

Save our Flora

AN ONLINE INDEPENDENT NATIONAL PROJECT
CONSERVATION THROUGH CULTIVATION

Contact: E. saveourflora@gmail.com W. saveourflora.weebly.com

Project launched on 14th November 2013

Maria Hitchcock Administrator
 Bulletin Editor

Membership

Individuals: 218

Groups: 22

International 3

Membership is free.

Please encourage others to join.

Quarterly Bulletins are sent by email
 only. Feel free to pass them on.

New members will receive the latest
 e-Bulletin only. Earlier Bulletins can be
 accessed online. (See box)

This is an informal interactive sharing
 group. We welcome your emails,
 articles and offers of seed and cuttings
 at any time.

Your privacy is respected and assured
 with this group. You may
[unsubscribe](#) at any time.



Leionema westonii

Image: Jeremy Bruhl

**Is your garden a
 native plants
 sanctuary?**

**All you have to do is
 grow one or more
 threatened species.**

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Unsure if you have any rare or endangered plants? Check them out on the EPBC list

<http://www.environment.gov.au/cgi-bin/sprat/public/publicthreatenedlist.pl?wanted=flora>

Save our Flora

Maria writes:

Winter is well and truly here with frosty mornings and glorious sunny days. The only problem this year is the severe drought which is affecting a large swathe of the eastern part of Australia. Here in New England we seem to have missed our summer rainfall. Autumn has been very dry and there's no rain in sight in the long range forecast. Climate scientists predicted such severe weather events years ago. The vast majority of people believe in global warming yet we seem to continually elect representatives who are marching to a different drum. Why can't we get it right?

On one side of the border Victoria wants to cull 1200 destructive brumbies from the alpine parks over three years. On the other side NSW is declaring heritage status for their brumbies which are destroying very sensitive areas with their hoofs. Crazy! In this issue I have included a glowing press release from Environment Minister Josh Frydenberg about what the Federal Govt is doing to protect threatened species. At the same time another 34 species have been added to the EPBC List and Keith Claymore writes about the imminent crash of many WA eco-systems. Why can't we hold our politicians to account?

On a brighter note I have included details about a Threatened Species Art Competition for children and an article about the world's largest cat proof fence. Thank you to Dr Ian Telford for being a regular contributor, this time with an article on *Leionema westonii*.

It's always wonderful to see what is going on around Australia through the Australian Network for Plant Conservation Newsletter. I have added many of the events listed in the ANPC Newsletter onto the Save our Flora Website. Do check it out.

ANPC are doing some wonderful work with the Bring Back the Banksias Project and I have included a report of their recent workshop on the genetic range of *Banksia marginata*. I know from personal observation how variable this species seems to be. It appears that many wild populations have been reduced to remnants which need to be bolstered to maintain genetic diversity.

Keep sending those newsletters. I always seem to find something of interest to share with you all and I am overwhelmed by the amazing conservation work being done by amateurs and enthusiasts everywhere. *Maria Hitchcock*

Save our Flora

PowerPoint Presentation

Ready to go!

30 slides approx 30 mins. talk

If you are interested in obtaining

this presentation

please email me

I can send it in an email (4.3MB)

or as a CD

Send me a C5 stamped addressed envelope

Attach 2 stamps

or on a memory stick

Send me a blank memory stick plus a stamped addressed envelope - 2 stamps

Coming Events

are listed on our website

saveourflora.weebly.com

**Check it out and
bookmark the site.**

**Do you have a contact
at a local school?**

Why not ask them to join

Save our Flora

as a group member

**More and more schools are
establishing**

Endangered Species Gardens

featuring rare plants from

their local environment.

Protecting our threatened species is a national priority

Josh Frydenberg 26 May 2018 SMH Online

Federal Minister for Environment and Energy

Australia has one of the richest and most complex ecosystems in the world. With over 150,000 different species, we are considered one of only 17 megadiverse nations on the planet. Remarkably, 40 per cent of our birds, 80 per cent of our flora and 90 per cent of our reptiles can be found nowhere else in the world.

Our diversity faces many challenges, putting this unique endowment under threat. Climate change, feral predators and population growth in urban areas are all taking their toll. This is why the Turnbull government has rolled out a comprehensive strategy to protect our threatened species, the results from which show it is working.

