



## **APS Conference 2022, Kiama**

Once every two years there is an opportunity for APS members from all over Australia and further afield to get together and increase their knowledge of our wonderful native plants. This year it was the NSWAPS that organised a very varied week of talks and expeditions which you probably read about in the monthly newsletter. Although I only attended for two days my brain was stimulated very much. I must get myself organised for the next one in 2024.

### **Past, Present and Future, (Theme of the conference) Professor David Keith (UNSW) Main speaker**

The theme for the conference was Past, Present and Future, Professor David Keith (UNSW) was the first speaker, covering the whole concept. I found his ideas fascinating and hope that this gives you some of the ideas expressed.

#### **Past**

Monday was the introduction to the events of the past that have led to the current ideas regarding how species have developed where they are. This is the idea of vicariance v. dispersal in the development of plant species. Vicariance, a new term to me, refers to the separation of large groups of organisms due to geographical barriers, eg plate tectonics/seafloor spreading, considered to be the process for change, from the 1960's when seafloor spreading was confirmed. Dispersal is referring to the transfer of seed and plants via wind, animals etc. (This was Darwin's theories)

Phylogeny, establishing relationships between families, to develop evolutionary trees of the various families, showing time in relation to the order of separation of families from each other. This system has become much more important in the last 10 years as scientists are now able to date when changes occurred in the family tree.

An example used was the location of *Nothofagus* sp. in both New Zealand and Australia, as well as New Guinea, New Calidonia and South America, the distribution stemming from *Gondwana* sp. before the break up of the supercontinent. But, New Zealand broke away from *Gondwana* very early on whereas Australia was one of the last to break away, and New Zealand was under water for much of the intervening time, therefore the *Nothofagus* in N. Z. would have to be derived from those on Australia via dispersal.

The same problem arises with *Protaceae* and *Triodia*, both being from half vicarious and half dispersal origin.

I'll leave you to investigate further into these ideas.

#### **Present**

Since European settlement of Australia, native species are under threat due to habitat loss, invasive species, altered disturbance regimes, pollution, direct exploitation and climate change. Surprisingly to me, there are 26,000 species of plants that have been brought here (exotic) and 24,000 species that are indigenous. But 600 Australian species are being grown extensively around the rest of the world so it is not only a one way transfer.

#### **Future**

The big question is "will migration of plants keep up with climate change".

Alpine plants may be lost completely due to warming, forests experiencing drought such as rainforests will decrease and the Jarrah forests of SW western Australia which have soils that don't hold water will be lost. Disturbance of the natural ecosystems as a result of fire will cause slower life cycles, faster fire cycles and the slowing of seed bank accumulation. The Alpine Ash forests are already affected by more frequent fire, as in general they don't grow new/ replacement trees to

maturity unless they have lots of light, therefore the seed back decreases. The sea levels will rise removing much of the coastal vegetation and flowering times will alter which could cause pollination and seed dispersal problems for plants dependent on animals for these events.

## **The Rest**

There were many other speakers, some whole group, while lots of diverse small group sessions.

One that was very different was on lichens. As you may be aware lichens are a symbiotic relationship between fungi and cyanobacteria, hence they don't really belong in with plants but I still find them fascinating. In fact, due to the very wet weather, I have lichen establishing themselves on my car, so I had better do some cleaning.

The speaker, Professor Martin Backor, from Slovakia, has an intimate knowledge of these creatures and enlightened us on all their possible uses being producers of many unique compounds that could be used biologically, ecologically or pharmaceutically. These range from antimicrobial activity, allelopathy which is the control of a plant species by the action of chemicals produced, chelating of heavy metals (producing chemicals that join up with polluting heavy metals in order to prevent their harmful effects, screening of UV light and also some metabolites that can reduce the division of cancer cells.

However, there is one big problem with this, lichens are extremely slow to grow, hence, so far they are not being used for any of these possibilities.

Another speaker, Patsy Nagle, is clearly a great advocate of conservation, with extensive knowledge of native plants in every possible way, including working for various levels of government, teaching, education and inspiring people from all walks of life. She currently works as a ranger for National Parks and Wildlife as well as many other groups. Simply she is an inspiration for anyone caring for our country.

## **First Nations Culture Associated with Native Plants**

Two other great speakers to the whole group were Auntie Joyce Donovan and Clarence Slokee.

Not only were they entertaining, informative and incredible in their knowledge, they gave us many insights into the uses of plants. Auntie Joyce talked about the use of various herbs and how some first nations people have difficulty in believing in

western medicine cures when they have full confidence in their own treatments. She is such a lovely person as well as elder and nurse I couldn't help respecting her and all she had to say.

Clarence on the other hand is a great source of information, as you are probably aware of from his Gardening Australia presentations. But, he is also a great entertainer, having the whole audience laughing at some of his comments and very well versed in his love for Native Plants.

