

SGAP Cairns

Society for Growing Australian Plants Inc., Cairns Branch
Celebrating our 40th year

NEWSLETTER 198 MARCH 2020



February Excursion Report - Cairns Botanic Gardens

Don Lawie

Our first meeting for the year was prudently held at the Botanic Gardens Information Centre in case wet season rain interrupted proceedings, but the day was hot and sunny. We met at the café to renew old friendships for another year and welcomed a number of visitors, who we hope to see again.

Main item on the agenda was for us to meet the new Curator of Cairns Botanic Gardens, Dr Charles Clarke. We have a privileged relationship with the Botanic Gardens management; Charles set us up on the Forum benches and we had a detailed briefing on what he hopes to achieve in coming years.

There are no radical changes proposed and Charles was complimentary of the long tenure of David Warmington in the job. We have a world-class

Botanic Garden which showcases tropical plants from Far North Queensland and the World.

We were given an insider's view of some of the problems that go with the job:

- Centenary Lakes, originally planned as a freshwater complex, has suffered repeated salt water flooding and is now a saltwater lakes system, with the surrounding ground suffering from salt deposits.
- The Gondwana feature garden has become too shady due to mango tree growth – but the shade has brought an influx of frogs and the frog-fanciers want the shade kept.
- *Heliconia* plants require much water but they are planted in an area of sandy soil and require an excess of watering in the dry season. A solution is to move them to a wetter area and plant the dry area with plants of the Tropical Savannah such as *Brachychiton* and *Cochlospermum* species.
- The close concentration of many diverse plants invites all manner of unwelcome bugs, fungi and weeds.



SOCIETY FOR GROWING AUSTRALIAN PLANTS INC., CAIRNS BRANCH

Email: secretary@sgapcairns.org.au

Website: www.sgapcairns.org.au

2019-2020 COMMITTEE

President: Tony Roberts

Vice President: Pauline Lawie

Secretary: Sandy Perkins (secretary@sgapcairns.org.au)

Treasurer: Val Carnie

Newsletter: Stuart Worboys (worboys1968@yahoo.com.au)

Webmaster: Rick Wong



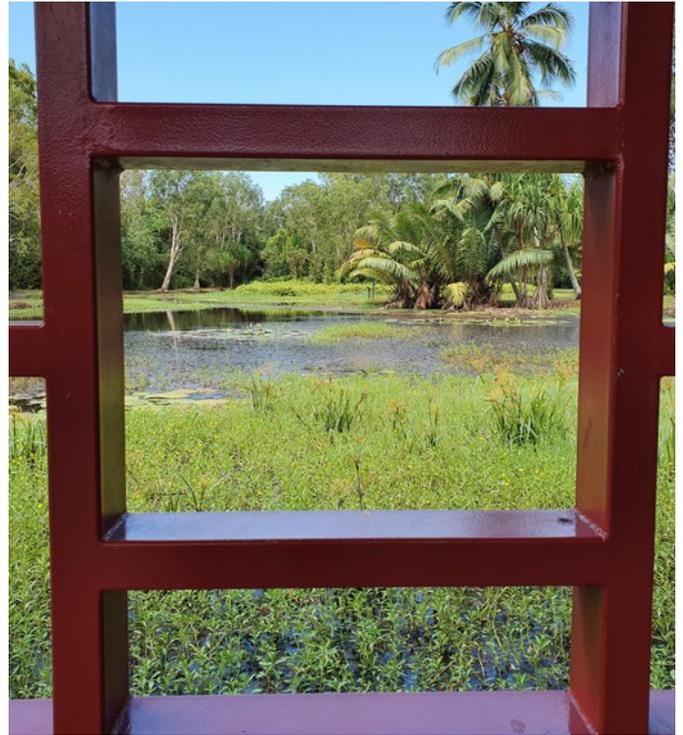
Dr Charles Clarke, speaking to SGAP at the Cairns Botanic Gardens.



Tiny cannonball mangrove flowers, blossoming in mangroves along saltwater creek.

That's just a few of the problems that go with the job.

Charles also liaises with the Australian Tropical Herbarium, and Sugarworld at Edmonton comes under his control. We lunched as Charles spoke and a walk was planned to inspect the Chinese Peace Garden, but the day was a bit hot for me and my family so we walked the Gondwana circuit instead. We look forward to a continuing association with the Gardens management and are pleased to welcome Charles to the job.



View of Nypa palms growing on the shore of Centennial Lakes.



The pagoda built as part of the Chinese Friendship Garden, Cairns Botanic Gardens.

CITIZEN SCIENCE INITIATIVE FOR ORCHIDS



Adapted from the WOW summer newsletter

Wild Orchid Watch (WOW) is a national citizen science project designed to collect, record and share scientific information about Australian native orchids. The WOW team are developing an app and website to enable orchid enthusiasts to collect, record, identify and share information about Australian native orchids. The WOW app will be ready for use in autumn 2020.

