



**Australian
Plants**
SOCIETY NSW

Coffs Harbour Group



NEWSLETTER No. 138: September 2018

COMMITTEE

President: Alison Moore

moorealison32@gmail.com

Vice President: Gwyn Clarke

gcl.38500@bigpond.com

Secretary: Rob Watt

rob8milehill@yahoo.com.au

Treasurer: Janice Fitzpatrick

jfitzpatrick9@bigpond.com

0418350937

Newsletter Editor: Jan Whittle

jan64garden@gmail.com

Publicity Officer: *vacant*

Website

Keep up-to-date with news, outings and meetings by visiting our website:

www.austplants.com.au/Coffs-Harbour

New Members

Sadly, none!

Membership Renewals

Renew online via APS website:

www.austplants.com.au

Newsletter Contributions

Thanks to members who have sent in material for this edition. If you have something of interest to share, please contact the Editor, Jan Whittle.

Payment is also available by cheque or credit card to the Treasurer, Janice Fitzpatrick. Please contact her if you need assistance.

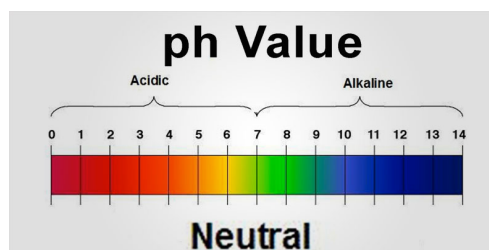
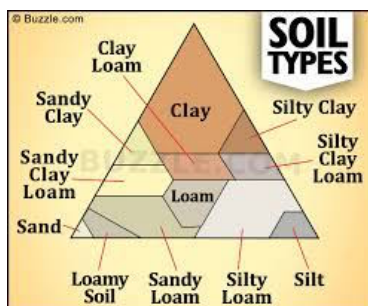
MONTHLY MEETINGS

All meetings are held in the Display Room, North Coast Botanic Garden. Please bring a plate of food to share. Tea and coffee will be provided.

Tuesday, SEPTEMBER 11: 10am – 1pm

Guest Speaker: Rob Watt

Topic: *Soils and the Native Plant Gardener*



The place of soil in the growing of native plants is clearly critical – they flourish when suitable, do poorly when not - and for many who may have recently come to this form of gardening, you may have problems in working out the science. What we plan to do at this meeting is to help in two ways: **first**, to discuss what are some of the main issues associated with soils in the growing of Australian natives. These may well differ from, say, vegetable growing. And **secondly**, to assist in finding out what your own soil type may be. This may well be critical in allowing you to know just how your soil type can be changed to get the best results.

The pH Test: To determine this second idea for your own garden, we are offering you the opportunity to bring along some soil samples from a few of your garden areas that can be subject to the pH test – to test the acidity or alkalinity of that soil. The pH scale runs from 0 to 14, with a pH of 7 being an indication of neutrality. The acid limit of most plants is about 4, and the alkaline limit about 9. However the range that we tend to aim for is 5.5 – 7.5, with 6.5 being the 'ideal'. This is critical in the uptake of minerals from the soil by plants.

The Jar Test: However, the composition of the soil is as critical and here you may be able to do this test before you come. We will see that the composition of an ideal growing medium (soil) is made up mineral particles that have evolved from the parent rock and is basically sand, silt and clay, organic matter, air and water. We will be discussing this at the meeting but to give you some idea of the texture of the soil, that is the proportions of these elements to each other, we place a small amount – about enough to half fill a jar – and found about 20cm below the surface.

Using your favourite internet search engine, type in “soil jar test” and you will see, at least on one site “**Preparedness Mama**”, the results and what they represent.

Sausage Test: If the jar doesn't appeal, take a handful of soil, remove twigs, etc, and add water.

Can you squash into a ball – No? - you have sandy soil.

Can you roll the soil into a sausage –No? – you have loamy sand.

Can you bend it into a U-shape without cracks – No? – you have loam or silty loam.

Can you bend into a sausage without cracks – No? – you have clay loam.