Today, 99.7 per cent of around 2000 of the threatened species and ecological communities listed under the Environment Protection and Biodiversity Conservation Act have a recovery plan or conservation advice, with our aim of achieving 100 per cent shortly. We have appointed Australia's first-ever threatened species commissioner Gregory Andrews whose successor Dr Sally Box is taking the lead implementing our Threatened Species Strategy with its targeted focus on 20 mammals, 20 birds and 30 plants.

We have mobilised more than \$255 million for over 1200 different projects that seek to improve the habitat and remove threats to threatened species, including projects that form part of our Landcare, 20 Million Trees, Green Army, National Environmental Science and Threatened Species Recovery Fund programs.

Indeed, just last week, Assistant Minister Melissa Price, whose massive Durack electorate is home to some 20 per cent of all threatened species in Australia, announced eight new projects to support the Kangaroo Island dunnart, the blue-top sun-orchid and a 120 hectare predator proof fence to protect the brush-tailed rock wallaby.

In every case, where appropriate, we seek to galvanise the expertise and efforts of Indigenous rangers, native title holders, state governments and not-for-profit organisations. For example, under the Recovery Fund, we are supporting the Dambimangari and Uunguu IPA Ranges to protect the brush-tailed rabbit rat and the golden bandicoot by managing fire and feral cats. As a

government, we have also increased ranger funding by more than 30 per cent and we are expanding the size of the Indigenous Protected Areas (IPAs).

We're also seeking to increasingly leverage the goodwill of the private sector with the launch last year of Australia's first ever Threatened Species Prospectus which has already mobilised more than \$6 million to fund 19 projects, ranging from a \$500,000 commitment to support the platypus and a range of threatened and freshwater fish species to an \$86,000 crowd-sourced initiative to establish a new island safe haven for the Norfolk Island green parrot.

As the most recent progress report illustrates, there have been some further timely and tangible improvements to the prospects of a number of our threatened species. Last year, in Victoria, 100 critically endangered regent honeyeaters were released in the Chiltern-Mount Pilot National Park and 90 eastern barred bandicoots were released in Phillip Island. In NSW, 240 critically endangered southern corroboree frogs were placed into disease-free enclosures in Kosciuszko National Park and the number of threatened magenta lilly-pilly is increasing by over 30 per cent in the coastal rainforest areas.

For the first time in a century, eastern bettongs were bred at Mulligans Flat in the ACT and, in WA, the numbers of black-flanked rock wallabies in Kalbarri National Park were reported to have doubled. In South Australia, where the blue-breasted wren became extinct after a series of bushfires, over \$200,000 has been spent through the federal government's recovery fund to move up to 80 birds from Victoria to South Australia and help re-establish their local population.

Significantly, what the progress report also finds is that we are mitigating the damage caused by the feral cat population with feral cats responsible for killing 1 million birds a day, we have been able to at the national level cull thousands of them, while eradicating their presence on Christmas, Bruny, Kangaroo, French and Dirk Hartog islands.

Protecting our threatened species is a huge task and no one is underestimating the challenge. But, the release of the most recent progress report does give us cause for optimism and with the continued constructive engagement across the different levels of government and the private and not-for-profit sectors, we can ensure future generations get to enjoy and appreciate Australia's unique natural inheritance.

ANPC News

June 2018

[Time is running out to capture Australia's biodiversity, but we have a plan](#) – Australian Academy of Science, 27 April 2018

Naturalist, broadcaster and Fellow of the Australian Academy of Science, Sir David Attenborough, is endorsing calls for greater support for the scientists who study and name Australia's plants and animals and other organisms, declaring that Australia's current capacity is not adequate for the magnitude of the task. Sir David says that at the very time that many species are under greatest threat, funding and other resources allocated to discovering and documenting species are declining. "This has serious consequences for the future of life on Earth," he says in the foreword to the Australian Academy of Science and the Royal Society Te Apārangi's [10-year plan for taxonomy and biosystematics](#), to be launched today at Parliament House, Canberra. [Read more.](#)

[A new garden for Canberra's National Botanic Gardens](#) – Canberra Times, 6 May 2018