Ecologists at the University of Adelaide, in collaboration with members of the Australasian Native Orchid Society (ANOS), have established agreed methods for data collection via the WOW app and website. This online resource utilises the iNaturalist platform, and will act as a central hub for orchid enthusiasts to record and store orchid observations, seek orchid identification and share information with trusted users.

The WOW app is being developed in-house at the University of Adelaide to be fit for purpose. The app will guide users to collect data, take a series of photographs and answer



Dendrobium canaliculatum, Mareeba

questions about variables such as habitat, landform, pollinators observed, and site disturbances. Location data will be recorded using the phone's GPS. Data sharing with trusted users (ecologists and taxonomists)

will enable critical research into orchid distribution, abundance, phenology and as indicators of environmental change.

The Wild Orchid Watch is a project within iNaturalist (www.inaturalist.org), a joint initiative of the Californian Academy of Sciences and National Geographic, and a highly successful online citizen science platform. The custom-built WOW app will feed data to iNaturalist where WOW data will be securely stored along with millions of other observations of living organisms submitted via the iNaturalist app.

Despite having been in operation for over 10 years, iNaturalist has been underutilised in Australia until recently. The Atlas of



Diruis oporina, Mt Emerald

Living Australia (ALA - www.ala.org.au) is now collaborating with iNaturalist, creating an Australian node of iNaturalist - iNaturalist Australia. ALA says “iNaturalist is a global social biodiversity platform designed to share and discuss biodiversity. Built on open source software, it supports open data, and has a strong community engagement focus including the interest and encouragement of the taxonomic community.”

How will orchid locations be protected?

One of the biggest concerns for modern orchid conservation is the protection of populations from illegal collection. With this in mind, all orchid sightings submitted via the WOW app will have geoprivacy set to ‘obscured’. When a WOW app user logs into iNaturalist and looks at a map of orchid locations in the WOW project, they will see a 0.2 x 0.2 degree latitude rectangular cell (about 20 x 20 km, or 400 km²) encompassing the hidden true coordinates.

An added layer of data protection built into the iNaturalist platform is "taxon geoprivacy"; the locations of all taxa with an IUCN equivalent status of near threatened or higher, are automatically obscured.

Who will have access to sensitive data?

Users will always have full access to their own submitted records. iNaturalist will securely store all accurate orchid locations. This data will only be directly accessible to state government data managers and WOW project curators.

When a research scientist, NRM land manager, or environmental consultant would like access to the detailed data, they will be required to apply via existing protocols as managed by relevant state government agencies. It will be up to the state/territory government data managers to assess the application and release the sensitive data for the specified taxa/locality of interest.



Thelymitra, Mt Baldy

What research is planned to be conducted with the data?

Data gathered through the WOW project, including the detailed locations, will be available to researchers via an application process as described above. Researchers will apply to state government data managers for access to the data, as per current protocols.

Citizen scientists app to survey wild and their habitat Australia. Over information will gain detailed drivers of species abundance and

There are endless opportunities to WOW data. For at the University of local orchid species aiming to determine environmental and



Corymborkis veratrifolia, Smithfield Conservation Park

will use the WOW orchid populations context across time, this allow scientists to insights into the occurrences, phenology.

research make use of the example, ecologists Adelaide are using as case studies, and which habitat condition

parameters best predict the presence and status of orchid populations and communities through analysis of spatial and temporal changes in habitat configuration, management regime, vegetation communities and climate. They will also investigate how best to combine new, detailed information with historical records of orchids to assess change.

This investigation will provide novel information on how broader ecosystem processes are influencing orchids via effects on disturbance levels, ecosystem composition and reproductive success. The results will reveal factors contributing to population decline or reproductive failure in orchids, which threaten their persistence and adaptive capacity in the context of climate change. This information will better inform how we should manage the habitats of orchids in a whole ecosystem context.

How do I get involved?

If you would like to test the beta version of the app, in your internet browser on your mobile device type: beta.app.wildorchidwatch.org and follow the prompts. You will need to create a username and password for this developmental version of the app.

The WOW app will launch in Autumn 2020. More details will be released soon. For more details, email the WOW team: info@wildorchidwatch.org

Cairns Branch of the Society for Growing Australian Plants

2019 Chairperson's Report

Cairns Branch of the Society for Growing Australian Plants has had another great year with many interesting locations visited and most of the members getting involved.

In **March** we held our Annual General Meeting at the Cairns Botanic Gardens Visitor Centre. We are thankful that Cairns Regional Council makes the venue available to us. The following members were elected into Committee roles:

President: Tony Roberts

Vice President: Pauline Lawie

Secretary: Sandy Perkins

Treasurer: Val Carnie

Newsletter Editor: Stuart Worboys

Webmaster: Rick Wong

Our **April** excursion was to Barron Gorge. The accompanying rain was not unexpected at that time of year.

