

Coffs Harbour Group NEWSLETTER No.144: January 2020



2020 COMMITTEE

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APS Coffs Harbour Membership

Renewals due March 31

APS Website

www.austplants.com.au

Keep up-to-date with news, program of outings and meetings via our pages: www.austplants.com.au/Coffs-Harbour

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Satellite image: NSW, Batemans Bay, December 2019



Across **Australia**, 10 million hectares has been burned, and an estimated 1.25 billion animals killed during this horror bushfire season (World Wide Fund for Nature). Many fires are still uncontained.

In **New South Wales** blazes have created a fire front that, if put into a straight line, would stretch from Sydney, across the Indian Ocean, and into Afghanistan. These fires have destroyed more than twice the area burned in the Amazon's rainforests in 2019. The smoke plume is currently about 1.3 billion acres, or half the size of Europe, and is drifting eastwards across the earth polluting the air of neighbouring countries.

(Editor: these data were correct on January 3, 2020.)

APS May 2021 Gathering and AGM

As some of you will know, the Coffs Harbour Branch is hosting the APS *May 2021 Gathering and AGM*. In 2017, our theme was *Rainforest Riches Revealed*. In light of the recent bushfires, we feel that it is fitting that we now tackle the topic of the effect of the fires on local rainforests as our theme for 2021. To that end we are undertaking a number of projects in 2020 that will be discussed at our next meeting. If you have ideas about guest speakers and/or relevant locations for field trips, please contact Rob Watt before February 11.

Rainforests and Bushfires - Aftermath Project





This Project aims to record the rainforest damage and loss, and to monitor its recovery. The idea is to select 6-8 regional locations (such as Mt Hyland, Norman Jolly Reserve, Pt Lookout, and parts of Dorrigo National Park) and visit each 3-4 times in a year to photograph vegetation regrowth. Small teams of interested members will each select a location and monitor it over time. Later in the year, we'll ask teams to share their photos to get an idea of what is happening to the rainforests.

Janice Fitzpatrick will oversee this project on behalf of the Committee. Please contact her on 0418 350 937 or email: ifitzpatrick9@bigpond.com to register your interest and your thoughts about suitable locations.

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MEETINGS

Meetings are held monthly on Tuesdays in the Display Room, North Coast Regional Botanic Garden. Please bring a plate of food to share. Tea and coffee will be provided.

Tuesday, February 11: 7pm - 10pm

AGM

Guest Speaker: Neil Puddy

Topic: Australian Rhododendron: Vireya

Tuesday, March 10: 10am – 1pm Guest Speaker: Roger Bagley Topic: Native water lilies and aquatic plants





Roger is a member of the Coffs Harbour APS Group and has a long-term interest in Australian water lilies and other native aquatic plants. He is frequently seen looking after the aquatic plants in the North Coast Regional Botanic Garden.

FIELD TRIP

Sunday, FEBRUARY 2 at 9.00am
Leader/Organiser: Rob Watt/Bellinger Landcare*
Meet at the Bellingen Cemetery, northern end of Lyon Street

THE FRIENDS OF WONGA FOREST WORKING BEE IN NORTH BELLINGEN



Join the Friends of Wonga Forest in helping to restore a vital link in koala habitat connecting koalas in Bongil Bongil National Park (behind the Bellingen township), to Bindarri and Dorrigo National Parks. Koalas have made the forests near Bellingen cemetery their home for decades, and we're excited to be part of a project helping to restore a key corridor for local koalas by removing weeds, planting primary food trees, restoring a patch of rare rainforest and learning as we go. We'd love you to come along, and learn about our iconic species and what we can do to help protect them. Join us on our journey to restore this beautiful forest!

One of the rangers at the Bongil Bongil National Park, Martin Smith, has been working to keep the healthy group of koalas well fed within the Park by planting tallowwood, swamp mahogany and grey gum – some of their favourite food – and also, surprisingly, forest oak, a native casuarina has also been found to be in their diet. He periodically needs koala spotters, tree planters and people to take part in surveys. If you are interested, we can start with the Landcare project and take it from there. Come along to the Landcare event and learn more.

*Please contact Rob Watt (6655 0043) before February 2 so he can advise numbers to Landcare.

Rob Watt: Lismore Region Weekend
Photos: Rob Watt

Thirteen of our members enjoyed an interesting and successful weekend at Lismore. The Lismore trip has been on our collective minds for some time principally for two reasons. First, we wanted to catch up with Faye Duncan. Faye has been a member for a number of years and while she has made the trip down to our meetings on many occasions, it is not getting easier and we thought that it was only fair that we should reciprocate and come up and see her neck of the woods. But another reason has recently arisen. With the development of a considerable overlapping of membership of the Coffs Harbour Group of the APS and the Friends of the North Coast Regional Botanic Garden, there was considerable interest to visit a sister organisation and see exactly how they did things.