Gardening Australia host Costa Georgiadis officially opened the new conservation and research garden in Canberra's botanic gardens in Acton. The new garden features a living collection of threatened plant species, and gives visitors a first-hand look at the conservation work botanic gardens are involved in. "The new garden contributes to the conservation of many threatened plants and by having these species here growing and thriving, acts as an insurance policy for the remaining plants surviving in the wild," said David Taylor from the National Botanic Gardens. [Read more.](#)

[Amendments to the EPBC Act list of threatened species](#) – 11 May 2018

The Assistant Minister for the Environment, the Hon. Melissa Price MP, has approved the inclusion of 34 plant species (including *Caladenia attenuata*, *Pomaderris delicata* and *Banksia catoglypta*), transfer of 4 plant species, and the removal of 1 species (*Ptilotus fasciculatus*) on the list of threatened species under the Environment Protection and Biodiversity Conservation Act 1999, effective 11 May 2018. [Read more.](#)

Available Propagators

The following people have indicated a willingness to work with projects that require good propagation skills. If you would like to be added to this list please let Maria know.

Maria Hitchcock Armidale NSW

Life member NSW - APS

Over 40 years propagating experience.

Cool Natives Online Nursery

<https://coolnativesnursery.com>

Col Jackson

Over 20 years propagating experience

Member of the Latrobe Valley APS Victoria

coljackson57@hotmail.com

Spencer Shaw

We operate two nurseries,

Brush Turkey Enterprises Wholesale

www.brushturkey.com.au and

Forest Heart Eco-Nursery

www.forestheart.com.au

and specialise in SE QLD native plants, particularly rainforest.

spencer.shaw@brushturkey.com.au

0428 130 769

Helen Howard

grevillea.hh@gmail.com

I have grafted Eucalypts, Grevilleas, Eremophilas and Brachychitons. My teacher was Merv Hodge. If any BG has a project I could help out with let me know.

WA shuts its eyes as precious ecosystems head towards 'profound crash'

Keith Claymore SMH 11 April 2018

Western Australia's wildlife and ecosystems are heading for a profound crash, and there's no comprehensive government blueprint in place to steer conservation and prevent major losses.

Like Mr Magoo — who refuses to admit he has an extreme near-sightedness problem and blunders through life dependent on miraculous streaks of luck — the state is apparently oblivious to the big picture, demonstrating a haphazard and piecemeal approach to conservation.

A World Wildlife Fund report published on March 14 considered the potential effects of climate change on biodiversity in 35 global "priority places", including Australia's south-west.

“Even if the global mean temperature rise is constrained to 2C, south-west Australia is projected to become unsuitable for 30-60 per cent of species across all groups [by the 2080s," it said.

“A business-as-usual scenario could be devastating for all species groups.”

Over the last few decades, many scientific reports have chronicled global and national declines in biodiversity - that is, the loss of native species and the degradation of ecosystems - and if the WWF's projection becomes reality, far-reaching economic, social and ecological consequences will result. Human-induced climate change is only one of several major pressures acting on biodiversity. Others include habitat destruction - “death by a thousand cuts” - invasive species, inappropriate fire and dryland salinity.

These threats don't operate in isolation but often reinforce one another, contributing to cumulative impacts that intensify and speed up biodiversity loss. WA is the only Australian state that doesn't have a statewide plan to conserve biodiversity. There is also no natural resource management plan to ensure resources are maintained or recovered, no overarching threatened species strategy, and no master plan to expand the conservation reserve systems and set aside lands and waters in

perpetuity; the foundation strategy for wildlife conservation.

Bodies that could contribute to the state's overall conservation effort, such as the ministerial Wetlands Coordinating Committee, have been obstructed and sidelined in recent years.

Public release of a much-needed replacement for the 1997 wetland conservation policy have been suppressed, and planning tools to actively protect wetlands ahead of development shelved.

Major deficiencies in WA's environmental legislative framework enable unwillingness and avoidance. The Biodiversity Conservation Act 2016 lacks accountability, and does not create the powers for a statewide strategic plan or periodic assessments to determine changes and trends in biodiversity.

In 2004, the WA government published a discussion paper about the problem of continuing decline in biodiversity facing the state and proposing a 100-year strategy for conserving biodiversity. The current Premier, Mark McGowan, commenced its development as environment minister in 2006. Following an extensive two-year public consultation period, an almost-completed strategy fell foul of a change to a Liberal-National government that decapitated momentum in 2008.

