Australian Plants Society (Wangaratta Inc)

June 2021 Newsletter

Visit APS Victoria website
https://apsvic.org.au

MEETINGS: ***Venue: Masonic Lodge, 101 Appin Street, Wangaratta.***
Meetings are held on the fourth Thursday of the month at 7pm.
Visitors are always welcome.

23 June (WEDNESDAY):	**(Due to the hall not being available on the Thursday, note change of date—this is a Wednesday.)** Speaker, Glenda Datson—The Greening of Albury-Wodonga & Wodonga's —habitat patches and corridors.
July:	No meeting this month.
26 August:	AGM. Silent Auction.
23 September:	Spring Spectacular Display Table.
28 October:	To be confirmed.
25 November:	To be confirmed.

NEXT COMMITTEE MEETING:

4 August:	4pm.

OUTINGS: ***Sunday after Monthly Meeting. Arrive at 10.30am for an 11am start***

27 June:	Visit to Glenda and Bernie Datson's garden & local reserves, 4 Wickham Court, Baranduda. 0428 401 090
25 July:	Helen Wrigley's garden—114 Colson Drive, Wangaratta South.
28 or 29 August:	To be confirmed.
26 September (may be subject to change):	Working bee (weeding, etc.), readying the van Riet's garden for an Open Garden to raise money for Oxfam.
16-17 October :	APS plant sales at Van Riet Open Garden. Profits will be divided 50:50 Oxfam:APS.
31 October:	To be confirmed.
28 November:	Christmas party lunch. Venue to be confirmed.
4 December:	Propagating Day.

A FEW SNIPPETS FROM THE JUNE 5th APS VICTORIA ZOOM MEETING

The meeting which was to be hosted by Shepparton APS was cancelled, due to COVID lockdown.

The next Quarterly Meeting of APS Victoria will be hosted by Grampians APS. It will be a celebration of their 40th anniversary and will include the APS Victoria AGM. It will be a full 2-day program. **Dates: 25th and 26th September.** There will also be walks and other activities in the following week leading up to the Pomonal Flower Show on the 2nd and 3rd of October. Members are encouraged to stay and enjoy a week of spring in the Grampians. You are encouraged to book accommodation in good time, as this event will coincide with the Spring school holidays.

Membership recording and payment processes.
The Webmaster, assisted by the Membership Officer and Treasurer, is working on updating the membership recording and payment process for APS Victoria. This will make it easier for local group treasurers and membership officers to manage, and to bring the Society up to date, by accepting on-line Credit-card payments. There will be a portal in the Members Only section of the APSV website. With individual passwords, each member will be able to renew their membership and check their status and be able to order the National Magazine '***Australian Plants***'. The system is still undertaking trials with the Bendigo APS acting as guinea-pigs. Problems will be ironed out before it goes 'live'.

Growing Australian Magazine. The June issue will be mailed soon. There has been a delay due to COVID with the printers. An electronic copy can be accessed via the APS Victoria website. Members' Password is **18&epacris**

Seedbank. The Seedbank Curator (Marj Seaton) would be delighted to receive viable flannel flower seeds. Those in the seedbank are too old and did not germinate in a test run. Many seed varieties in the seedbank are purchased commercially.

Helen van Riet, your APS Victoria Representative

WHAT IS THAT LOCAL PLANT?

At the APS Wangaratta May meeting Neil Blair gave a presentation on his work over the last five years photographing and helping to identify the flora of the Chiltern-Mt Pilot Box-Ironbark National Park and surrounding regions. This includes alpine areas, the Warby Ranges, Pine Mountain, Whitfield, Mitta Mitta and Yarrawonga in NE Victoria and Rand, Urana, The Rock and Woomargama NP in NSW. The Victorian Herbarium was looking for photos for it's Vicflora website and they and a number of other users whose work extended across the region were grateful for regional photos, hence the expansion from the park into the surrounding regions.
There are now 1124 species on the Friends of Chiltern website which is still actively growing.

This is a reminder that you can access the website at https://friendsofchiltern.org.au/

For general information, click on the **Home** tab.

For some great photos of what is to be found in the Park, click on **Biodiversity** then mouse over the drop down-menu and click **Galleries,** then select your area of interest.

For the flora list, click on **Biodiversity,** mouse over the drop-down menu and click **Flora of Chiltern Mt Pilot NP** to find the listings written by Eileen Collins and Neil Blair showing the scientific and common names, the status, and photographs showing each plant's features for identification purposes.

Get to know your Committee

MY PATH TO APS *Rosemary Buchanan*

I was raised in fairly "butchered" country in the Goulburn Valley, so there was not much romance of the bush in my early life. The marvel of my childhood was poking a bit of geranium into the grey clay soil and having a plant grow. I have been a plant grower ever since.

By a circuitous route I acquired a very romantic hill of dry sclerophyll country in the King River valley which I have loved for forty years. The predominant trees are ***Eucalyptus melliodora, Eucalyptus macrorhyncha*** (which Julie Strudwick told me means big nose***)**, ***Eucalyptus polythemos*** and ***Eucalyptus dives***. Each Spring there is a wonderful display of orchids and dry ferns,
Hibbertia, Indigofera, Xanthorrhoea and of course, the Silver Wattle. Different plants occur on the slopes and the gullies, the north or west aspects. I observed these without thinking, but it is wonderful to see what an ostensibly dry, unyielding bit of land will produce. This obscure bounty is what really interests me. When the group has visited my place, a long time ago, we skirted round the house area – nothing to see there - in favour of the bush.

