

# AUGUST MEETING

# **Cathy Powers**

Our speaker at the August meeting was Cathy Powers, and her topic – "Saving Miss Daisy". Cathy's theme was endangered plants, and how we, as 'Citizen Scientists' can help them to survive.

She began by outlining the factors which can threaten the existence of a plant species – loss of habitat through land clearing; weed infestation; bushfires; and climate change. Cathy's home in the Brisbane Ranges is very dry at the moment. While there have been frequent rain events, there has not been the consistent rain which soaks into the ground, so plant communities are suffering.

She then went on to define what is meant by the terms 'endangered' and 'threatened'. Endangered means a species is 'in danger of becoming extinct through all or a significant portion of its range', where threatened means 'may become endangered in the foreseeable future.'

What can we do to help? Propagation and cultivation of threatened or endangered species in the garden is a small but important step we can all take. You don't need a large garden and many of the endangered and threatened plants can be grown in pots. You don't need to grow every endangered species in your garden. If you have just one, you are making a real contribution to its survival.



*Eucalyptus crenulata*, the Silver Gum, is now endangered in nature, with as few as 150 plants remaining. However, there are plantations of *E. crenulata* which are grown for the foliage, much in demand in the cut flower industry.

The Environment Protection and Biodiversity Conservation Act 1999 (the EPBC Act) is the Australian Government's central piece of environmental legislation and lists 39 species of flora as extinct (with an unknown number 'extinct in the wild'), 141 species critically endangered, 527 endangered species and 592 vulnerable species making a total of 1299 native species that are within the category of threatened flora.

And of course, the difficulty with growing these endangered plants in the garden is 'where do you source the plant?' If they are not attractive, they are hard to find for cultivation.

Cathy went on to give us a couple of plants from each state which are on the EPBC Act List, and which can be grown readily in our gardens.



Prostanthera cryptandroides – Wollemi Mint-Bush

President: Matt Baars - <a href="mailto:baars16@bigpond.com">baars16@bigpond.com</a> Secretary: Bruce McGinness - <a href="mailto:bruce.mcginness@optusnet.com.au">bruce.mcginness@optusnet.com.au</a>Treasurer: Frank Scheelings - <a href="mailto:ftscheelings@gmail.com">ftscheelings@gmail.com</a> Editor: Ade Foster - <a href="mailto:adefoster@internode.on.net">adefoster@internode.on.net</a>Australian Plants Society - GeelongP.O. Box 2012, Geelong. 3220.Website: <a href="mailto:www.apsgeelong.org">www.apsgeelong.org</a>

In NSW, Prostanthera cryptandroides, the Wollemi Mint-bush is an attractive plant from dry Eucalypt forests on the central west slopes around Lithgow. *Zieria adenodonta* occurs only near the top of Mount Warning in the Tweed district in NSW. And from a few remote spots in South-east Queensland.

In Queensland, *Phebalium distans* and *P. whitei* are both attractive plants which should grow successfully in our local gardens. *P. distans,* a small white-flowered shrub, is known from only three sites in the southeast. The lovely yellow-flowered P.whitei is found in the Darling Downs region.

In South Australia, another Phebalium, *P. lowanense*, was on Cathy's list. It is a small scrubby plant from the Murray Darling Basin on the SA/VIC border. Prostanthera eurybioides, is a low, spreading shrub with a limited distribution occurring in two disjunct areas: Monarto, near Murray Bridge and Mount Monster CP in the South East, near Keith.



Phebalium daviesii – St. Helen's Wax-flower

In Tasmania, Phebaliums are again on the list. *P. daviesii*, The St Helens wax flower, is a small flowering shrub native to Tasmania, Australia. The plant is only found in a small area near the George River on Tasmania's north-east coast. *Eucalyptus gunnii ssp. divaricata* occurs in grassy open woodland at the exposed edges of treeless flats or hollows (frost hollows) around the Great Lake region on the Central Plateau.

Western Australia has so many flowering plants – 10,000 at last count – and a few make the the EPBC Act List. *Grevillea involucrata*, the Lake Varley grevillea is a spreading low-growing shrub from the wheatbelt in the south western part of the state. Banksia cuneata, the Matchstick Banksia is a large shrub or small tree with a very restricted range in the Central/Avon wheatbelt in southern WA.

And, in Victoria, Cathy chose two plants to represent the threatened species. Correa lawrenceana var. grampiana, the Grampians Mountain Correa, is a shrub to about 2.5m. It is restricted to the rocky slopes of the Grampians. *Epacris impressa*, the Pink Heath, is the floral emblem of Victoria, and is found in all the southern states. But, *var. grandiflora* is restricted to the Grampians and is larger and often double-flowered.

