumps of greenery at present, existing on occasional showers and heavy dewfall. Once the fire has gone through, or after extended dry periods, they

will become twisted black stems apparently lifeless but Lo! The next shower will return them to life.

Some patches of shallow soil on the granite shields also support strong colonies of the fragrant-leaved herb *Plectranthus gratis* which can reach a height of seventy centimetres. Another abundant lithophyte was *Evolvulus alsinoides* with wiry stems supporting many tiny ice-blue flowers that blended perfectly with the dark rock faces.

We had by then reached the dizzy height of 120 metres and were puffing steadily so the little rock plants were a good excuse to pause. Our Branch Hon Sec Boyd appeared from the heights, not even slightly out of breath, to encourage us to continue but we declined and made our way back to ground level, smoko at Greenpatch and a memory of another journey under Rob’s expert guidance.

There are many plants we didn’t see and more to add to Rob’s list; the flora is so extensive that I think that we should return to the Pyramid in other seasons and try to find an approach from a different part, perhaps accessing the courses of some of the ephemeral creeks.

As you should know, the Australian Tropical Herbarium has taken over the development of the keys to the rainforest plants of northern Australia. In the past few years, we’ve seen the release of free online versions of the Rainforest Key’s 6th Edition, and the Orchid Key (both of which can be accessed through the Herbarium’s website: www.ath.org.au/JCUPRD_042124.html). However, there remains a substantial gap to fill. To deliver to the public a comprehensive and free web-based set of keys for Australia’s tropical rainforest plants, the ferns need to be dealt with. And we have just generated working version of this key for testing in the herbarium. It’s far from finished; it’s full of holes; it needs a lot of testing. But a working version of the key has been generated and it’s only a matter of time and testing before it is released.

Over the past few months I’ve written about the changes to our understanding of plant classification that have been wrought by DNA sequencing. One group that will see name changes over the next few years is *Phyllanthus* and its relatives *Breynia*, *Sauropus* and *Glochidion*. DNA studies have shown the current classification of these groups does not reflect their true evolutionary history. It seems the resolution of this problem will come from splitting *Phyllanthus* into several new genera. These genera can be defined by clear features like flower characters, fruit shape and seed surface. *Glochidion* remains unaffected by the proposed changes, but *Breynia* (including good old fart bush) and *Sauropus* may need some rearrangement.



Plants of Walsh’s Pyramid. Above: *Melaleuca pyramidalis*,. Below left: *Genoplesium ?morrissii*. Below right: *Pultenaea millarii*.





Plants of Walsh's Pyramid. Rubiaceae – Pogonolobus reticulatus



Plants of Walsh's Pyramid. Cheilanthes ferns and grasses toughing it out amongst the rocks



Plants of Walsh's Pyramid. Convolvulaceae – Evolvulus alsinoides (Tropical Speedwell)



Plants of Walsh's Pyramid. Fabaceae – Kennedia rubicunda (Running Postman)

By far my favourite tree in our garden, surpassing even the long suffering *Idiospermum* down on the lower terrace, is the Daintree Pine. This neat, attractive small tree is to all appearances a conifer – it has the same reduced leaves, the same neat conical shape, and even bears cone-like structures. However, the Daintree Pine carries a misleading name – it is actually a flowering plant, related to *Casuarinas*, and the only member of its genus in Australia.

Daintree Pine or *Gymnostoma australianum*, is an exceptionally restricted species, confined to the upper catchments of creeks around Thorntons Peak and the upper reaches of the Roaring Meg Creek. A few trees occur almost at sea level on Noah Creek, just a couple of hundred metres up from the Cape Tribulation Road bridge. There are however other members of the genus overseas, including Borneo, New Caledonia, Fiji and Papua New Guinea. Fossils of the distinctive branches have been found in the mountains of Victoria, New Zealand, and even in Argentina.

The tree is modest in size, usually 4-7 m tall, with fissured bark. In the wild, it occurs on rocky creek banks, where I guess it can take advantage of abundant water and light. However, they seem to thrive in Cairns without supplementary watering. Trees may be male or female, or bear flowers of both sexes. I have heard rumours that female trees have a better form, and this would seem to be borne out by the almost perfect conical tree in our garden, although its likely to get more bushy as it ages.

The leaves of the tree are reduced to tiny green scales at joints in the green branches. The branches are four angled,

Beautiful tree species of the Wet Tropics

Gymnostoma australianum, CASUARINACEAE

Daintree Pine

By Stuart Worboys

with four shallow furrows running their length. In *Casuarina*, these furrows are deep and offer protection from drying for the microscopic breathing holes (stomata) contained within. *Gymnostoma's* natural habitat is moist tropical rainforest, so it's not so concerned about drying out. Its stomata are virtually naked on the branch surface, hence the name, which translates as naked stomata.

Like *Casuarina*, it has winged seeds borne in cones. Pollen is probably windborne.



Gymnostoma australianum in Cairns



Gymnostoma papuana in Tabubil, Papua New Guinea



Gymnostoma sumatranum (photo by Scott Zona)



Immature female cones and the distinctive, conifer-like branches of *Gymnostoma australianum*.



Upcoming Events

CAIRNS SGAP

17 August 2013 – Bramston Beach. Meet at grassed park 11.00 am (see map below).

21 September 2013 - Stoney Creek. Meet at Car Park 10 am.

19 October - Fitzroy Island – When booking, don't forget to ask for a locals discount.

Book for the Fitzroy island fast cat on 40446700. Boats leave at 8.00, and 11.00am. We will meet at the Jetty at 8.50 and at 11.50am. Options to stay overnight at resort or book a camp site with council, or on the number above.

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

1 September 2013

Carnival on Collins

See www.sgapqld.org.au/anpsa2013.html for more information.



www.sgapcairns.com.au

SGAP CAIRNS 2013 COMMITTEE

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