My paddocks are all native pasture. There is one 'improved' paddock which has Phalaris, sown at least sixty years ago. I have tried hard to protect my native grasses, of which I have a huge range. It is these grasses that I will bring to the display table in the future.

When I travelled out of the district, I could look at the bush, but I didn't really see it. Joining SGAP in the 1990s opened my eyes so that I could see 'into' the bush and discern the relationships. I found it extremely exciting. What I really enjoyed about the group was their diverse nature. (Don't think me rude, but I have always described APS as the most wonderful, idiosyncratic bunch of dags.) There was a break of about ten years and then I rejoined the APS. The members were different, but it was a joy to reconnect with the familiar faces. We support each other very discreetly, but most of the chat is about plants. Each person is a fount of knowledge, but some of the quieter members have extraordinary knowledge, far beyond the norm. So wonderful.

I was terrific at making exotic, tough gardens, and growing food. Only when I attempted to grow native plants did I become frustrated and doubtful of my abilities. My soil is fertile when you add water, very acid, and, as any farmer will tell you, hungry. It has eaten any amount of mulch I have put on over the years: where does it go? Amazing stuff. On the other hand, my new land in the upper King River I have had for only 18 months is metres deep in rich, moist soil; a complete contrast. It supports ***Eucalyptus radiata***, which I can now identify as liking red soil and high rainfall, and ***Eucalyptus viminalis*** amongst others, as well as tree ferns and mosses. I am sure I could grow anything that withstands frost and snow!

Maybe because I have not been wildly successful at growing the plants that group members bring to the display table each month my notice has been taken more with the more insignificant local shrubs. I would be interested in the group propagating some of the more at risk local plants and promoting awareness of their ecology. The other thing I am keen to do – oh so late in my life! - is grow the non-eucalyptus native trees. At present I have (tiny) Queensland kauri, ***Stenocarpus sinuata, Araucaria bidwillii, Grevillea robusta*** and ***Nothofagus cunninghamii,*** as well as a Huon Pine and other plants of the southwest of Tasmania. The variety of local Kurrajongs also takes my fancy.

I have always been known as wildly optimistic.

Vicflora image

***Ed's note:** *in Greek*, macro = big or large; rhync-, rhyncho: provided with a snout or beak, i.e. a projecting appendage. (The fruit of Eucalyptus macrorhyncha is strongly beaked.)

MAY MEETING

MT AUGUSTUS NATIONAL PARK *Guest Speaker, Marilyn Bull*

Our thanks go to Marilyn and Geoff Bull for meeting their commitment to give this presentation to us which turned out to be the day of lock-down. It was a worrying time for them as they had already left Melbourne for Wangaratta before the announcement. And it was a worrying time too for their hosts, Helen and John van Riet. All were concerned as to whether they were Covid-compliant. But the presentation was delivered before the mid-night deadline and then in accordance with information obtained by ringing the information hotline, Marilyn and Geoff drove straight home after breakfast the next day. Unfortunately they were thwarted by being unable to complete their planned walks in the Warby's but as a group we were most interested to hear of the Bull's expedition to the Dragon Tree Soak and Mt Augustus in 2016.

Mt Augustus or Burringurrah is an 'inselberg' or 'island mountain', about 8 km long. It is a major feature on the surrounding plains, rising a further 715 m (or 1105m above sea level) at its highest point and covering 4795 hectares, about twice the size of Uluru. The road circumnavigating the mountain is 49 km long. While there are low hills in the distance, the closest feature of any size is Kennedy Ranges, a 285 km drive to the west. Mt Augustus is a tiny dot on the map. The nearest large town is Carnarvon, 430 km west via Gascoyne Junction. Meekatharra is 360 km southeast. All roads are gravel but well graded with few corrugations making it accessible to all vehicles when dry.

Geology

Mt Augustus is often described as a monolith (meaning one rock), often as the largest in Australia, vying for that position with Uluru. It has also been referred to as a monocline (a one-sided slope). Geologists refer to it as an 'asymmetrical anticline'. It is folded like an arch with a steeper north-eastern side.

The rocks are sand and gravel, deposited by an ancient river which flowed southeast about 1600 million years ago, over a more ancient faulted and eroded surface of granite and metamorphic rocks. Over time sandstone and conglomerate formed. These were then buried by marine sediments when shallow seas covered the area between 1600-1070 million years ago. So, the area has a very ancient history. But it has not finished. About 900 million years ago the rocks buckled into their present-day structure along the old fault lines. The marine rocks eroded away to form smaller hills in the area and Mt Augustus began to look as we see it. The actual Mt Augustus sandstone is about 1.6 billion years old, 3 times older than the sandstone of Uluru. At the western end, at the Pound, the older igneous and metamorphic rocks are visible. Because there is more than one type of rock present it cannot be called a monolith, or sadly, the world's biggest rock!

Aboriginal History

There is evidence that the Wajarri people lived at Burringurrah and the surrounding plains over a long period. Stone tools have been found, and engravings and paintings are on several overhangs and rock faces. The permanent springs at the base of Mt Augustus, and Goolinee (Cattle Pool) on the Lyons River would have been important during drier times.

