Correa Mail

Newsletter No 401 - May, 2024

APRIL MEETING - Frogs and Other Amphibians

Our speaker for the April meeting was yours truly, Ade Foster. I was asked to fill a void in our speaker list. The topic was '*Frogs and Other Amphibians'*.

There are three orders of amphibians – the *Anura*, frogs and toads, the *Urodela*, salamanders and newts and the *Gymnophiona*, the Caecilians. Only frogs are native to Australia. The only 'true' toad in Australia is the introduced Cane Toad.

Cane Toad – *Rhinella marina*

Most of us are familiar with frogs and their life cycle of egg, tadpole and adult. We are less familiar with the salamanders and newts, and many of us are probably unaware of Caecilians entirely.

Salamanders and newts are found primarily in the more temperate regions of the northern hemisphere, with populations in central and tropical South America. They look superficially like lizards, with a more rounded, frog-like head.

Salamanders also have a three staged life cycle. Eggs laid in water, an aquatic larval stage called an Eft, and a terrestrial adult stage. Adults are fossorial – burrowing – but breathe to some extent through their skin, so need a moist habitat. This is usually on leaf litter and low vegetation close to streams, ponds and lakes.

Northern Red Salamander – Photo: John P Clare

Many salamanders show bright 'warning' colours as defence against predation.

Newts are salamanders which have maintained an aquatic life-style after metamorphosis. Their tails are ventrally flattened and fringed with a membrane to assist with swimming. They breathe almost exclusively through the skin but do have reduced lungs and some respiration happens through them. Their legs are smaller and don't really support the weight of the animal out of water.

Smooth Newt – Photo: Wikipedia

Newts are commonly kept in aquaria as pets in the UK, Europe and United States.

The Caecilians are found in the wet equatorial tropics and across most of South America. They are mostly fossorial and are rarely encountered. As such, little is

known about their life history and habits. Superficially, they resemble large earthworms.

Ringed Caecilian – Photo: Carlos Jared

They range in size from about 90 mm to well over 1.5 metres. Their eyes are reduced to light/dark sensory organs. Most have a sensory tentacle between eye and nostril connected to the Jacobsen's organ in the roof of the mouth. This is probably an adjunct to the sense of smell, amplifying it to aid in finding prey.

Caecilians seem to have done away with the intermediate stage of growth and, either give birth to live young or the young develop in the egg and hatch as animals almost identical to miniature adults.

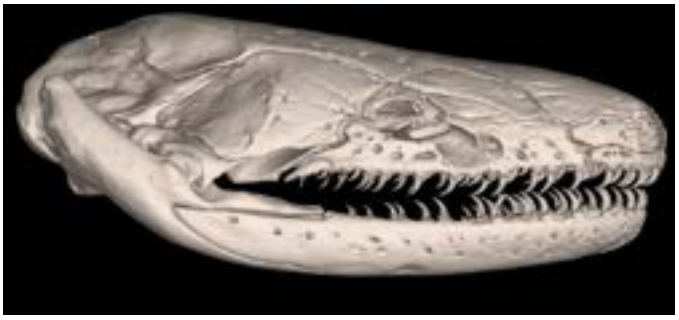
Ringed Caecilian with young – Photo: Carlos Jared

There are also completely aquatic caecilians. They have no gills, but breathe through their skin, and can gulp air if the oxygen levels in the water are too low. Their young have a well-developed lateral line, like fish, which help detect changes in water pressure and so aid in capturing prey.

Some caecilians display a remarkable amount of maternal care for the young. They guard the eggs, and the young when they hatch. As with other amphibians, caecilians shed their skins regularly, every 3 – 10 days depending on species. It's important to maintain the skin in good condition to aid in respiration. Frogs and salamanders eat their skins after shedding; an important source of protein, not to be wasted. Some caecilians allow their young to graze on their skin. Scientists studying caecilians in South America wondered how the young could be so active on such a diet. By watching closely they observed something quite remarkable.

The female secreted a milk-like substance from her vent which the young sought eagerly. It is produced in glands near the ovaries, and contains carbohydrates and lipids, much like mammalian milk.

Many terrestrial caecilians hunt earthworms and have a very impressive set of teeth to help keep hold of their slippery prey.



Caecilian skull – Image: David C Blackburn

And, if these amphibians weren't already sufficiently amazing, some have been shown to have venom glands near the teeth. The stuff of nightmares, maybe?

