

## WHATS ON

### Botanic Gardens

Jahdo Freechild of Australian Raw Cacao will be speaking at the Cairns Botanic Gardens on Saturday 7 September at the new Visitors Centre. Entry price is \$10, presentation commences 1:30 pm. More information at: [australianrawcacao.com](http://australianrawcacao.com) and the gardens' website: [www.cairns.qld.gov.au/cbg/whats-on/events-calendar](http://www.cairns.qld.gov.au/cbg/whats-on/events-calendar)

### Treeforce



September Sunday 22nd – Great Northern Clean Up Day & AGM

The Far north's version of 'Cleanup Australia Day'. The Great Northern Clean Up is aimed at providing an opportunity for the communities within the northern parts of Australia to participate in the Clean Up Australia experience at a time more suitable to the tropical climate.

This year's cleanup will be at Lower Freshwater Creek (off Kamerunga Road, behind the Freshwater train station). Contact Treeforce on 0458 245 142 for more information.



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## EXCURSION REPORT AUGUST 2013 Bramston Beach

By Don Lawie

Our run of perfect winter weather continued with a warm sunny day for the beach. We met in time for a walk along the beach before lunch and wandered into the behind-dune vegetation. Beachfront houses are set well back and most occupiers have semi-cleared the vegetation, making an open woodland glade. Retained trees are a mix of open forest and rainforest, and most supported a variety of epiphytes. An old *Melaleuca leucadendra* had a good variety of ferns: *Asplenium australasicum* (or so we decided from the midrib showing strongly beneath the frond), associated with a Ribbon Fern (*Vittaria elongata*), *Drynaria rigidula*, and *Pyrrhosia longifolia*. The Bramston area is noted for the profusion of Golden Orchids (*Dendrobium discolor*) and we saw masses of blooms on specimens probably emplaced by residents. A Noni tree (*Morinda citrifolia*) had a few knobby compound fruit which smell and taste of old cheese. These are "Old People" medicine for coughs and colds – perhaps the taste is so bad that one dose effects a psychological cure? The scrambling vine *Vandasina retusa* is also a feature of the area and contributed to the damage of the low behind-dune trees of North Bramston during recent cyclones. Today the vine is a healthy rampant green, showing off its beautiful purple pea shaped flowers.

Out on the beach the above-tidal area was interlaced with many golden stems of the root parasite Dodder Laurel (*Cassytha filiformis*). What their host could be on the open beach is a bit of a mystery –perhaps the plentiful beach vines *Canavallia rosea* or *Ipomoea pes-caprae*, which also covered much of the beach. An intriguing little plant was Pineapple Sedge (*Cyperus pedunculatus*), which look very similar to the Bromeliad *Tillandsia cyanea*, and may have some use as a potted specimen. Small seedlings of the exotic weed Pond Apple (*Annona glabra*) dotted an area doubtless as a result of a fruit washing ashore. Many dried out seeds/fruits such as Looking Glass Mangrove (*Heritiera littoralis*), *Cerbera* sp., *Calophyllum inophyllum*, Poison Laurel (*Cryptocarya pleurosperma*), and the Monkey Puzzle Nut (*Xylocarpus* sp.) littered the tide line. The herb *Melanthera biflora*, one of the plants collected by Banks and Solander at Cooktown in 1770, also thrived at the top of the beach.





# August excursion

It was a good day for birding: Three Beach Stone Curlews frolicked along the waterline, and we almost stood on a pair of Bush Stone Curlews stretched out on the ground leaf litter, their cryptic colouring and the dappled light rendering them almost invisible.



*Pretending to be a stick - bush stone-curlew at Bramston Beach*

Back on the road verge Stuart found a large patch of Herbert River Cherry (*Antidesma bunius*) presenting their juicy fruit to the world. Cooper says that *Antidesma* is Cassowary tucker, and the small fruit bearing at this time of year when Cassowary chicks hatch, would be a valuable food resource for the young birds.

After lunch we drove to the northern end of the road, waded the surprisingly deep North Bramston Creek (no crocs visible today!) and explored the ancient rocks along the mangrove fringed shoreline. A steep granite tor rises sheer from the beach and supports a strong population of trees, shrubs and epiphytes with a

view of sea, sand and estuary that a resort owner would kill for. Liz commented "I've just travelled the world and look at this at our doorstep!"

