



*Society for Growing Australian Plants
Cairns Branch*

NEWSLETTER

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President Stuart Worboys
Vice President Rob Jago
Secretary Helen Lawie
Secretary@sgapcairns.org.au

Treasurer Val Carnie
Webmaster Tony Roberts
Librarian Coralie Stuart
Newsletter Editor Pauline Lawie
lawiepm@gmail.com

*Excursion Sunday, 20 August, 2023.
Josephine Falls*

Meet at the parking area at the beginning of the Josephine Falls track for lunch. As this is a popular tourist destination, there are plenty of signs from the one on the Bruce Highway at the end of the Mirriwinni straight, south of that town. There are picnic tables and also a toilet. The sealed, wheelchair friendly track is 1.2 km to the falls which should be looking as good as Rob Jago's photograph depicted in the June edition of the Regional Journal's Conference program. Mozzies like this place too.

Ed: Email secretary@sgapcairns.org.au to say you are coming. We will keep an eye out for you before leaving for the walk. If you wish to borrow something from the library mention that in your email.



Cooktown Botanic Gardens Report
Helen Lawie



Our July outing was a reconnection with
Cooktown Botanic Gardens.

SGAP Cairns has a long history with this place: volunteering, camping, planting, protecting, and IDing the plants. Tony Roberts, SGAP Cairns President for many years, was the curator at the Gardens until 2021. With big shoes to fill, Peter Symes came from Melbourne's Royal Botanic Gardens of Victoria and is a natural fit to the role.

SGAP Cairns and Tablelands used to make an annual migration to Cooktown, and we saw much evidence of the success of these previous visits. There were familiar trees albeit taller,

and the addition of wide, wheelchair friendly pathways and signage galore. A tasteful fence rings the Gardens now. In the past volunteers erected temporary fencing to protect fresh growth from wallabies, pigs, and horses. Giant mango trees (some of the oldest in Queensland) had been pruned back hard, and they inspired reminiscences of endless wheelbarrows of fermenting fruit being removed from the watercourse.

One discovery for me was extremely gratifying: a “SGAP Garden” story-board complete with photos of a highly motivated working-bee group. Some of those very same volunteers were present on the day to enhance the understory planting of the SGAP Garden and also the Banks and Solander Garden.



Val planting a rebecca

The SGAP Garden was the recipient of a collection of ferns, fern trees and more from Donald’s shade house with *Cyathea rebecca*, *Cyathea cooperi*, and *Tapeinochilos ananassae*, Backscratcher ginger, among the

standouts. Practical considerations such as proximity to sprinklers, mature height, and access to sunlight vied for importance with aesthetic preferences to enhance visitor experience.

The Banks and Solander Garden was enriched with a multitude of *Leptaspis banksii* Rainforest Grass sourced from the Botanic Gardens own nursery.



Rainforest Grass,
Leptaspis banksii



Don inspecting the
Grevillea pteridifolia he
planted many years ago

Contributing a sparse canopy in this garden was a tree of around three meters, a *grevillea*

pteridifolia, which was a good example of the vicissitudes suffered over the years. The type specimen was collected by Banks and Solander in 1770. Its golden flowers are rich egg yolk yellow.

Peter’s nursery also provided good sized *Plectranthus apreptus*, Cockspur flower, for a mass planting under *Cleistanthus apodus* Weeping Cleistanthus. This small leaved delicate native had fruited well, and plenty of seedlings were observed.

As we moved about digging, planting, and discussing locations, we gradually noticed the arrival of visitors who watched us curiously. The reality sank in of the privileged position the title of ‘volunteer’ had bestowed us with an access all areas pass. When Peter showed us how to plug the hose into the underground irrigation system, it truly clicked that we were at play in a public garden. The expertise and willingness of our small band was in full swing, and without the call of the kettle from the crib room we may never have downed tools (Bianca put down the secateurs!).

Later, while Pauline made an appraisal of the orchid shade house, we attended to the rainforest plot where Bob and Peter deliberated over the finer details of plant identification. Bob’s recognition and recall of species names and characteristics was prodigious. As the support crew scrambled for ID tags and confirmed spelling, Bob moved on to the next plant sharing a vignette about who had collected it or how it was named. Although members are certainly familiar with Bob’s talent and patience, it was grand to see him warmly sharing his knowledge with a fellow professional as he and Peter engaged in the various aspects required to accurately ID the trees. Peter later reported that this exercise added around five species to the Garden’s already extensive database, which is a great outcome.

Next a tour of the Gardens working nursery. Its core purpose is propagation to introduce, replace or bolster specific species within the Cook Shire Council, for example, providing small *Xanthorrhoea* trees as gifts for Australian Citizenship ceremonies, is another one of the

functions of the nursery. Peter provided interesting insights on the challenges and rewards of running a Botanic Garden in a remote town. Distance of transport adds to the cost of arborists, trellises, shade cover, water systems, and security. Seasonal climate variation adds to the complexity of plant selection and maintenance in microclimates from the shade house to the garden bed.

One ongoing project requiring dedicated problem solving is the custodianship of some Ant Plants. We were lucky enough to spot flowers on some of these fascinating plants, something that would be quite hard to do if they were in their usual perch in nature.



BBQ dinner in a scrupulously clean picnic shelter near the First People's Grove was a fitting finish to a satisfying day. The camaraderie of shared interests and efforts was not dulled by the sunset. A shower of rain fell on the tin roof, the new plantings, and the bursting buds of several ancient Melaleuca. In the morning the Gardens were thickly scented with the honey of their tea tree blossom as the Cooktown "breeze" circulated its intoxicating aroma.

Ed. Peter Symes sent an email expressing his thanks for the work done in the Gardens and confirmed that there were nine plants identified by Rob added to the data base.