Ade went on to introduce us to some of the more common frogs to be found in the region; the common Froglet, Spotted Marsh Frog, Pobblebonk Frog, Growling Grass Frog, Brown Tree Frog, Victorian Smooth Froglet and the Bibron's and Southern Toadlets.

Growling Grass Frog – *Litoria raniformis*

The talk finished with a little about the conservation programs and species conservation happening at Zoos Victoria. Some programs have had a great success – raising vast amounts of money for animal welfare, changing state laws and correcting the practises of a huge international confectionary company.

In particular detail we talked about the Southern Corroboree Frog. These little frogs have a very restricted habitat and are found only in the Mt. Kosciuszko National Park above 1300 metres altitude. A few years back, when this conservation program began, there were estimated to be only fifty of them remaining in the wild.

Southern Corroboree Frog – Photo: Rowley, Australian Museum

They have a very specific habitat need. Eggs are laid in summer in a nest among the sphagnum moss. They develop through autumn then go into a diapause – a suspended state – until the snow melt floods the bogs. So without sphagnum bogs and winter snows, breeding is impossible.

Corroboree frog at the nest – Photo: Zoos Victoria

There are there are three main threats to their continued survival ….

- Feral animals, foxes and rats as predators and horses trampling the sphagnum bogs
- Climate change causing reduced snowfalls and therefore reduced run-off and disease
- Disease in the form of Chytrid fungus carried on the feet of animals and human hikers.

Zoos Victoria has a captive breeding program at Melbourne Zoo and Healesville Sanctuary. With partners they are building disease and predator free enclosures in isolated areas of KNP for release of captive bred frogs. The budget is a staggering $1,241,000 over 5 years.

Corroboree frog tadpole – Photo: Zoos Victoria

Climate change is a global problem and not one we can change in isolation. But, if we want to continue to enjoy frogs, we need to do our bit.

PLANT TABLE - Various Members

It was a small plant table this month, and many members reported little or nothing flowering in their gardens. But, there's always something …

Matt Leach brought along *Crowea* 'Festival'. It is a hybrid between *Crowea exalata* and *Crowea saligna*; a chance seedling that came up in an Australian Plant Society member's garden. It grows up to 1.2m high x 1m wide, with flowers most of the year. The main flush is in autumn. It is very hardy plant that will tolerate most conditions, but has some struggles with high pH. 'Festival' is a fantastic plant for any garden and a great insect attractor.

Ade .. *Grevillea* 'Lassiter's Gold' is a vigorous, layered plant with huge, golden-yellow flowers to 20 cm. It grows 1.5 x 10 m and needs a lot of space or heavy pruning. *Grevillea* 'Sylvia' is a large shrub with soft foliage and metallic red flowers all year. *Grevillea* 'Katherine's Fire' is a small shrub with vivid red flowers, developed by Phillip Vaughan.

***Grevillea* 'Lassiter's Gold'**

Ade also has a number of Correas in flower at the moment including *Correa bauerelenii* – the Chef's Hat Correa, *C. backhouseana*, C. pulchella 'Gypsy', C. 'Canberra Bells' and two colour forms of *C. reflexa* from the Brisbane Ranges.

***Correa reflexa* – Brisbane Ranges form**

Jennie brought along a selection from the car-park/garden at Little River Railway Station, which she has had a hand in curating. Grevillea 'Superb' is a common hybrid, very hardy, which produces flowers for most of the year. She also had an unknown Grevillea, perhaps *G. priessii* or a hybrid thereof, and a lovely little *Crowea* with tiny flowers.

Frank brought Grevillea treuereana, a medium shrub with beautiful, deep orange/red flowers. He keeps it pruned to keep the pathways clear, because of its very spiky foliage. Hibbertia scandens is a very vigourous, twining shrub with produces very large yellow flowers, usually in late spring and summer. Frand also brought a nice Eremophila – *Eremophila forestii* – which is featured in the '*Plant of the Month'* article.

Grevillea treuereana

Carmel brought *Correa* 'Catie Bec', a hybrid of *C. alba x C. pulchella*. It was developed at Bywong Nursery in NSW and named for one of the granddaughters of the owners. It is a very hardy, rounded shrub to about 1.5 m and produces masses of pink, open flowers in winter and spring.

***Correa* 'Catie Bec'**

PLANT SALE - 13th April, 2024

Our plant sale on April 13th was a great success. The weather was perfect and we had a record number of patrons through the gate.

Although our grower numbers were down - due to illness, car troubles and other commitments – all those present reported record sales. We also had a couple of new ones – Wine Barrel Banksias and Mara Metal Art. Both are keen to come back next year.