The area also has great significance in their Dreamtime.

Burringurrah was undergoing his initiation into manhood. He was so distressed by the rigours of the initiation that he ran away, breaking Aboriginal Law. The tribesmen chased him, finally catching him and spearing him in the upper right leg as punishment. Burringurrah fell to the ground. The spearhead broke from its shaft and protruded from his leg. The boy tried to crawl away but was hit with a fighting stick. He collapsed and died, lying on his stomach with his left leg bent up beside his body.

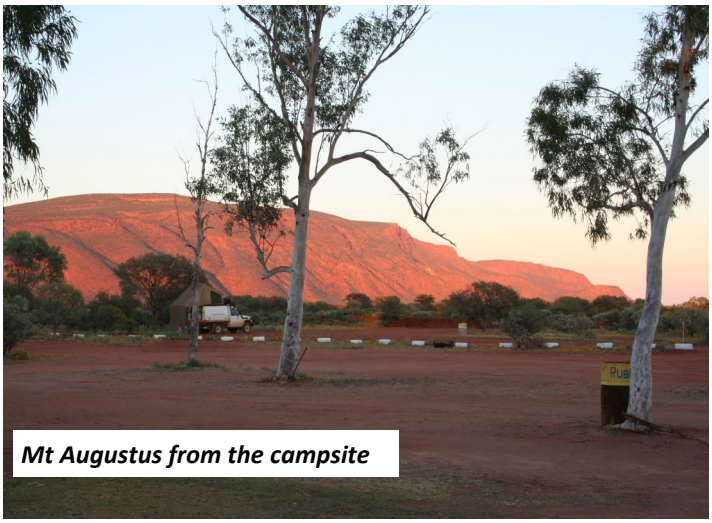
It is easiest to see his final resting position from the south. The fracture lines at the western end indicate the wounds from the fighting stick. The spear stump is on the eastern end and is now called Edney's Lookout.

European History

Francis Thomas Gregory was the first recorded European to visit Mt. Augustus, reaching the summit in June 1858 as part of his 107-day journey through the Gascoyne region. He named the peak Mt Augustus after his brother Sir Augustus Charles Gregory. At the time his brother was unsuccessfully searching for Ludwig Leichardt in western Qld.

The pastoral lease, Mt Augustus Station, was settled in 1887. In 1989 part of this lease and part of the neighbouring Cobra Station lease were released voluntarily to create the National Park. The fence line along the south follows the road, with signs at intervals that wild dogs are being poisoned. One hopes that a few dingoes read it and stay on the other side of the fence. We did not see or hear one even though we were told that they are everywhere!

There is no accommodation or camping in the National Park. The Mt. Augustus Station has set up rooms and a campground close to their homestead. Facilities were good but "Don't park on the grass – even briefly". And watch out for water. They perpetually water the grass to keep it green.



Mt Augustus from the campsite

Walks

We were fortunate to arrive when the park was in full flower – mid September. It had been a good year for rain which certainly helped. We stopped at Emu Hill Lookout on the way from Kennedy Ranges. This gave a good view of the mountain. It was also a good taste of the flowers to come, with many beautiful herbs in flower. ***Ptilotus ?aervoides, Dysphania ?kalparri*** with ***Ptilotus exaltatus*** & ***P. macro-cephalus, Lobelia heterophylla ssp. pilbarensis*** and daisy were seen. The vegetation of the area is Arid Shrubland; Mulga, Wattle scrub, Sennas and Eremophilas are dominant species. The plains were dominated by low herbs and grasses with areas of shrubland. The trees of the creek beds stood out.

On our first day we headed east then followed the south road doing all the walks and visiting the aboriginal sites. On the second day we climbed to the summit. It was advised that you leave early to avoid the heat and back at the campsite a book was kept of climbers .

I hope you have your walking shoes on and have done a few stretches because we are now going to do most of the walks around and on Mt. Augustus!

Heading west along the Loop Rd, we come across piles of dead bushes and tape in the middle of the road, with little piles of gravel between them. The rare Dawson's Burrowing Bee ***(Amegdilla dawsonii)*** is a 'solitary bee' which lives in large communities in claypans (and the middle of the road) in WA. We saw them in the Kennedy Range and here on the Loop Rd. It is one of the largest of our native bees. The female drills a hole 15-30 cm deep into the clay to build her nest, starting with a turret at the top to prevent the clay falling back in. The adults are seen from July to September, the females emerging from their holes to mate, build a shaft with brood cells at the base, and lay their eggs, one to a cell. The smaller male has a furious mating session and then feels he has done enough and hangs out on nearby shrubs before dying earlier than the females. By the time the female has finished building cells, providing nectar for each cell and laying her eggs, she is exhausted and dies. When we were there males were very rare and the females were dying.

Edney's Lookout Trail 6 km return

Our first walk was by far the most floriferous with masses of herbs trying to outdo each other: Sennas, Hibiscus and Mulla-mullas vying for attention with many pea flowers. The walk begins at the Oorambo Trail. Geoff quickly left me behind as I constantly exclaimed over the flowers around each corner! Fortunately I don't have photos of every plant or we wouldn't proceed beyond this walk!