Stuart had a super surprise for us on the way home: his eagle eyes had spotted some Pitcher Plants (*Nepenthes mirabilis*) growing on the roadside. We found that they were disguised by masses of fern (*Dicranopteris linearis*) clothing an exposed road cutting. These Pitcher Plants are usually associated with the Iron Range area of Cape York Peninsula hundreds of kilometres north of here. How did they arrive? There was an extra bonus: Masses of the day-flying moth *Alcides zodiacus* were hovering about a large emergent clump of Russell River Vine *Omphalea queenslandica* growing over some large trees behind the cutting. The vine is the moth's host plant where they lay their eggs which eventually develop into the familiar large Bandy-Bandy moth which flies as far as the Atherton Tablelands and after a few years returns to the Russell-Mulgrave Valley to continue their life cycle.

*Omphalea* fruit are large – bigger than a big grapefruit – and contain 3 -4 edible nuts which are good Cassowary tucker. Stuart's eagle eyes spotted two of these fruits which we usually associate with the month of May. What a finish to the day.

We were pleased to welcome Dave Barrow, whose knowledge and enthusiasm promise to enhance future outings.

Coming up in November, the I'll again be running the Australian Tropical Herbarium's Rainforest Plant ID courses. These courses are designed to train the interested lay person in the techniques of recognizing rainforest plants. You'll learn that recognizing rainforest plants requires you to look, smell, touch, even taste a plant to identify what it is. Recognising plant families is an essential part of the course.

The three-day course in November course will be held at Paluma, nestled the upland rainforests north of Townsville. Food and dormitory style accommodation will be supplied, but you will need to bring your own warming drinks.

Only ten places are available for this course. More information on price and dates can be found at [www.ath.org.au/JCUPRD1\\_069169.html](http://www.ath.org.au/JCUPRD1_069169.html)

Online enrolments are possible through <https://alumni.jcu.edu.au/PIC2013>



*Nepenthes mirabilis with red and green pitchers, clambering over roadside regrowth.*



*Zodiac moth in flight*

# Beautiful plants of the Wet Tropics

## *Nepenthes mirabilis*

### Pitcher Plant

By Stuart Worboys

Few plants in the world can match the sinister beauty and carnivorous appetites of the pitcher plants. Their adaptations for acquiring nitrogen in their swampy, low nutrient natural habitats make them fascinating objects for study, and attractive features in a pot or hanging basket.

The genus *Nepenthes* is the sole genus in the family Nepenthaceae, with 85-90 species distributed across humid tropical Asia from Madagascar to New Caledonia. Two other groups of pitcher plants are known – Sarraceniaceae in North America, and *Cephalotus* in south-west Western Australia. Despite similarities in appearance and insectivorous behavior, these groups are not related – *Cephalotus*' closest relatives are a family of Andean trees called *Brunellia*, whilst the kiwifruit family Actinidaceae is thought to be the closest group to the *Sarracenia*s. Perhaps unsurprisingly, the tropical pitcher plants are most closely related to another carnivorous group – the sundews (*Drosera*). I should also say that some bromeliads also manage to trap and digest insects, but lack the shapely sophistication of true pitchers.

Three species of *Nepenthes* are now known to occur in Australia. The most widespread and commonly encountered of these is *N. mirabilis*. *N. rowanae* and the recently discovered *N. tenax* are confined to crocodile habitat in the swamps of the lower Jardine River, right at the top of Cape York. The story of the explorations leading to their rediscovery by Rodney Kruger and Charles Clarke is somewhat hair-raising.

### Description

*Nepenthes mirabilis* is a compact shrub or non-woody



Wild *Nepenthes mirabilis* with green pitchers.



Male flowers

vine reaching 10 m tall.

Leaves are broad and glossy, reaching 40 cm long and 8 cm wide, with a long tendril at their tip. The tendril wraps around nearby objects and uses them as climbing supports. Some tendrils (not all!) produce at their tip an elongate cup-shape structure, the pitcher. The pitcher is patterned with red and green, and with a glossy lip surrounding the opening (the peristome) and a red lid (operculum), which prevents rainwater from diluting the digestive fluids contained within.