Apart from growing threatened plants in our gardens, what else can we do to assist? While the term 'Citizen Science' doesn't sit well with some people, the concept is valuable. In our wanderings, whether in the garden or in the bush, we can record our observations and share them with others. We can join groups such as study groups and 'Friends' groups or online via Facebook and the like.

'Save Our Flora' is an online group which shares information about the propagation and cultivation of rare and threatened species. Membership is free and includes an electronic newsletter with all the latest information.

Larger land-holdings can be registered with groups such as 'Trust For Nature' who can assist with conservation issues on your property.

In the Brisbane Ranges a citizen science project is underway to map and understand a selection of plants from the 600 recorded for the park. A list of 15 has been selected and participants are encouraged to record sightings. This can aid with more accurate distribution maps, help understand impacts from animals and people, better understand flowering and reproductive cycles and so assist to understand what conservation issues may exist.

There are many such projects happening, whether they be structured like the Koala Count or the Aussie Backyard Bird Count, or just a random encounter with a rare or unusual species. This last was beautifully illustrated a few years back when, in 2009, a couple of amateur orchid photographers discovered the tiny *Caladenia pumila* on the Inverleigh Common. This orchid was believed to be extinct since the 1920s.



Caladenia pumila – Inverleigh Common

Recording your sightings and observations online has made it easy to provide information, and easy to communicate with others about your particular interest. Sites like Bowerbird and Natureshare allow you to post images of flora and fauna for identification or simply observation. The data collected from such sites enable a much broader picture of what we have, where it's found, how it behaves or how it fits into the environment.

Cathy concluded by showing us images and video taken by motion activated cameras which she has installed on two ponds on her Brisbane Ranges property as part of her own citizen science project.

There are also numerous Facebook pages for almost any natural history topic you can think of, where people are encouraged to post images and discuss them with like-minded people across the world. I personally follow sites for Victorian Birds, Australian Birds, Australian Orchids, Australian Frogs and Reptiles, Australian Spiders, Australian Mammals, South African Spiders, Southern African Birds and African Wildlife. In 20011, Frank Scheelings and I submitted photos to the South African Spider site which turned out to be a new species! Ed.

## **ON THE TABLE**

#### with Frank Scheelings

Frank, ably assisted by Young Matt, presented a very diverse and colourful plant table.

There were a large number of *Chamelauciums* on display, and it seems to have been a very good year for them. They ranged in colour and size from the large white flowers of Secton's form, through all the pinks of the *C. uncinatum* forms, to a tiny, deep purple *C. floribundum*. Great plants which everyone should be growing.



Eremophila mackinlayi - Photo: Russell Scott

Eremophilas featured strongly this month. *E. cuneifolia* is a striking plant with large, showy mauve and pink flowers. It has been flowering consistently in Ade's garden since last November. E. mackinlayi, often sold as 'Desert Pride', is a very showy plant with grey/green foliage and large deep purple flowers.

Other *Eremophilas* on display were *E. drummondii*, a deep purple flower, *E. drummundii x E. nivea* hybrid which was the palest lilac, *E. maculata* ( see Plant of the Month) and a deep maroon *E. maculata x E. brevifolia*.

Grevilleas always feature given their variety of form, colour and flowering seasons. There seems to be a Grevillea in flower every month. This month was no excpetion with *G. treueriana*, *G. paradoxa*, and *G. zygoloba* as true species, and many cultivars including G. 'Caloundra Gem', G. 'Red Hooks', and G. 'Molly'. There was a lovely hybrid *G. longifolia* x G.'Honey Gem', which produced vibrant red longifolia-type flowers and a compact little *G. lavandulacae* x *G. alpina* with lovely bright pink flowers.



*Kunzea ambigua* – Tick Bush

*Kunzea ambigua* is a small shrub with long weeping branches, which, at this time of year, are covered in a dense coat of small whitish flowers. The other *Kunzea affinis*, (which may have been *K. priessii*) is a small open shrub with bright pink flowers.

Phebaliums were discussed by our speaker, Cathy Powers, and there were two species on our table, *P. whitei*, with tiny very deep yellow flowers, and *P. nottii* which has deep pink blooms.

Among the other specimens of interest were Banksia lemanniana, called the Lantern Banksia as the flowers hang down from the branches; a yellowflowering form of *Calothamnus quadrificus*, the onesided bottlebrush and *Bauera sessiliflora*, the Grampians Baeura.

# PLANT OF THE MONTH Eremophila maculata

This month's Plant of the Month was *Eremophila maculata*, brought along by Carmel Addlem.

*Eremophilas* have always been popular garden plants, and have become more so since the beginning of the century, when people were looking for drought tolerant plants. The name *'eremophila'* is derived from the ancient Greek - *erêmos* meaning "lonely" or "wilderness" and *phílos* meaning "dear" or "beloved", so 'beloved of the lonely wilderness' or desert.