On Saturday we visited two botanic venues. First, we went to the **Booyong Flora Reserve**. This was done at Rowan's suggestion and it was a gem. While only 13 hectares, it presents as a dense area of Big Scrub rainforest remnant located in open countryside. You feel as you approach that it is going to be a visit that will be a breeze and we will do this in a few minutes. But, Tardis-like, it was extraordinarily deceptive. With two small creeks running through the weed-free remnant rainforest, there is a well-maintained pathway that snakes throughout the huge specimen trees that make up the reserve. There were a number of features that made it outstanding. First, was the size of these trees. They were giants. So many trees that I know as specimens that may be decades old, were towering over you. There was no chance to see foliage and Peter Poropat's book on bark identification came into its own. But that raised the second point – there was virtually no need to know the tree – the signage was exceptional. Practically every tree had its own sign giving you all that was required. As we departed, signage gave us all that we needed to know – Alex Floyd was acknowledged as the person who had initially identified this as an important piece of the Big Scrub to be preserved way back mid last century and volunteers of the Big Scrub Landcare Group who had provided the labour since 1997 that now makes it a joy to visit. All are to be congratulated and if you haven't visited the place yet, make sure it is on your bucket list.



The Coffs Harbour Group in the embrace of a Ficus obliqua

Next, we travelled cross-country to the *Rocky Creek Dam* for lunch. When linked to the nearby *Big Scrub Flora Reserve*, there are over 148 hectares of diverse native trees and shrubs (181 species) wet forest birds (45 species) and native vertebrates (25 species). Here we explored a very interesting variety of native trees that have been planted adjacent the dam since it was completed in the mid-1950s via well signposted walks that took in a variety of both flora and fauna.

That evening, we all met up for a meal at the Lismore Workers Club.

On Sunday we met at the *Lismore Rainforest Botanic Gardens* for various walks. First, we had a tour led by the LRBG gardener, Damien Butler, through their rare and endangered collection. This included an interesting collection of wild macadamias. This specimen fits perfectly within the general aims of the Gardens to collect only those species that grow within 200 km of Lismore. However, while the future of the modern cultivars is assured because of their commercial success, less certain is the future of the wild species from which they have been developed. Consequently, the Macadamia Conservation Trust and the Lismore City Council are working to conserve and protect the future and to this end we can currently see in the Gardens not only *Macadamia integrifolia* and *M. tetraphylla*, but also the rare *M. ternifolia* and *M. jansenii* and thus safeguarding the genetic future of the species.





(L) Damien Butler with Rowan and Bianca; (R) Morrie with LRBG President, Hazell Bridgett

The second walk was also interesting. While there are few formal gardens on the site, one exception is a formally planted, although very naturally landscaped, garden of many of the plants that the Indigenous peoples historically used in their daily life. Entitled the *Useful Plants Garden*, and led by Graeme Patterson,

we were shown quite a few plants taken from the same 200 km limit of the Gardens. We were joined by a number of local Lismore people who must value this opportunity to get such a lesson on the last Sunday of each month. Once again everything was well signposted and with an interesting sheet handed out of all the relevant information.

Finally, we were then allowed to walk and take in a number of areas including one with dense plantings of Hoop pines in an area known as the Wilson Park Species Garden. Here they are replicating the same type of dry rainforest found in the nearby Wilson Park Nature Reserve and believed to have one of the highest number of species of this type in any similar community in NSW.

Before we left it was time for the formal part of our visit and it was Morrie Duggan's duty (in the absence of our President Gwyn Clarke who could not be with us because of a back injury) to present to the President of the Friends of Lismore Rainforest Botanic Gardens, Hazell Bridgett, our gift of a signed copy of Alex Floyd's *Rainforest Trees of Mainland South-eastern Australia*. I believe it was well received and they hope to make a trip to Coffs Harbour next year. We thanked all for their kindness and delightful morning tea.

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### Jan Whittle: Goodeniaceae: Goodenia

At a recent meeting, Rob Watt gave me a vigorous *Goodenia paniculata* seedling from his garden, with advice to 'put it in a sunny spot'. The sole yellow flower looked familiar, but I did not recognise the foliage. Curious to learn more about this Australian native, I did some research. I soon discovered that ANPS (Australia) has a Goodeniaceae Study Group and have applied to join.

The *Goodeniaceae* family comprises 400 species divided into 13 genera. Well-known and widely grown genera are Scaevola (71 species), Dampiera (66 spp), Goodenia (178 spp) and Lechenaultia (26 spp). Other genera include Anthotium (3 spp), Coopernookia (6 spp), Velleia (21 spp), and Verreauxia (3 spp). All species are herbs or sub-shrubs whose flowers and fruits are similar, and are sometimes referred to as 'fan flowers'. These plants prefer temperate climates and occur mainly in the Southern Hemisphere.

**Goodenia** genus was named in 1793 to honour Bishop Samuel Goodenough who was a botanist and member of the Linnaean society. There are 174 species endemic to Australia and most are easy to cultivate, preferring sunny, well-drained positions. Their characteristic fan-shaped flowers can be yellow, blue or purple.