The Oorambo Trail is a picturesque walk along the creek with magnificent River Red Gums, Cyperus, herbs, peas and shrubs, most of which were in flower. ***Eucalyptus camaldulensis ssp. obtuse, ?Calocephalus pilbarensis, ?Brachyscome/Minuria spp., ?Myriocephalus, Tephrosia rosea, Swainsona ?incei, Hibiscus sturtii var. forrestii, Senna ?artemisiodes subsp. oligophylla, Dodonaea ?pachyneura*** and ***Ipomaea costata*** were some of those encountered.
A short walk takes you to an overhang along the escarpment with many aboriginal drawings and engravings.

One hundred metres down the track is Edney Spring, nestled amongst the red escarpment and the gums.

Time to head up into the rangelands. There are still many low herbs, especially where there is a bit of a waterline but there are now more shrubs. The Hibiscus and ***Ptilotus obovatus*** were very common. ***Goodenia prostrata*** *and* ***Brunonia australis*** covered large areas. ***Eremophila humilis*** (endemic), ***Calytrix desolata,*** busy ants, ***Senna cuthbertsonii, Solanum lasiophyllum, Pityrodia augustensis, Trachymene pilbarensis, Santalum spicatum*** and grass.

Our next walk is short, to see the etchings on the Petroglyph Trail. As it is at the base of the range there are again many low plants and shrubs present: Goodenias, daisies and Calandrinia, ***Ptilotus polystachyus***, a beautiful mistletoe ***(Amyema fitzgeraldii),*** in a wattle and ***Seringia velutina.***

We head to the western end of Mt Augustus to see The Pound. This is a natural basin which was used by early drovers to hold cattle on the way to Meekatharra. There is a small walk to the top to view the pound and views to the opposite side. There are a few unusual species seen here that we have not seen elsewhere. ***Indigofera monophylla, Euphorbia ?australis, Ptilotus, Polycarpaea longiflora, Dysphania ?rhadinostachya, Tribulus suberosus, Halgania sp. A Kimberley, Ptilotus schwartzii, Acacia kempeana, Dodonaea petiolaris, Eremophila warnesii*** and ***Acacia tetragonophylla*** were seen.

Our final stop for the day is at Cattle Pool (or Goolinee) on the Lyons River. This is a permanent pool with many birds visiting. A track runs beside the pool for more than 1 km. It is a beautiful spot with picnic areas and seats to sit and contemplate the river. The stately River Red gums dominated the banks, Water plants such as ***Cyperus spp., Isolepis congrua*** and ***Potamogeton tricarinatus*** lined the edges and shallows. Grasses and herbs grew on the banks and surrounding plain along with ***Ptilotus macrocephalus.***

Goolinee

Next morning we are up early, sign the climbers book and head for the summit track. There are 2 alternatives, the Gully Track and the Summit Track, both meeting after about 1.5 km. The Gully Track continues on again for another 1.5 km. The Summit is 12 km return and it is suggested that it will take 5-8 hours.

Geoff takes the Summit Track, I take the first section of the Gully Track. This is more challenging with lots of rock hopping, and aboriginal engravings along walls as well as in a special overhang near the beginning of the gully - Flintstone Rock. Once you have crawled under the rock you find many engravings. It is surprising the water has not worn them off. The rocks along the gully are spectacular. ***Corymbia hamersleyana*** (Pilbara Ghost Gum) and ***Ficus brachypoda*** were noted.

I rejoin the Summit Track which continues upwards but is more obvious, with rock shelves, and small gullies to climb. The vegetation is quite different with many new species. It is predominantly shrubby, becoming much taller in the Melaleuca gullies. Often a species would be massed in an area, then a change would see another species dominate. ***Eremophila latrobei ssp. glabra*** was one of these. The vibrancy of the reds against the bright green was stunning. Other massed species included patches of Seringia and of Halgania.

Some of the species seen along the higher section of the walk include ***Acacia maitlandii, Eremophila ?longiflora, Leptosema chambersii, Goodenia macroplectra, Melaleuca leiocarpa*** and ***Thysanotus manglesianus.***

After about 2 ½ hours we finally reach the cairn at the summit. We have phone coverage so I ring my daughter for her birthday! The table and chairs and the concrete for the cairn were brought up by one man over a few years. He would grab volunteers where he could to assist with carrying everything up the same path we have just walked. Even the water to mix the cement had to be carried up. A visitor's book sits in the tin. The views are spectacular.

From here it is all downhill. Mt Augustus was a wonderful surprise. Amazing walks filled with many species of flowers, fascinating history, both past and present. This is a must do destination for anyone who is prepared to take a long drive and do a few walks to enjoy this special place.

Pityrodia augustensis—endemic

Goodenia prostrata & Brunonia australis

GROWING EREMOPHILA—A new book coming soon.

The most recent publication (2008) on growing Eremophila is now out of print. A new reference book is soon to be published, and contains an additional 83 Eremophila (58 species/subspecies and 25 un-described species).