We trialled a couple of new ideas, and all were a success. With a few tweaks and couple more ideas, we are sure the sale can continue into the future.

Thanks to all those who organised, agonised or helped out on the day. We had a nice little gethering after the sale for helpers and growers, and, unlike other years, we were not all exhausted. Proof that the 'new way' is the 'right way'.

Fabulous Phil and lots of buyers.

Mike and Wendy from Otway Greening have sold the business and attended their last plant sale as owners – a more than 25 year tradition for them. We wish them well. The new owners have said they are keen to continue the tradition in 2025.

Lastly, a huge thank you for the great support we get from our growers, we couldn't do it without them…

- **Chris Fletcher**
- **Friends of Melton Botanic Gardens**
- **Ironstone Park Nursery**
- **Otway Greening**
- **Special Effects Nursery**
- **Sun Valley Native Nursery**
- **Vaughan's Australian Plants**
- **Wine Barrel Banksias**
- **Corio and Norlane Lions Club**
- **Cruzin' Coffee and Food**
- **Mara Metal Art**
- **Bunning's North Geelong**

After expenses we raised ***~$1250.00*** on the day, and signed at least two new members. Well done everyone!

2023 MEETINGS and OUTINGS

May meeting	Munda Biddi Trail, WA
June meeting	Grant Baverstock – Bats
Aug Meeting	AGM & Photo Competition
Oct Meeting	RSPCA Koala Hospital
Dec 7th	Christmas Break-up BBQ

Lots more in the pipeline. Stay tuned!

PLANT of the MONTH – *Eremophila forrestii*

Eremophila forrestii was chosen as plant of the month. It is most abundant in Western Australia, but is also found in the far west of South Australia and the Northern Territory. The Western Australian authorities recognise five sub-species … *capensis, forrestii, hastieana, inland* and *viridis. Subspecies capensis, viridis and 'inland'* are classified as Conservation Category 3, which means they have a very limited distribution and are not well known.

Eremophila forrestii – Wikipedia, Geoff Derrin

The type species is known as Wilcox Bush, *subsp capensis* as Cape Range Poverty Bush and *subsp hastieana* as Grey Poverty Bush. All are small shrubs from 0.5 – 2.0 m. The leaves are grey/green and covered in dense grey or yellowish hairs. The flowers are shades of cream to pale pink with a spotted or streaked throat and four long stamens extending beyond the flower tube. Flowering is mostly from April to October.

The species was first formally described in 1869 by Ferdinand von Mueller. The specific epithet (forrestii) honours the Australian explorer, politician and plant collector John Forrest.

***E. forrestii subsp forrestii* – Wikipedia, Geoff Derrin**

Although common in the wild in many places in WA, it is not well known in cultivation. It is quite difficult to propagate, although it does reasonably well in the colder Victorian climate on Myoporum rootstock.

***E. forrestii subsp forrestii* – Wikipedia, Geoff Derrin**

APS GEELONG MEMBERSHIPS

We have introduced a new system for our membership renewals, to keep in line with APS Victoria procedures and to enable us to better keep track of our membership.

All memberships will terminate of 30th June each year, regardless of when the previous payment was made.* Membership fees will be due on July 1st every year.

* Exception: We are hoping to recruit new members at the plant sale in April, and any who sign on at the sale, or afterwards, will have membership through to 30 June 2025.

Don't forget, if you join APS Victoria and pay your membership of APS Geelong at the same time, please email our secretary to let him know. That way, we keep you in the loop and keep our records up to date, as we are required by law to do.

Email the scretary at: apsgeelong@gmail.com

PLANTS ONLINE - Any recommendations?

We thought we might start a resource for those who are interested in online shopping for plants. If you have used, and would recommend, an online source for quality native plants, can you please let us know and we'll add it to our list.

In the meantime, here is a list of websites of our Plant Sale Growers. I don't know if they have an online shopping function …

Friends of Melton BG … https://fmbg.org.au/
Otway Greening … https://otwaygreening.com.au/
Nick's Natives … https://nicksnatives.com/
Special Effects Nursery …
https://www.specialeffectsnursery.com.au/

Mara Metal Art … https://marametalart.com.au/

Chris Walker-Cook uses Water Garden Paradise for aquatic plants
https://www.watergardenparadise.com.au/

Find these on Facebook …

Ironstone Park Nursery
Sun Valley Native Nursery
Vaughan's Australian Plants
Wine Barrel Banksias
Cruzin' Coffee & Food