**G. paniculata** (Branched Goodenia) is a species found in eastern Australia in freshwater wetland or swampy habitat on clay, silty or sandy soils. Plants can tolerate low pH soils, and the attractive yellow flowers form on racemes from October to April, and are pollinated by insects. Here is a 1989 entry from ANPSA the Goodeniaceae Study Group:

G. paniculata is a "local" species which is truly local to the Sydney Basin area particularly the area around the foothills of the Blue Mountains. Likes swampy areas and in the garden resented being in a dry situation (enough to die on me!). Unfortunately, I don't have a permanently wet area to hold these water-loving plants so this one remains in a pot for the foreseeable future. A very attractive feature plant in a pot with long (40-50 cms), slender but fleshy, clumped foliage and attractive yellow flowers (1 cm) held on similarly long pedicals (sic) displayed both within and above the foliage.



(L) G. paniculata



(C) G. varia



(R) G. macbarronii

*G. macbarronii* (Narrow Goodenia) is very similar in appearance to G. paniculata and it is listed as vulnerable in NSW and threatened in Victoria. In NSW it grows on the western slopes of the Great Dividing Range, south from the Guyra and Inverell districts. It is most commonly associated with forest and woodland and in disturbed sites, such as along roadsides. It is found close to drainage lines, creeks, soaks, swamps, small lagoons, alluvial fans and moist areas, most frequently on sandy soils.

**Goodenia varia** (Sticky Goodenia) is a tough perennial plant with yellow flowers that grows into a dome shape. Often is a groundcover but also under favourable conditions may reach three quarters of a metre high. It is easy to grow, tolerating poor soils and as the common name suggests has sticky bright green foliage.

This species is known for its medicinal properties as a sedative (Lassak & McCarthy, 2001) and Levitt (1981). Dulcie Levitt was a missionary in Groote Eylandt for 25 years and in my library, I came across her publication, 'Unwritten Pharmacopoeia' that contains photos and descriptions of plant species used by northern Aboriginal Australians for healing. Of *G. varia* she records that ... "leaves were given to children to pacify them on long voyages".

# Barry Kemp: Edible native fruit?

My daughter sent this photo from Magnetic Island. It is juice from fruit of *Memecylon pauciflorum*, a shrub from tropical Qld, related to *Melastoma affine*, which is fairly common here. It is also found in SE Asia and overseas reports say the fruits are edible, but so far she hasn't been game to try it. *Melastoma* fruits reputedly turn your lips black!







Memecylon pauciflorum

Image at R from Wee Foong, Ang (Singapore)

### Barry Kemp: Living in the Bush

My sister, after a lifetime on a farm, now lives in a medium-sized town, and says she regrets the suffering of "all of the birds and animals" (sic) in bushfires. I try to tell her that, like the rest of the world, we have already lost most of our wild "birds and animals" as a result of us destroying their homes. I don't think I am getting through.

When we were going to primary school through two miles of bushland with lots of orchids, lilies, Banksias and wallabies etc., which we enjoyed seeing, we also saw the ongoing destruction of the local bush, but we didn't "connect the dots". Our father needed to clear his small farm in order to make money to support his family. Wallabies ate crops, so had to go. The lyrebirds had already gone. The bush seemed endless, but when I return to that area, it is all introduced pasture and a few aging trees which will not be replaced when they die. People who remember what it was like are now very old.

I still occasionally hear politicians in particular talking about people in towns like Coffs Harbour as "living in the bush", when most residents are never seen outside of town or on the beach. When I have guided school groups around natural areas of the Botanic Garden, I have found that most of them are afraid to step off the paths. Even locals living on "acreage" are seldom in tune with natural bushland.

A couple of other relatives of mine live very close to Bongil Bongil National Park. When I suggested a walk there with them, they said, "We have never been there, we are afraid of snakes"! Telling them that the snakes

were more afraid of them and just needed to be left alone didn't help. On the farm, we were also taught that snakes were a threat and should be killed on sight. *Old attitudes die hard.* 







# Jan Whittle: Warrilyu seeds (Eucalyptus pachyphylla)

Source: https://www.uq.edu.au/news/article/2019/12/spreading-seeds-of-indigenous-knowledge

Indigenous wisdom and modern science are helping to bring a highly nutritious seed to the world's attention. University of Queensland ethnobotanist, Dr Boyd Wright has been working with the Kiwirrkurra people in Western Australia's Gibson Desert, investigating the seed of the native tree, Warrilyu (*Eucalyptus pachyphylla*). Dr Wright said that while the skills required to harvest and process the seeds were slowly being lost, Warrilyu seed was set for a comeback, thanks to some impressive nutritional qualities:

It's truly remarkable – it has the highest levels of magnesium that I've ever seen in a seed, it's extremely dense in calories and its fatty acid profile is also impressive.

When early explorers first encountered Gibson Desert Aborigines they remarked on their outstanding physical condition, their good humour and their overall satisfaction with life in a seemingly inhospitable environment.

Warrilyu seeds are an incredibly robust food source – historically they've been an important drought food, as the gumnuts are held on the trees for very long periods.



E. pachyphylla growing at Myall Park BG (J. Whittle)