If you can form a ball, then you have clay soil!

All welcome at the meeting with samples and questions.

Tuesday, OCTOBER 16: 7pm – 10pm

Guest Speakers: Morrie Duggan, Rob Watt & Jan Whittle

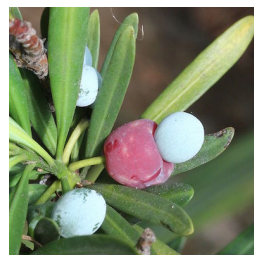
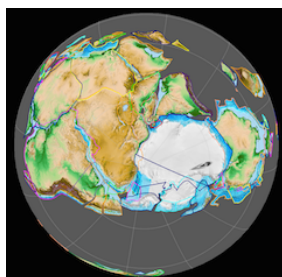
Topic: *Gondwana Plants*

All you wanted to know about
Gondwana plants:

What was 'Gondwana'? (Morrie)

What are Gondwana species?
(Rob)

Where do they grow?(Jan)



Tuesday, NOVEMBER 13: 10am – 1pm

Annual General Meeting

Guest Speaker & Topic: tba

~~~~~

## FIELD TRIPS

**Sunday SEPTEMBER 16 at 10am**

**Annette & John Houseman's "Torwood" Garden**

**Location: 67 Secombe Lane, Wauchope**

We last visited the Houseman garden in Wauchope in 2009 and we are overdue for a return visit. Notwithstanding the distance, it is well worth seeing this mature, native garden and September is an ideal time with an excellent range of Grevilleas that ought to be at or near their peak.

Directions: Secombe Lane is north east of Wauchope and is reached via Stoney Creek Road, which runs north from the Oxley Highway. Because of the distance, carpooling may be a preferred option. Either organize between yourselves or get in touch with the Secretary, Rob Watt (66550043) or [rob8milehill@yahoo.com.au](mailto:rob8milehill@yahoo.com.au)

**Sunday OCTOBER 21 at 10am**

**Alan Collyer's Garden**

**Location: 68 Williams Road, Bonville**

This is a garden we keep returning to over the years because it has much to see for different interests. It is 20 acres and includes many Western Australian Grevilleas, most of which have been grafted onto local stock. And there are also 200-300 rainforest trees. Alan started planting over 20 years ago and this is a collector's garden - each of the trees has been planted where it should do best. It is a wonderful opportunity to see the garden maturing. This is a must see garden of the district!

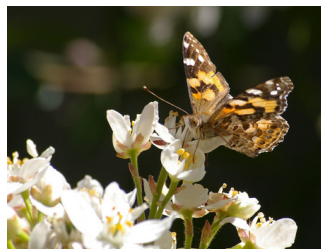
---

## ACTIVITIES REPORTS

**Jan Whittle: Presentation by Carol & Trevor Deane, "Butterflies of Coast and Plateau"**



Trevor & Carol Deane



Painted Lady butterfly

In July, we were treated to a wonderful photographic presentation by Trevor and Carol who have shared a lifelong interest in *Lepidoptera* (butterflies and moths). They see themselves as "caretakers" of their 20-acre rainforest property, where they have planted 650 trees as part of the Bush Connect program to link their property with the nearby Junuy Juluum National Park. We learnt that "butterflies and moths are not only beautiful and fascinating, they are also a vital part of the ecosystem – important pollinators and part of the food chain of other insects (incl. parasitoids), spiders, reptiles, bats and birds".

The comprehensive information on the 84 species of butterflies and 14 Hawk Moths that have visited their garden and their preferred native plants cannot be adequately summarised here! Fortunately, the Deane's website – *Butterflies of a Dorrigo Garden* (<http://butterfliesdorrigo.weebly.com/>) – provides a wealth of knowledge. So, if you desire butterflies in your garden, visit this excellent website to find out which native plants will attract them.

## Phil O'Shea: Visit to Bonville Garden of Lindy Hills & Wayne Hartridge

Photos: Alison Moore & Phil O'Shea

A beautiful winter's morning saw a good turnout of 22 members and guests at this property just south of Coffs Harbour. We were greeted with morning tea and a chance for a chat around a cosy fire before setting off. Over the past 35 years Lindy and Wayne have planted a beautiful forest and garden on this 8 acre property. It lies in the Bonville area adjoining Pine Creek to the south and Pine Creek State Forest to the west. Lindy and Wayne are volunteers at the North Coast Regional Botanical Garden Herbarium and their love of native plants is reflected in their garden.