E. maculata 'typical' flowers. Image: Australian Seed

The genus *Eremophila* was first formally described botanist Robert Brown in 1810. The first species to be named were *E. oppositifolia* and *E. alternifolia*, and it would seem the two have been confused ever since. Ferdinand von Mueller was responsible for naming and describing forty seven species. Robert Chinnock is the modern authority who has named more than one hundred species of *eremophilas*. Given the remote locations of many of the plants, it is almost certain that more remain to be discovered. To date, some two hundred and twenty species have been described with perhaps forty more awaiting description. The most recent additions to the list are *Eremophila buirchellii* and *Eremophila* calcicola which were formally described in 2016.

*Eremophila maculata,* also known as spotted emu bush, or spotted fuchsia-bush, is the most widespread of its genus in the wild state and probably the most frequently cultivated. It is a very hardy, spreading, often densely branched shrub with variable leaf shape and flower colour. The inside of the flower is mostly, but not always, spotted. Flower colours vary from deep purple, through red to orange and yellow, and there are many cultivars and hybrids available.

Carmel's specimen was a lovely pink/purple, with a heavily spotted throat, which she is growing in a pot. It was struck from a cutting in August 2014.



Carmel's Eremophila maculata

It strikes readily from cuttings and prefers an open, sunny position. It can tolerate shaded positions but will develop a more open habit. It is drought 'tolerant', but will develop more flowers and denser foliage with regular watering. Pruning after flowering is advised as the plant is very vigorous, some might say invasive, of your garden's space. Pruning not only controls the plant's spread, but encourages denser foliage and more flowers next season.

# UPCOMING EVENTS

**November Meeting** – Rare Plant Auction. See last page for details.

## December Xmas Break-up.

As usual we have a BBQ Christmas gathering rather than a meeting in December. John and Barb Bell have very kindly consented to host the event again this year. Their property is at 1050 Horseshoe Bend Rd, Torquay. Melways 493 H9. Arrive at 12.00 noon and please bring everything you will need, food, drinks and a salad or dessert to share with others.

## NATIVE ORCHID EXHIBITION

Geelong's Australian Native Orchid Society's Annual Show is on again on Saturday, November 4<sup>th</sup>, from

9.00 am to 5.00 pm. at the Wesley Uniting Church, 100 Yarra St Geelong Entry \$4.00. There will be orchids for sale, and morning and afternoon tea. There will also be a display by the Geelong Floral Art Group Inc.



#### FROM APS VICTORIA

**21<sup>st</sup> & 22<sup>nd</sup> October** - APS Ballarat District Group will hold the annual Spring Plant Show and Sales, from 10.00 am to 4.30 pm, at the Robert Clark Horticultural Centre, Ballarat Botanic Gardens. This a a great display of flowers and foliage with a large range of plants for sale. Hand painted floral art, books sales and lots of other stall holders.

**28<sup>th</sup> October** – APS Echuca presents Native Flower Showcase at Echuca Uniting Church Hall from 9 am to 4 pm. Featuring an awesome display of Australian native plants grown by members of the Echuca Moama area. There will be plant sales, displays from Birds Australia, Landcare and Moama Botanical Gardens, and morning teas.

**25<sup>th</sup> & 26<sup>th</sup> November** – APS Ballarat will host the quarterly gathering ... "Late Spring in Ballarat – Expect Anything and Everything". This will be held at the Ballarat Botanical Gardens, Gate 4, Gillies Street, Ballarat.

#### **GYMEA LILIES – 'TIS THE SEAON**

#### LILIES AT LAST

#### By Ade Foster

On 19<sup>th</sup> October I received an excited message from my sister, Helen, who lives in Vermont South. Her Gymea Lily has finally flowered.

Helen planted two Gymea Lilies in her garden in 2005, without really knowing anything about them. She was initially disappointed that there were no flowers, but she was encouraged to be patient. In 2013 the first plant flowered, and she has been anxiously watching the second one, since the flower spike first appeared way back in February. Today she was rewarded. On a five metres tall spike, the beautiful red flowers have finally appeared.

The Gymea Lily, *Doryanthes excelsa* is an interesting plant, occurring naturally along the central coast of New South Wales. It has several popular names, all related to its size, appearance and distribution—Giant Lily, Flame Lily, Spear Lily, Illawarra Lily and Gymea Lily.

Propagation is usually by division of mature plants, but they may be grown from seed. Seed germinates quite readily, usually within two months, and is best sown in autumn. But, be warned, plants grown from seed will not flower until about 8 years of age, so, be patient. It's worth the wait.