The objectives of the publication are to:

* Raise awareness of Eremophila for its versatility in a changing garden environment
* Highlight the diversity of the genus
* Provide updated information to, and educate gardeners regarding growing Eremophila
* Encourage the use of Eremophila as garden plants

If you'd like more information about the book, to register your interest, or purchase a copy, please contact Russell Wait at eremophilabook@gmail.com

DRAGON TREE SOAK

Dragon Tree Soak Nature Reserve is located in the Great Sandy Desert in the southern part of the Kimberley region of Western Australia. It is a reserve that contains old dry lake beds, and is far away from any known or named tracks. It covers an area of around 180 square kilometres and is 210 kilometres east of the Great Northern Highway. Dragon Tree Soak is believed to be a relic of the riverine vegetation found along the Mandora Palaeoriver during its partial rejuvenation by the wetter climates of the early to mid Holocene Epoch. It is a swamp with Bullrush ***Typha domingensis*** and Dragon Tree ***Sesbania formosa***. It includes a freshwater spring, a permanent freshwater marsh and peatland. It has an area of 5 ha (main water area: about 0.4 hectares when we visited). It forms an oasis supporting plants and animals that are absent or scarce elsewhere in the desert. It is used by birds from the surrounding hummock grasslands but also has species generally associated with scrub or tree-lined watercourses elsewhere.

Prior to travelling to Mt August, Marilyn and Geoff Bull, along with six other vehicles' occupants, from their 4WD Club, travelled to the Dragon Tree Soak Reserve which lies about half way between Broome and Port Hedland. Features passed were the McLarty Hills, McLarty oil field, several shot lines used in exploration, the Dragon Tree Soak, a nearby salt pan, clay pans and a burnt-out Landrover from years ago.

They followed the Edgar and McLarty Ranges in and the Anna Plains Road out. In 11 days they travelled about 600km, in a loop, mostly through trackless desert over a very large number of sand dunes with swales of Triodia, low or high wattle and larger ***Grevillea wickhamii.*** A GPS was used to follow a map to which they had added waypoints.

There is no way of getting medical attention here if you get sick. They took welding gear for breakages and carried 6 tyres each. Most had 2-3 punctures, one had 5.

They followed the route on their map first and then diverted where necessary around denser vegetation. Old tracks which had been run straight through by dozers on survey lines for oil drilling were followed at times, but it was mainly bush-bashing with each vehicle following in the lead vehicle's wheel tracks to prevent punctures. They travelled in swales in the middle of dunes, sometimes driving a kilometre or so along the side of the dune to find a safe way across, sometimes being snatched over, winding through wattle to get out, then turning at a point on an opposite dune.

They had plotted the Dragon Tree Soak area on their map and, following their GPS, were excited when they went over a sand dune and found it right in front of them. The large clay pan vegetation was mostly wattle and Melaleuca. Large adjoining areas were covered in Triodia but they also spotted Native Walnut and at the McLarty Hills there were large swathes of intense blue ***Cyanostegia cyanocalyx***, pictured below. Other plants noted were ***Grevillea striata*** and ***G. eriostachya***, and ***Persoonia falcata***. Spinifex after flowering is the bane of four-wheel driving. It collects underneath the vehicle against the exhaust and can set fire to cars so you have to be constantly monitoring the build-up.

There was a lot of different countryside along the Anna Plains Track. This trip loop had missed rain and was extremely dry, as opposed to the Mt. Augustus area which had received good rains where the resultant wildflowers were stunning.

Cyanostegia cyanocalyx

Fabulous Peas 2022

FJC Rogers Biennial Seminar

15th - 16th October 2022

Discover the extraordinary world of Australian pea plants

Saturday : York on Lilydale, Mount Evelyn

Speakers with expertise in identifying, growing and propagating peas. Learn about current research into propagation and growing-on techniques. Evening dinner and an entertaining speaker.

Plant sales of common and unusual pea species. Book sales. Displays. Raffle.

Sunday : Coach tours to public and private native gardens which include a wide variety of pea species.

Art exhibition and sale featuring pea plants from 8th – 16th October at Karwarra Australian Botanic Garden, Kalorama. Plant sales.

Expressions of interest: fabulouspeas2022@gmail.com

https://apsvic.org.au/fjc-rogers-seminar- 2022/

Hosted by: Australian Plants Society Maroondah Inc.

In March 2020, APS Victoria organised an Exhibition called

"Australian Plants Revealed: 65,000 years of traditional plant use and 250 years of science".

CoVid-19 caused the exhibition to be closed early and lectures planned for the end of March 2020 to be cancelled.

During lockdown Alex Smart and Michael Cook produced a video of the presentations, which has now been uploaded to YouTube.

The video can be uploaded by clicking this link or copying and pasting to your web browser:

https://www.youtube.com/watch?v=W_z_AlnLEhw

This article may be of interest to you. Copy and paste to your brower.

The 50 beautiful Australian plants at greatest risk of extinction — and how to save them (theconversation.com)

https://theconversation.com/the-50-beautiful-australian-plants-at-greatest-risk-of-extinction-and-how-to-save-them-160362

Gillian Anderson's piece on her 'rain garden'—i.e. relying entirely on rain, in ***Getting to know your Committee*** in our May newsletter reminded me *(Ed.)* of an article in The Age, March 27, 2021 by Megan Backhouse in her regular Spectrum segment, ***Gardening*****.** This was entitled:

"DRY SOIL? DON'T DESPAIR" and subtitled

"Selecting plants that match the climate you live in will save you a lot of time and bother."