Near the house are two large *Eucalyptus dunnii* (Dunn's White Gum) which were grown from seed 35 years ago. This fast growing species, while common in timber plantations around the world, is naturally only found in three locations in NSW.<sup>1</sup> Several large *Eleocharis grandis* (Blue Quandong) are of similar age and have well developed buttress roots. These are among the fastest growing of the large rainforest trees. They are a local tree, thriving in this moist sandy loam and have self-seeded in bare areas beneath the canopy. A 10 centimetre diameter but 25 year old *Dysoxylum fraserianum* (Rosewood) is evidence of the slow growth of this species in a shady environment. In some cases, local palms such as *Archontophoenix cunninghamiana* (Bangalow Palm) and *Livistona australis* (Cabbage Palm) have been used as an edging plant on the rainforest boundary to encourage more vertical growth.

Although the property was previously used for grazing, Wayne and Lindy's plan is to turn it all into forest of some type. They have found that the pasture grass is the biggest impediment to tree growth and so sections to be planted are first treated with herbicide and then mulched to allow better root development.

Some group plantings include *Athertonia diversifolia* (Atherton Oak), an impressive rainforest specimen from North Queensland with large lobed leaves and edible fruit. *Gmelina leichardtii* (White Beech) is a large local tree with blue cherry sized fruit and an attractively patterned bark and has been planted in rows along one boundary. There are a lot of *Davidsonia pruriens* (Davidson's Plum) and Lindy supplies seed to a wholesale nursery. The Davidson's plum has two sub species, *D. pruriens* var. *pruriens* from North Queensland (with fruit on strings hanging from the trunk) and *D. pruriens* var. *jerseyana* from north east NSW and southern Queensland (with fruit on short stems close to the trunk). The deep red fruit with the blue skin has a complex and intense acidic flavour that can be used for sauces and jams.

Wayne explained his several selective pruning techniques to improve the form of many of his trees. The lower country adjoining Pine Creek periodically goes underwater and they have decided to only plant riverine forest species in this area. Plantings of *Lomandra longiloba* near the creek have been very successful in stabilising the banks and excluding weeds.

Most of the hundreds of species planted have been grown from seed or cuttings and they have a very diverse collection of plants in pots awaiting planting. One particularly interesting one is *Toeckia pterocarpum*, a small tree bearing brilliant red, pear-shaped, angled fruits to 3 cm long.<sup>2</sup>

At the end of the walk their son Dave gave a very informative demonstration of the correct methods of caring for and sharpening garden tools using files, different grades of wet-dry sand paper and diamond wet stones. This was a real eye opener to most of us who didn't know how to properly sharpen loppers and secateurs.

Thanks to Lindy and Wayne for showing us around their impressive property and sharing their knowledge and to Dave for the tool sharpening workshop.

(1) *Field Guide to Eucalyptus*, Brooker & Kleinig 1999; (2) *Australian Native Plants* (4<sup>th</sup> ed.) John Wrigley 1996



*Athertonia diversifolia*

~~~~~

Rob Watt: Award Ceremony for A.G. (Alex) Floyd, OAM

Photos: Jan Whittle

At 10am on Wednesday, 1st August 2018, over 50 people gathered at the North Coast Regional Botanic Garden (NCRBG), Coffs Harbour, to celebrate with Alex Floyd for the presentation of his 2018 Australian Plants Award, Professional category.