Our **May** excursion to Behana Gorge was cancelled due to rain.

In **June** we visited the private garden of Anthony Lagois

and Brian Moran on the Cairns hillslopes and were amazed by their fabulous collection of native plants.

We enjoyed a combined Tablelands/Cairns trip to Cooktown in **July**. The SGAP Garden was reinvigorated and the Botanic Gardens staff were given plenty of tips by the hugely qualified and talented band of volunteers.

In **August**, we went for a boat trip down the Russell River under the guidance of Patsy.

September saw the Branch visit the garden of Branch founding members, Mary and David Gandini. Under David's guidance, the members helped tidy the grounds in preparation for the reluctant sale of the property.

A large contingent of members attended the **final excursion of the year** to Smithy Holmes Park on Behana Creek at Aloomba.

We finished off the year with a **Christmas Party** at the home of Rick and Sharren Wong.

I would like to thank the committee members for their efforts throughout the year; Pauline for keeping the President in check, Sandy for keeping everyone up to date, Val for balancing the books and Stu for producing the all-important newsletter (quickly approaching his 100th edition).

Additionally I would like to thank Sharren who has put in a great deal of effort toward Yabba 2020. I must also thank all of our members for their enthusiasm and support throughout the year, and hope that we can continue to get the great attendance at our outings in 2020.

Tony Roberts, Branch President

Cairns SGAP Christmas Breakup December 2019

Don Lawrie

Our last meeting for the year was our Christmas breakup, held at Rick & Sharren's home at Palm Cove. Lunch was a shared meal with everybody contributing some special items so that it took some time to consume. Discussion ran along the events of the past year and our busy year to come. We are hosting the Native Plants Queensland "Yabba" in August and plans are well in hand with Sharren liaising with state president Bob Bannon to resolve a plethora of details.

Before that is the 250th anniversary of Captain Cook's stay at the Endeavour River and we will be putting in a maximum effort to support our President Tony in his

position of Cooktown Botanic Gardens Curator.

The specimen table held some rainforest fruits – notably a nutmeg which looked almost identical to a commercial one. An array of local native pepper vines was sorted by Dr Jago who resolved the apparent anomalies by detailing the number of name changes that had occurred since Cooper's Fruits of the Rainforest was published.

Light entertainment was provided by Don's Botanical Quiz, devised by himself (attached). Winners were, not surprisingly, Bob and Bianca Jago who each was rewarded with a handsome potted Golden Orchid (*Dendrobium discolor*). Highlight of the day was the Annual Raffle which included, apart from the usual plants and orchids, a range of items not least being Val's hotly contested bottled rum balls and fudge. There were so many items that everybody scored at least a couple.

As the afternoon drifted to smoko time Rick and Sharren started producing plate after plate of special treats, not least being a delicious Trifle. Coffee, tea, chats among friends persisted until we reluctantly made our way home, looking forward to the next get-together.

Mt Lewis February 2020

Stuart Worboys

In late February, I had the opportunity for a brief visit to Mt Lewis. The weather gods and fallen tree demons were kind, and we made it to the end of the Mt Lewis Road without incident.



Rhododendron viriosum

Not far from the northern end of the road, a short and obscure track branches off into the rainforest. The track is famous among botanists for being the path to the only easily accessible population of Australia's native rhododendrons. It passes through thickets of Mt



Cadetia taylori

Lewis walking stick palms (*Linospadix apetiolata*), past podocarps, *Syzygiums*, endemic *Garcinia brassii* and tangles of foot-trapping *Gynochthodes podistra* vine to an open bouldery outcrop. From the top of this outcrop, you can look out to the dry woodlands of the Einasleigh Uplands. But what was most remarkable was the flowering of blood red *Rhododendron viriosum*, the best I've seen in 25 years of visiting this site.



Melastoma malabathricum

Upcoming events

Townsville

Meetings of Native Plants Queensland - Townsville Branch on the 2nd Wednesday of each month at 7pm, Annandale Community Centre. Excursions the following Sunday.

Website: www.npqtownsville.org.au

Tablelands

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

Excursion officers: Bert and Chris Jaminon, 40914565.

Cairns Branch

Sunday 15 March. 12 noon. Annual General Meeting. Home of Stuart and Joe, 10 Eugenia Crescent, Redlynch (not far from the Red Beret Hotel - see map below). Please bring a chair and a plate to share. If you have any plants for the fundraising raffle, please bring those along as well.

A note from the Tableland's Newsletter is relevant here: "Election of office bearers will take place at this meeting and we should all give some thought to this as current office holders have been doing a splendid job for many years and some of them may want to hand over the job to others. In all clubs it usually falls to a few to do the "chores" but all members benefit from membership of the club so some contribution, from other members, in this area would add to the smooth running of the club."

Friday 21 August - Monday 24 August 2020. Native Plants Queensland Yabba, Cairns.