Flowers are produced at the end of the growing stem, in racemes about 30 cm long. Flowers are small, red or green, with male

and females on separate plants. Seeds are wind-borne.

*N. mirabilis* is widespread on northern Cape York, where it typically occurs in swamps and in thickets along creeklines. South of Coen, it is only known from Yarrabah and Bramston Beach, where populations are considered endangered and protected by law.

### Cultivation

Being a vine, pitcher plants make great hanging basket plants. A suitable potting media for *Nepenthes* should be well-drained, slightly acidic, and poor in nutrients. A simple well-balanced recipe can be made by mixing equal parts of organic

(such as peat moss or tree bark) for moisture retention and inorganic ingredients (such as pumice, perlite, or granite chips) for soil aeration. Despite their reputation as being beasts of ever-wet swamps, they are tolerant of occasional lapses in watering.

Don't overfeed *Nepenthes*, lest they stop producing pitchers! Gary Sankowsky suggests a single pellet of slow-release fertilizer in the pitchers every couple of months.

When stems get too long, or start to die, cut them off near the base, making sure you retain a few leaves. New stems will sprout from the base of the plant.

## BRAMSTON BEACH SPECIES LIST

### FERNS

#### ASPLENIACEAE

*Asplenium australasicum* (birds nest fern)

#### POLYPODIACEAE

*Drynaria rigidula* (basket fern)  
*Drynaria sparsisora*  
*Platycterium hillii* (elkhorn fern)  
*Pyrrosia longifolia* (felt fern)

#### OPHIOGLOSSACEAE

*Ophioglossum pendulum*

#### PTERIDACEAE

*Vittaria* sp. (tape fern)

### FLOWERING PLANTS

#### AMARYLLIDACEAE

*Crinum pedunculatum* (mangrove lily)

#### ANNONACEAE

\**Annona glabra* (pond apple)

#### ARALIACEAE

*Polyscias australianum* (ivory basswood)  
*Polyscias elegans* (celerywood)

#### ASTERACEAE

*Melanthera biflora*

#### BURSERACEAE

*Canarium australianum* var. *australianum* (scrub turpentine)

#### COMBRETACEAE

*Terminalia arenicola*  
*Terminalia catappa* (beach almond)

#### CYPERACEAE

*Cyperus pedunculatus* (pineapple sedge)  
*Gahnia aspera*

#### EUPHORBIACEAE

*Excoecaria agallocha* (blind-your-eye mangrove)

#### FABACEAE

*Acacia crassicarpa*  
*Acacia flavescens*  
*Canavalia rosea* (beach bean)  
*Cynometra iripa* (wrinklepod mangrove)  
*Vandasina retusa*

#### GENTIANACEAE

*Fagraea camagei* (porcelain fruit)

#### GOODENIACEAE

*Scaevola taccada* (beach lettuce)

#### HEMEROCALLIDACEAE

*Dianella ?caerulea*

#### LAURACEAE

*Cassytha filiformis* (dodder laurel)  
*Cryptocarya cunninghamii* (coconut laurel)  
*Cryptocarya vulgaris* (northern laurel)  
*Litsea fawcettiana* (brown bollywood)

#### MYRTACEAE

*Corymbia intermedia* (pink bloodwood)  
*Corymbia tessellaris* (Moreton Bay Ash)  
*Melaleuca leucadendra* (weeping paperbark)  
*Rhodamnia macrocarpa*  
*Syzygium forte* subsp. *forte*

#### ORCHIDACEAE

*Dendrobium canaliculatum* (tea tree orchid)  
*Dendrobium discolor* (golden orchid)  
*Dendrobium smillieae* (bottlebrush orchid)

#### PHYLLANTHACEAE

*Antidesma bunius* (Herbert River cherry)



*Breytia stipitata* (fart bush)

#### PITTOSPORACEAE

*Bursaria tenuifolia*

#### POLYGALACEAE

\**Polygala paniculata*

#### PROTEACEAE

*Grevillea baileyana*

#### RUBIACEAE

*Morinda citrifolia*

#### SAPINDACEAE

*Guioa acutifolia*



# Upcoming Events

## CAIRNS SGAP

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

**Saturday 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 **4<sup>th</sup> Wednesday of the month.**

Excursion the following Sunday.