The biennial Award, established in 1983, is presented by the Australian Native Plant Society (APS) to people who have made an outstanding contribution to the knowledge of Australian plants. The Award was made at the Biennial Conference in Hobart earlier in the year but Alex was unable to attend to receive it at that time. It was consequently a great thrill for many of Alex's friends, especially those associated with the APS Coffs Harbour Group, together with many of the people he has worked with over the years at the NCRBG, including the President of the Friends of the Garden, Lindy Hall, to be present at the award ceremony. We were also particularly honoured that three people who have previously received the Award were also able to attend: Gwyn and Geoff Clarke (Amateur, 2001) and Gwen Harden (Professional, 2004).

In her presentation speech, Alison Moore, President, Coffs Harbour Group, spoke of the national recognition of Alex's work with the 2008 award of the Order of Australia Medal; and of the tremendous assistance that Alex has given to all those interested in Australian rainforest with his 1989 book *Rainforest Trees of Mainland south-eastern Australia* (revised in 2008 by Terania Rainforest Publishing). Alison also noted the value of Alex's work in the Herbarium at the NCRBG over the last 30 years. She also read a statement from APS Life Member and long term associate of Alex's, Barry Kemp who was unfortunately unable to attend.

Of particular significance to all present is the recognition and esteem by Alex's peers, with his name acknowledged in the botanic naming of newly discovered (or reinterpreted) plants.

Two genera named in his honour:

- *Floydia* L. Johnson & B. Briggs [*Floydia praealta* (F. Muell.) L. Johnson & B. Briggs]
- *Alexfloydia* BK Simon [*Alexfloydia repens* BK Simon]

Specific epithets carry his name: *Acacia floydii* Tindale; *Bosistoa floydii* Hartley; *Cryptocarya floydii* Kosterm; *Endiandra floydii* Hyland; *Homoranthus floydii* Craven & Jones; and *Zieria floydii* Armstrong.

Alison concluded that it has been the willingness of Alex to assist those who are slowly learning about Australian native plants – his patience and expertise – that have made him such a friend to so many who have come to know him.

Other speakers included Councillor Sally Townley, Gwen Harden and Bill McDonald, the latter two having worked closely with Alex over the years in both conservation and environmental education.

With his reply, Alex was to surprise and delight all when he spoke comprehensively and expansively about his life in the world of Australian native plants and set out, under the theme of being 'lucky', to have been in the right place at the right time. The bare bones are well known from the section "About the

Author” in his book, but the story Alex told was both personal and inspirational, providing a glimpse into what has made Alex so special to those who have come into contact with him.



(L to R) Gwyn & Geoff Clark, Gwen Harden, Bill McDonald; Australian Plants Award; Alex Floyd

~~~~~

### **Janice Fitzpatrick: Presentation by Gwyn Clarke & Barry Kemp, “Wet and Dry Heath”**



Barry began with some definitions to give context to the discussion on wet and dry heath, which he noted forms only a tiny proportion of Australian vegetation. Heathland occurs where climatic conditions should allow forest formation but soil structure prohibits tree growth. Typically the soil where heath grows is shallow, acidic and of low fertility, sometimes with an underlying impervious layer preventing drainage or rock preventing root penetration. In Australia, wet and dry heathland are very species-rich – as we saw from the photos Gwyn and Barry showed us. Both Red Rock and Limeburners Creek, which the group has visited, contain both wet and dry heathland species, particularly where ancient sand dunes occur within wet heathland.

Barry then illustrated his description of wet heath with photos of plants typically found there and noted that most of our coastal heathland has been destroyed by housing development, airports and sandmining. Wet heathland also occurs in sub-alpine areas in peaty depressions subject to frost and snow that inhibits tree growth. Some of the species that occur in wet heath include some banksias, boronia, dillwynia and leucopogon.

Gwyn then described the species that are typically found in dry heath, which usually occurs at greater elevations and with drier soils. Woody heath is found in dry heath, and consists of open woodland with small trees and dry heath species among the trees. Gwyn illustrated her talk with many photos taken from their property near Glenreagh, and included photos to show how the plants responded to the fire that destroyed much of the vegetation several years ago.

Species that occur in dry and woody heath include xanthorrhoea spp, some banksias, pultenaea species, melaleucas and boronia. We are fortunate that we have good examples of both wet and dry heath in the Coffs Coast area.