Her article is reproduced below.

The most often repeated phrases at a Mediterranean gardening conference held in Castlemaine earlier this month were: poor rocky earth; a severe lack of topsoil; and hot, dry summers. What, you might well ask, is a gardener in these parts to do? Not necessarily what you might expect. Extensive soil improvement and irrigation were not high on the agenda at this event, organised by the Mediterranean Garden Society. Instead, the emphasis was on making the most of the conditions you have and choosing plants that can handle them.

The conference offered lessons for all gardeners wanting a more sustainable approach and highlighted how putting fewer resources into gardens doesn't have to come at the expense of beauty. In fact, reducing the use of water, fertilisers and commercially blended soils can enhance it.

Retired horticultural academic and consultant Dr Peter May gave a lecture that discouraged gardeners from automatically thinking they need to do something to their soil before making a garden. Most soils just need an initial cultivation—that is, digging them up.

He also advocated a more pragmatic approach to plant selection, especially in the face of climate change. "I think you should select for the worst case rather than the best case. Gardeners are notoriously optimistic", he said. As for the tendency to change conditions to accommodate particular plants, his view is that some of our soils are not well drained enough for Mediterranean plants, well get over it. There needs to be a lot more "get over it" in gardening.

That includes selecting plants that will tolerate the dryness that comes each year, rather than the dryness of drought or a particular period of below-average rainfall.

The conventional measure for assessing the typical average dryness of a place—its aridity - was simply to look at rainfall. May said that unless you were comparing places from a small geographic spread, rainfall alone was not a great guide for which plants would do well where. Melbourne and London, for example, have a similar annual average rainfall—about 630mm—but a quite different degree of dryness.

And even though gardeners in southern Australia are experiencing increasingly Mediterranean conditions—which is to say hot, dry summers and most rain falling in autumn, winter and early spring—a range of other climatic factors mean that conditions in, say, Castlemaine and Spain are not identical.
Aridity is affected by all sorts of things, including temperature, when rain falls, the rate of evaporation, the prevalence of frost, and day length. May outlined some of the tools that have been developed in Australia and elsewhere to ascertain the particular dryness of your plot, and says the most useful approaches take into account both average (high and low) temperatures and rainfall. May, who has lived and gardened in Kyneton since the early 1980s, said over that time the town's mean annual rainfall dropped from 750mm to about 640mm, with noticeably dry years becoming more common.

Continued from p10.

In his early years in Kyneton May planted a lot of cool-climate, high-rainfall trees and shrubs, but has since turned to more dry-and-heat-tolerant fare. About five years ago he built a new house and garden and decided that, except for some productive beds (vegetables, fruit trees and vines), he would not irrigate at all.

His ornamental spread, which had input from two designers—Melanie Husada (of Poppy and the Bee) and Lisa Stafford—was one of the standouts of the conference. It has a wild, untamed feel, with perennials self seeding into the surrounding gravel, drying seed heads and billowing grasses. It might be entirely rain-fed but it has plenty of colour and movement.

May described his soil as red-brown basaltic clay loam that is reasonably well drained but is shallow, over weathered basalt, meaning that it can be quite dry in late summer. There was no major soil treatment done before planting carefully chosen plants from the Mediterranean and other parts of the world with a Mediterranean-like climate, and more temperate locales.

And everything in it—the *Phlomis* from Greece, the *Ceanothus* from California, *Kniphofia* from Africa, *Poa* 'Suggan Buggan' from southern Australia and *Calamagrostis* from central Europe, to name just a few—is continually under review.

While May emphasises that his approach reflects his personal concerns about sustainability, he says no one should feel too badly about plants dying in their care: "You will have learnt something" he said.

End

In the March 27 edition of **The Age Spectrum *Gardening,*** author Megan Backhouse wrote about displays for the upcoming Melbourne International Flower and Garden Show (MIFGS) [sadly cancelled because of Covid-19 concerns] Her contributions are reproduced here.

One of the take-away themes was set to be gardening in the face of climate change and record rates of urbanisation. MIFGS has always been part trade show and part conversation-starter, offering up ideas for both how we garden and how we would *like* to garden. On all these fronts, the strictly horticultural is tipping into the ecological.

As landscape designer Phillip Withers puts it, "the widespread land clearing that has occurred across Victoria since European settlement, together with global warming, means that now more than ever, we need to pay attention to what we grow in our gardens. I still think there is a notion that a beautiful garden is one that is built on European values", he says. "A lot of gardens throughout Victoria require a lot of water and don't make sense in terms of where they sit."

Withers perused the limestone cliffs, rocky outcrops and coastal vegetation of Point Addis, near Anglesea, to get ideas for his show garden. He has been planning Moonahs, Heaths, Pimelea, Grass Trees, Banksias, Correas and other such sturdy native fare, alongside locally sourced stones and gravels.

A render of the Phillip Withers display garden for the Melbourne International Flower and Garden Show. ***CREDIT:PHILLIP WITHERS***

Withers is not alone - other designers of this year's show gardens promised displays that work to restore ecological function in urban settings. Joby and Carolyn Blackman of Vivid Design came up with a forest-in-a-backyard display that they say would provide shade, help cool temperatures, absorb pollution, sequester carbon, provide forage for bees *and* screen the neighbours.