Mistletoe

The following article fell into my lap just when I was going to put out plea for members to send me articles for the newsletter.

The author writes: I was enjoying a picnic on the banks of the Barron River, lamenting the dozens of weed species thriving there, when a flower caught my attention. The flower looked out of place. It was in a river sheoak, *Casuarina cunninghamiana*. *Casuarina* flowers are pretty insignificant; the male spikes look like

discoloured branchlets and the female flowers small, reddish powder-puffs. The flower that I spotted was long, pink and absolutely stunning. Curiosity got the better of me and I clambered up the tree to further investigate.

The flower was of course that of the sheoak mistletoe, *Amyema cambagei*. The foliage of this mistletoe was rather difficult to distinguish from the host's branchlets. Interestingly, many Australian mistletoes seem to mimic the physical appearance of their hosts, mainly in the foliage department. Several species have done an exceptional job at this. Apart from the aforementioned sheoak mistletoe, there is *Dendrophthoe homoplastica* imitating *Eucalyptus shirleyi* and the mangrove mistletoes blending seamlessly with their mangrove hosts.

The name mistletoe, in its strictest sense, refers to the plant *Viscum album*, the plant of folk law and Christmas molestations. More generally, today, it alludes to the more than 1,400 species of hemiparasitic plants in four families of the order Santalales.

In Australia, we have around 90 mistletoe species, in the families Loranthaceae, Viscaceae and Santalaceae. Of these, many species have evolved foliage similar to their preferred hosts. In fact, one study of the Australian mistletoes in the Loranthaceae found that 78% mimicked their hosts' foliage.

Of course, this means that numerous mistletoes have become host-specific to one degree or another. It is interesting that some even prefer to parasitise other mistletoes.

Studies into mistletoe host-specificity have produced numerous theories for how and why evolution has driven this phenomenon, from deceiving herbivores to protect foliage from being eaten to encouraging mistletoe birds to visit host species, increasing the chance of seed dispersal to the preferred host.

The mistletoe bird is the primary disperser of Australian mistletoes (Liddy 1983). This little

bird feeds mostly on mistletoe fruit and is perfectly designed for the job of dispersal. Mistletoe fruit are single seeded berries. Between the exocarp (skin) and the seed is a sticky layer of viscin, which is rich in glucose, minerals and amino acids. The fruit passes quickly through the bird's digestive tract after ingestion, taking as little as four minutes for the journey. On exit from the bird the remaining viscin covered seed is very sticky, often adhering to the bird's feathers. The bird then "wipes" the seed free on a branch. The viscin hardens and "glues" the seed to the branch where it germinates.



Some thoughts on Pandans

Don Lawie

Mistletoe seed germinates similarly to their non parasitic brethren, n except that the primary root penetrates the host and feeds from the host's vascular system.

Ed. I wish Doreen Sabien, the acknowledged champion of mistletoe, could read this. I'm not keen on them (yet) though I do know many are beautiful and the birds love them.

How's this for a contrast to the flowers of *Casuarina cunninghamiana* being "pretty insignificant"

Flowering at Russell Heads

Photographs by Patsy Penny
Pandanus tectorius flowers and fruit



Pandanus trees are so much a part of our landscape, especially the beachscape, that we tend to overlook them. The story of Edmund Kennedy's expedition is always accompanied at the start by a picture of the party leaving Mission Beach by cutting a track through the tall prop-rooted Pandanus trees that are a feature of that area.

Any beach in our Wet Tropics will be sure to have a Pandan or two and Patsy's photos make me wonder why I have taken the Pandan for granted. Their rugged structure and colourful fruit make them a Must-Do for photographs of the beach, and they carry the latent message for wrecked sailors that Here is Food. I remember trying to eat Pandan fruit many years ago; after much hacking with a cane knife I extracted a segment of the fruit and tried sucking the juice. Was it good? Suffice to say that if I were a starving sailor on the beach, I would continue to starve if I had to depend on Pandan fruits.

Patsy's photos of *Pandanus tectorius*, Beach Pandan, demonstrate what an attractive tree it is. They are a reminder that we need to stop looking and try seeing the beauty that is all around us.

*More on Cooktown Botanic
Gardens and the 1986 Conference*

Pauline

Some SGAP files from Mary Gandini which relate to the State Conference in 1986 found their way into our hands and they are most interesting to compare with the State Conference next month. While Don took charge of the printed program, I have the correspondence which resulted in that conference being held in our area.

It is difficult to be exact, as all the correspondence is either typed or hand written and went to post office boxes in Cairns and Atherton, but a letter in December, 1984, says Region "has received a submission from the Tablelands Branch" and that Region had "authorised the Tablelands and Cairns Branches to jointly hold a State Conference in 1987". That letter to the Cairns Branch was sent to the wrong address. The minutes from a conference held in Townsville said that the next conference would be in 1986, so Tablelands and Cairns insisted that it would be 1986. Letters show the conference was a great success though it left the organisers out of pocket.

Names which appeared prominently then, and still do in SGAP today, are Mary Gandini and Rob Jago, Cairns life members, and Tablelands members Garry Sankowsky and Peter Radke who was recently awarded life membership by

Queensland Region. Garry and Nada's garden features again this time.

What is certain is that a great deal of effort was made very early in 1985 by the committees elected to arrange the conference, and received much cooperation from Townsville and Mackay Branches. By October the connection to the Gallop Botanic Gardens (previously Queens Park) in Cooktown was well established. The man in charge at that time, Paul Burkitt, was working three days a week and the SGAP Branches donated, and no doubt planted, many plants and enough money for some tools and a shed to be erected. Paul was quoted in *The Cairns Post* as saying it would take 200 years to bring the Gardens to what he would like to see!

The report of last month's visit to the Cooktown Botanic Gardens brings us up to date.