Any queries, please contact Chris Jaminon on 4091 4565 or email [hjaminon@bigpond.com](mailto:hjaminon@bigpond.com)

## TOWNSVILLE SGAP

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

See [www.sgaptownsville.org.au/](http://www.sgaptownsville.org.au/) for more information.

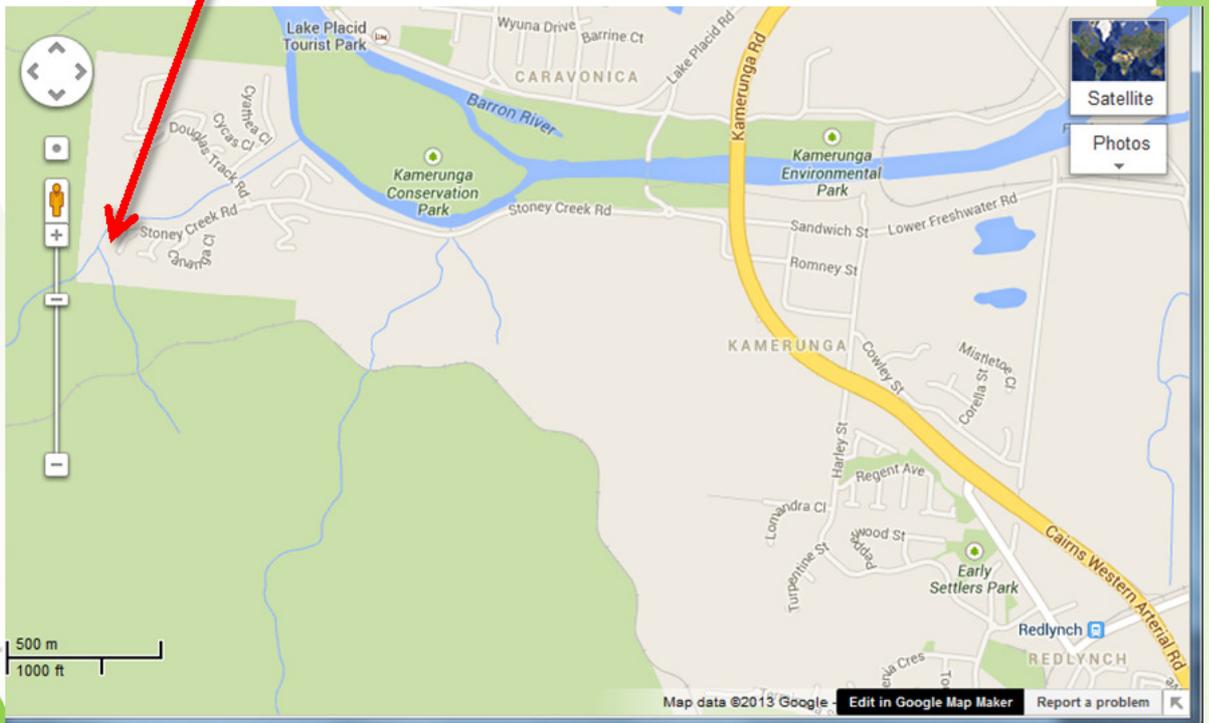
## OTHER EVENTS OF INTEREST

**10-16 August 2013**

ANPSA Biennial Conference, Sunshine Coast. Held every two years, this is the conference of our national parent organization.

See [www.sgapqld.org.au/anpsa2013.html](http://www.sgapqld.org.au/anpsa2013.html) for more information.

## SGAP Excursion Sat 21 Sept – Stoney Creek



- SGAP CAIRNS 2013 COMMITTEE
- Chairperson Rob Jago
  - Vice-chairperson Mary Gandini
  - Treasurer Stuart Worboys
  - Secretary Boyd Lenne
  - Newsletter Stuart Worboys
  - Webmaster Tony Roberts