And, by coincidence, Phil Royce sent this ....

# **SPIKE IN THE GARDEN 2**

by Phil Royce

The green, biological spike in our front garden has finally done it. FLOWERED - two weeks ago. After six years, the Gymea Lily, *Doryanthes excelsa*, has shared its lovely red clump of beauty. But not so easy to examine and take in because the flower is perched atop an almost 4 metre high (a guess) spike and Di & I stand just 1.65 metres!

The plant has taken a battering recently from the strong winds that have come from the north and west. But rather than have an elegant and straight spike, our's is a bit bent - perhaps in keeping with its owners. The spike just cannot help wobbling while the flowers appear to be in segments from which red strappy bits grow.



Nevertheless, 'tis really a pleasure to have a relatively uncommon native plant in our garden. We have seen just one other *Doryanthes excelsa* in flower - in the Warralilly development towards Torquay. I have noticed two couples (one with a dog that I watched closely) stop and crane their necks skyward to admire the lily. This afternoon, a large raven also stopped, not just to admire but apparently to scavenge any insects that might be enjoying the isolation high up in the flower.

Drive by any time, soon, for a sticky beak.

## **UP-COMING EXCURSION**

#### Melton Botanic Gardens and Eucalyptus Arboretum

Our visit to the Melton Gardens will be on **November 26<sup>th</sup>**, at a time to be confirmed. These gardens are a delight. Beautifully laid out with a host of plant species on display, the walking is all flat ground. There are some very interesting plants here and the gardens follow the creek line with majestic

old River Redgums. The 'Friends' nursery will be open, so bring your wallets and purses ☺

## **MEMBERSHIP SUBSCRIPTIONS**

It is necessary to remind members of the need to pay their subscriptions promptly. And most of us have, which explains our Treasurer Frank's smile. However, there are a number of consequences of being slow in paying your club's subs.

The most important of these is that it means you do not have insurance coverage in case of injury. This is because financial membership provides, amongst other things, the insurance coverage.

Our club management committee does not permit non-financial members to participate in its organised activities, such as the trip to the Hansen garden in late October, or the trip to Melton Botanic Gardens in November.

Please, if relevant to you, pay your subscription to Treasurer Frank using the form available on our internet site.

# http://www.apsgeelong.org/Memberships%20Form% 202017\_18.pdf

Note: If you find the old membership form here, please press the refresh button on your browser to update to the latest version. The latest form is 2017 / 2018. Ed.

# AN INTERESTING SUNDEW

Ade Foster

On a recent visit to Western Australia, Penny and I visited Goomalling, about 130 kms north east of Perth. We stopped at a little bushland reserve and found an interesting Sundew, which I believe to be *Drosera macrophylla*.



The plants were scattered through very dry, scrubby woodland and had a large rosette of thick green/gold leaves with dense, hairy red margins. Each rosette had a cluster of stems with up to twenty five creamy white flowers issuing from its centre. Such information as I can find suggests that this is one of the tuberous Droseras, which may take up to eight years to reach maturity. A mature plant may produce as many as forty flower stems, with between two and eight flowers per stalk.

It is found on sandy or loamy soils, often around granite outcrops in the southern part of Western Australia north and east of Perth.

## NOVEMBER RARE PLANT AUCTION

Our November meeting will take the form of a rare plant auction. Following Cathy Powers' address at our last meeting, you should all be inspired to plant a rarity in your garden. Matt Leach and Bruce McGinness (among others) have put together a list of thirty rare and unusual plants which will be auctioned on November 21<sup>st</sup>, so bring your purses and wallets and be part of the fun.

The following is the list of plants currently headed for the auction. There may be some changes if plants currently under propagation are not ready for the sale.

Acacia alcockii Acacia aphylla Acacia argyrophylla Acacia covenyi Acacia denticulosa Acacia gemina



Acacia denticulosa – Sandpaper Wattle

Ammobium alatum Anthropodium milliflorom Aphanopetalum resinosum Banksia epica Blandfordia grandiflora Correa glabra (variegated)

# Diplarrena latifolia



Diplarenna latifolia – Western Flag Iris

Dryandra stuposa Eucalyptus steadmanii Grevillea flexuosa Grevillea maccutcheonii Hakea bakeriana Hakea neurophylla Hakea subsulcata



Hakea neurophylla – Pink-flowered Hakea

Lambertia orbifolia Leucochrysum albicans Microseris lanceolata Olearia adenophora



A great big thank you goes to Nicole Leach for doing such a great job with the

newsletter while Penny and I were away. It's nice to know that someone is prepared to step up and take on the roll. And thanks also to all of you who contribute articles for the newsletter. I'm truly grateful for your input and assistance. Ed./Ade