Also from Megan Backhouse, May 31, 2019

BACKYARD CONSERVATION THE NEW FRONTIER FOR BIODIVERSITY

Clare McPhee runs her own business looking after "very tidy, very clean, hedged-to-pieces" gardens in Melbourne's bayside area. Paula Rivera is a wildlife carer who tends possums that have burnt their paws on hot roofs, birds trapped by fruit-tree netting and other native animals that have run into mishap.

But in their downtime, McPhee and Rivera join forces to tackle the threat of species extinction, one garden at a time. The two met a year ago when they both volunteered to become garden guides for a Gardens for Wildlife Victoria program being rolled out by the City of Frankston.

They have now formed quite a duo. In the Frankston area, where more than 80 per cent of bushland has been cleared for urban development, they're part of a team of volunteers who pair up and visit residents in their home gardens. They spend about an hour perusing the place and then give suggestions on how it could be made to run wilder.

More layers, more indigenous plants and at least some water sources for animals, is the main thrust of their advice. The finer details differ between gardens and garden owners but the aim is always the same: how to make even diminutive urban gardens the sort of places where native birds, insects and other animals feel at home.

Both McPhee and Rivera were among those who took part in a Gardens for Wildlife Victoria workshop held in Narre Warren last week. It presented a very local way of dealing with global problems and was held, coincidentally, on this year's United Nations-proclaimed International Day for Biological Diversity.

The central message of the workshop was that tinkering in your garden can make a difference. It is especially pertinent in light of the recent United Nations report warning that 1 million plant and animal species are on the verge of extinction because of human activities. This followed hot on the heels of a Victorian State of the Environment report announcing that Victoria's biodiversity was deteriorating in many places with native species under the increasing threat of extinction.

WEEDY ACACIAS

Over the specimen table at a meeting earlier this year, members were discussing the attributes of *Acacia iteaphylla,* or Flinders Ranges Wattle. I mentioned that it could become quite weedy and that some Local Government Areas had declared it an Environmental Weed. I also mentioned that, as members of the Australian Plants Society, we should give some thought as to whether we should be propagating and offering this, and perhaps other 'weedy' species, for sale to the public at our plant stalls. I am unaware of APS Victoria's stance on this. Geoff W. Carr, botanist and ecologist with Ecology Australia, has drawn up an extensive list of Acacias of environmental concern which has been published in the April 2019 issue of the APS Acacia Study Group Newsletter. He comments that environmental weed invasion is a premier conservation issue. He has studied the nature and dimensions of the problem, the impacts of invading Acacias and what we might do to get our own Acacia-loving houses in order. As his list is a very large (too large for reproduction in our newsletter), I am happy to email it to any interested member. Let me know at gdatson@bigpond.net.au

‘BLAIRBUSH’ - MY GARDEN

by Neil Blair

I had a ‘traditional’ suburban home garden with peripheral brick-lined garden beds around a central lawn planted with trees and shrubs commonly found in the nurseries, a mixture of exotics and hybrid “native” species.

Around four years ago this coming spring I was volunteering in a native nursery in Albury growing local natives from cuttings and seeds. This coincided with my hobby of photographing the regional local native flora.

It was then I thought how nice it would be to turn my garden into a bush patch with local natives I was familiar with. Working at the nursery for pots rather than dollars I started at the back fence and have progressively moved forward over the years to now working on the front garden.

Today the back garden is completely cleared of all prior shrubs and trees, there are no lined garden beds nor any lawn and the paths are the original soil. While there has been the inevitable losses there are at present over a hundred species all growing well. Many are budding up for the first time and I am looking forward to my ‘first’ general flowering spring.

The young plant growth has been in many cases spectacular and may well have been helped by the application of “Bush Tucker” purchased through the APS, the only fertilizer I have used.

With the increased flowering as the plants mature I am looking forward to an increase in faunal activity. Two highlights this year were a short stay by Satin bowerbirds eating the fruits of Einadia and Enchylaena saltbushes and a month or more of regular overnight clusterings of native bees on a branch of Callistemon continentale (see pic).

Native bee—*Lipotriches australica*
(Halictidae), Albury

A REMINDER RE THE NEUTROG ORDERING PROCEDURE 2021

For APS Wangaratta members

Here are details of an updated ordering system for Neutrog (including Bushtucker) fertilizers.

- All ordering is directly with Neutrog through their exclusive member-only online store.
- The on-line platform is called 'Shopify'.
- You email your individual order to Neutrog and you pay by EFT direct to Neutrog.
- The Wangaratta Treasurer (Arthur Meyers) has provided Neutrog with your email Address unless you have advised him you do not wish to participate.
- Once your name and email is set up in their system, Neutrog will email you a unique activation code and password, and instructions about how to place your order, payment and delivery date.
- Your unique activation code and password will link you with Neutrog's on-line store which is open 24/7. You will be stepped through the process on-line.
- Orders are consolidated for 4 deliveries per annum. The next delivery is timed for Spring 2021.
- Online orders are now open need to be placed by 9th August for delivery the first week in September.
- There is a one-off discount for a first order over $40. The cost to APS members for Bush Tucker is around $32 per 20 kg bag, which is around 50% of the retail price.
- Orders will be delivered to 475 Shanley Street, Wangaratta and can be collected on the 3rd September. **(Please call 5725 7207 before collecting.)**
- Members will be expected to collect their order on the nominated collection date from the delivery address. If this is not possible, please organise for a friend or family member to pick up your order on the nominated collection date.
- Help is available for placing your order by ringing Neutrog freecall - 1800 656 644.