~~~~~

Coffs Harbour APS Saving our Species Project – Update

Earlier this year some of our bush regeneration members helped National Parks Service (NPS) with data monitoring for *Sophora tomentosa* on a couple of their headland regeneration projects. However, as our intent was for more of our members to gain experience in data monitoring for threatened and endangered species, this exercise had limited benefit for us.

Our next step was to approach Dan Clarke, the APS Conservation Officer, who has been leading a significant SoS project with the help of some of the district groups for *Prostanthera densa*, for his advice about what we can do. Jennie Watkins, a member with long experience with local Landcare and conservation groups, has agreed to lead the work to plan this project. She is currently in conversation with Dan about a practical approach to SoS in our area.

We're very grateful to Jennie for taking this initial planning on.

~~~~~ Reporting occurrences of *Solanum viarum* (Tropical soda apple)

CHCC is having a crackdown on *Solanum viarum*, a Class 1 Noxious Weed that is mainly dispersed via cattle manure and farm vehicles. APS members are asked to report to CHCC Weeds Inspector (Mob: 0417 200 326) if they find any plants so they can be eradicated. This plant pest is not to be confused with the native *Solanum laciniatum* (Kangaroo Apple), which has a purple flower and reddish-orange fruit.

Tropical soda apple is an upright, branching perennial shrub growing to 2m in height. It has broad-based, straight, cream-coloured prickles to 12 mm long scattered on most plant parts. If not controlled a few plants will form a hectare-sized thicket in 6 months, with each plant producing 150 fruit containing 45,000 seeds each year! Herbicides kill the plants, but do not kill the seeds inside the fruit.



Key identification features

- Leaves are mostly 10–20cm long and 6–15cm wide. The upper and lower leaf surfaces are densely covered in short hairs; mid-veins and primary lateral-veins are cream-coloured on both sides of the leaves.
- Flowers are white, 1.5-2cm wide, with 5 petals. They occur in clusters of 3–6 off a short stem.
- Mature fruit are yellow and golf ball-size (2–3cm in diameter). When immature they are pale green with dark green veins, like immature watermelons.

~~~~~ Responding to Myrtle Rust Threat: Queensland Native Plants group, Gold Coast

The Rainforest species of *Myrtaceae* are most at risk from Myrtle Rust - 45 species are listed, some are critically endangered now. Also animals, birds and insects that use the rainforest as food and habitat are at risk too! The Queensland group hopes their members and interested others can assist with monitoring the extent of the problem, locating any healthy remnants and monitoring for seed, fruit, propagate from cuttings if necessary for revegetation/recovery plans. Any efforts by amateurs and societies such as APS require coordination with experts- and that requires government funding.

To learn more, please contact the president, **Bonni Yee**: bonniyee@genesearch.com.au

Further reading: www.apbsf.org.au *Myrtle Rust reviewed: the impacts of the invasive pathogen Austropuccinia psidii on the Australian environment.*

Vale Steve Clemesha

We note the recent passing of Steve Clemesha on 17 August 2018, who was, with D.L. Jones, the co-author of *Australian Ferns and Fern Allies*, The Currawong Press, 1989 (repr. 1993). He was a regular speaker on orchids and ferns to the APS and was frequently consulted by the Herbarium staff about orchid identification. Barry Kemp remembers his love of carnivorous plants and his pond full of floating containers of them. A record of Steve's 2003 presentation on carnivorous plants can be obtained from Rob Watt. His other interest was the grafting of western banksias onto eastern rootstock.

We extend to his wife, Pauline, and his family, our deepest sympathy.

~~~~~

## Notice of NSW Events

**September 15, 2 – 5pm**

**Ben Walcott:** *Garden Design with Native Plants*

**Venue:** Armidale City Bowling Club

**September 16, 9am – 5pm**

**Garden Visits in Armidale**

RSVP (by September 7): Barbara Nevin 026775 2128; Penelope Sinclair: [apsarmidale@gmail.com](mailto:apsarmidale@gmail.com)