**So, all in all, get yourself ready for the next conference, and go along yourself – Jenny Ashwell**

## **NSW Annual Get Together, 12/13 November**

Just a reminder to you all, especially to those to the north of Goulburn, the weekend is being organised by the Southern Highlands Group and the first presentation/talk will be all about the plants of the Wingecarribee area by a very knowledgeable environmentalist with afternoon visits in the area. Sunday includes various walks around Mt. Gibraltar and visits to gardens and plant sales.

To register go to the APSNSW web site. If you do go take in any ideas as we, Southern Tablelands, are organising next year's event! And we need people with knowledge of how to run the weekend

Jen

## **Outing on 5<sup>th</sup> November**

Thought I would give you some info on this visit to the STEP area at the Canberra Arboretum.

This demonstration area of what grows around here under various conditions is a good resource in particular for those planning revegetation on their properties. The area traverses the dry slopes (not so dry at present) and moves downhill to a wet area. The trees, shrubs and forbs are labelled so you get a good idea of what grows where.

Since it is not a huge area, will take 1 to 1.1/2 hours my suggestion is that we all meet in the Arboretum Carpark at 10am.

If you would like to take a visit to the Cool Country Native Nursery at Pialligo and want to share a car I will be going from the carpark at the back of the Council offices at 8.15 that morning as I want to go to the nursery first. This is the best nursery in the area and on the first Sat of the month, ie 5/11, they also have local people who are into propagation sell plants there. You can often buy good local species from them.

If you are interested in either of these things, especially giving you a lift, please let me know either by email, [jashwell@activ8.net.au](mailto:jashwell@activ8.net.au) or ring 0400985941.

I am sure a number of you will want to go to Canberra under your own steam so that you can do other things before or after the STEP visit, but please also let me know so we have an idea of numbers.

### **AGM December 3<sup>rd</sup> 2022**

In particular for new members, and for everyone in general our AGM is made as brief as possible and is a good chance to get to know other members as we always follow it by lunch and a tour of the property that we happen to be at.

However, I am giving you the advanced info about one aspect that we will need to deal with, we are in need of more members to become active in doing things for the group. This year we have mainly relied on the long term members to organise and carry most of the activities and jobs to be done. I know that many of you live a long way from Goulburn but you may be able to offer help with coordinating things via computer. Below is a list of jobs that need to be done and there are probably many more that I can't think of at the moment and you can be a novice ready to learn.

- Walks co-ordinator
- Propagation workshops co-ordinator
- Plant growing home plus servant/maid
- Plant sales organizer
- Tracker of plants we have
- Social organizer
- Ideas organizer
- Peoples interests

Be on the committee, that only meets rarely, most is done by email or phone.

### **Mount Grey Reserve Outing - Saturday 1<sup>st</sup> October 2022**

An intrepid group of eight members lead by Pauline left the carpark behind the Council Chambers and drove up to the start of the walk on Speedway road. As soon as we assembled on the track we were struck with an area wide display of *Leucopogon muticus* – blunt beard-heath. Its white to creamy flower display predominated the immediate shrub understory. As we progressed along the track a surprisingly diverse variety of plants were flowering under the dry sclerophyll forest of mainly *Eucalyptus mannifera* - brittle gum; *E. rossii* - scribbly gum; and *E. blakelyi* - Blakely's red Gum.

Some of the understory plants in flower were *Acacia paradoxa* – kangaroo thorn; *Grevillea ramosissima* - fan grevillea; *Ozothamnus diosmifolius* – white dogwood; *Glossodia major* - wax lipped orchid; *Hakea laevipes* – bushy finger; *Dillwinia sericea* – showy parrot pea; *Diuris pardina* – leopard orchard.

The weather held off with only two light showers when we quickly donned our raincoats. It was an invigorating time for everyone to be back in the bush for a great walk and get together. Other plants seen were: *Patersonia sericea* - silky purple-flag; *Stylidium graminifolium* - trigger plant; *Hibertia obtusifolia* - hoary guinea flower; *Banksia spinulosa* – hairpin banksia and *Brachyloma daphnoides* – daphne heath, an amazing display and just a stone's throw away from Goulburn.

- **Bob**



*Glossodia major*



*Ozothamnus diosmifolius*



*Patersonia sericea*



*Hibbertia obtusifolia*



*Dillwynia sericea*



### Wetlands Gardens Win Awards at Lilac Festival

Two gardens that the STAPS planted (first plantings were made in 2015) and maintain were entered into the Lilac Festival Garden Competition for 2022. The judges appeared to appreciate the aim of the gardens as well as the implementation. They were awarded the winner of the Native Garden section as well as the Judges Choice Special Award. Particular interest was paid to *Veronica perfoliata* and *Homoranthus prolix*. They also noted the educational as well as recreational role the gardens play.



*Stylidium graminifolium*

### Calendar of Events

- 5 Nov STEP Garden Canberra Arboretum
- 3 Dec AGM