Arthur Meyers – APS Wangaratta Treasurer and Neutrog Order Co-ordinator

Email *pianoman@netc.net.au* *Mobile 0490 449 304*

HAEMODORUM IS RED ALL OVER

Posted: 07 Jun 2021

"In July 2008 I saw the striking Scarlet Bloodroot in flower on a brief trip to Kakadu looking for similarly coloured freshwater algae. Actually, so-called 'red algae' are usually deep green or brown in freshwater but they are part of a broader group of algae which includes the red seaweeds you find on rocky shores.

But I digress. The flower of this kangaroo paw relative is very much red, or scarlet. I was reminded of it when I saw a specimen flowering in the nursery at Cranbourne Gardens in March. That's it to the left of this post and in the following close-ups.
We have three plants, recently collected from tropical Queensland on a collaborative field trip led by James Cook University in Townsville to create an *ex situ* collection of plants from this region particularly vulnerable to climate change.

This particular species is not uncommon so I expect it was gathered as an amenity and educational addition to our collection, rather than for direct conservation purposes. We will plant it out into our Weird and Wonderful Garden (at Cranbourne Botanic Gardens) in over coming months so it is ready to impress and intrigue visitors next autumn.

The Bloodroots are species of ***Haemodorum*,** one of 14 genera in the Australian and South African family Haemodoraceae. Another genus in the family is ***Anigozanthos***, the kangaroo paw.

The bright red flowers were a surprise to me. While the blooms of the kangaroo paws can be vivid red, the species of *Haemodorum* I knew from around Sydney all had black flowers. All species in this genus do, however, sport an orange or red pigment in the below-ground parts and lower stems - hence the genus name which means 'blood gift' and the common name for all species of Bloodroot.

The species illustrated here is ***Haemodorum coccineum***, with the species name from the Latin for scarlet, clearly a reference to the flower colour. It occurs naturally in savannah areas of tropical Australia, and through into New Guinea, with the root and the flower used as a dye by Indigenous peoples, and the root sometimes for medicinal purposes. Robert Brown, who travelled with Flinders around Australia, named this species in 1810, but it was first collected for science by Joseph Banks and Daniel Solander, from Endeavor River in 1770. The fruit is a juicy capsule, as you can see amongst the flowers in this next picture from Kakadu. when mature they are red or black on the outside, with the juice red or purple. Nearly every part of this plant (leaves excepted), has some red."

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Shows, conferences, plant sales and other items of interest 2021

Important: Please check APS Victoria website for cancellations

26 & 27 June 2021 - APS Ballarat Winter Flower Show. Flower show, plant sales etc. Robert Clark Centre, Ballarat Botanic Gardens, Gilles Street, Ballarat. 10am-4pm.

4 Sept 2021 - APS Wilson Park (Berwick) Plant Sale, Wilson Botanic Gardens, Berwick.

11 & 12 September 2021 - APS Yarra Yarra Australian Plants Expo, Eltham Community & Reception Centre, Eltham. 10am-4pm.

18 & 19 September 2021 – APS Bendigo Plant Show at Kangaroo Flat Primary School, Freeman Drive, Kangaroo Flat. 9.30 am to 4.00 pm both days. $3 entry.

25 & 26 September 2021 - APS Grampians Group host APS Victoria COM Meeting.

2 & 3 October 2021 – Wartook Gardens - Open Days for Wimmera Healthcare Foundation. BBQ lunch, morning and afternoon teas available.

2 & 3 October 2021 - APS Grampians Group Pomonal Native Flower Show, Pomonal Hall.

9 October 2021 - APS Echuca Moama Native Flower Showcase, Echuca Masonic Lodge Hall, 426 High Street, Echuca. A huge flower display, plant sales, floral art, Native Bonsai, basket weaving and other displays and demonstrations. 9am-pm.

16 October 2021 - APS Mitchell Annual Flower Expo and Sale, Memorial Hall, Kilmore.

23 & 24 October 2021 - APS Ballarat Spring Flower Show. Robert Clark Centre, Ballarat Botanic Gardens, Gillies Street, Ballarat. 10am-4pm.

13 & 14 November 2021 - Garden DesignFest, Metro Melbourne & Mornington Peninsula

20 & 21 November 2021 -Garden DesignFest, Regional Victoria: Ballarat, Euroa, Geelong and Macedon Area.

11-16 September 2022, ANPSA Biennial Conference 2022, Kiama, New South Wales. Preliminary details of the Conference, pre- and post-Conference tours and the beautiful town of Kiama can be found on the APS (NSW) website. https://austplants.com.au/ANPSA-Biennial-Conference-2022

15 & 16 October 2022 - 14th FJC Rogers Seminar. Topic: Fabulous Peas (the typical 'pea-flowered' plants from the sub-family Faboideae). York on Lilydale in Mt Evelyn. Expressions of interest and queries to fabulouspeas2022@gmail.comfabulouspeas2022@gmail.com