This was the last time a WA government tried to put in place a statewide and multifaceted approach to deal with this major problem. This also marked the beginning of a decade-long trend of ignoring information about the overall decline in biodiversity, and obfuscating any comprehensive release of big-picture biodiversity information to the public. State of Environment reporting ceased, and findings from the 2015 audit of WA's biodiversity were concealed.

Political cycles of three or four years rarely, if ever, coincide with ecological cycles that sustain life or the time required to fix natural resource problems that can last decades, if not centuries. Coming to grips with such time scales for most is like setting course for some planetary system light years away. It's difficult to compute yet necessary to come to terms with, and requires detailed planning, commitment and level-headed continuity in management that spans generations.

Save our Flora

WA shuts its eyes (cont)

Take for example secondary dryland salinity, an insidious problem caused by the widespread clearing of deep-rooted native vegetation that results in the rising of salty groundwater to the surface on a massive scale. In 2000, the state Liberal-National coalition proclaimed in a 30-year strategy that "salinity is the greatest environmental threat facing Western Australia".

A 2010 report by the former Department of Environment and Conservation predicted that 750 native species in the South West would become extinct within 50 years because of salinity.

In 2013, the former Department of Agriculture and Food published the Report Card on Sustainable Natural Use in Agriculture that concluded:

"Dryland salinity remains a potential threat to 2.8–4.5 million hectares of productive agricultural land ... the long-term extent of salinity may take decades to centuries to develop, especially in areas where clearing was staggered."

A year later the former Department of Parks and Wildlife (now Department of Biodiversity Conservation and Attractions) cut its salinity management and science programs. Some 20-year old initiatives and an entire dedicated salinity management branch were abolished, and staff made redundant.

While government funding was being pumped into the Kimberley over eight years, programs and capacity in the south-west of the state that had taken decades to build, with nonpartisan support over three consecutive governments, were being abandoned, with irreplaceable expertise lost.

WA has no vision or grand plan for how to deal with the accelerating decline, and looming crash, in its unique wildlife. The lack of high order and comprehensive strategic plans underscores a policy of benign

neglect, an attitude of "we don't care... enough" that falls prey to political cycles.

Blind complacency and politically risk-averse decision making will not help advance beyond "business as usual".

A paradigm shift in government thinking and management culture is critical, or the state is doomed to interminable myopia, just like Mr Magoo.

Keith Claymore is a former senior officer with the West Australian government and has 30 years' experience in biodiversity conservation.

Save our Flora

Threatened Species Children's Art Competition

<http://www.threatenedspeciesartcomp.net.au/how-to-enter.html>

This competition helps children unleash their artistic creativity while learning about the extinction crisis facing our native plants and animals. It aims to encourage the next generation of environmental leaders. In 2016 we started a children's art competition because we wanted primary aged children to be able to express their feelings about our vanishing native species by creating original paintings and drawings, and writing about their work. We were astonished at the results. Over 600 children contributed and produced some of the most profoundly insightful artworks we had seen. We held an exhibition of the best 40 works, reaching thousands of friends, family members, teachers and the general public. 21 schools, 11 after school programs and numerous private programs got involved.

Orange bellied parrot
Anya Radomir

Childrens' inspiring and challenging creations and written explanations delivered the message that we need to cherish and protect our threatened native plants and animals, and reconnect to the environment which sustains and nurtures us. In 2017 the competition grew much larger than even we could have imagined. Over 1600 children entered. 63 schools and 14 other programs got involved. Our exhibition was more publically accessible than in 2016, with part of it held in the Surry Hills Community Centre and part of it held in the Botanic Garden Sydney. We expanded to welcome entries from the ACT. The exhibition went to Canberra after Sydney and was appreciated by a whole new audience.



Chris said: "I was inspired to paint a watercolour picture of the Swift Parrot because of its beautiful colours. I believe I have seen the Swift Parrot in my local area and the fact that it is listed as endangered is really sad. These attractive birds deserve their place on this planet. Their colours give joy to anyone who sees them feeding off a tree (sometimes hanging upside down) or flying past. As I love animals, I am very conscious of protecting natural habitats and doing my part to help spread awareness."

Finn said: "I felt scared and worried for this koala as I drew it, but also the smallest bit of hope for it. I think the koala is feeling frightened and injured still, because from its look, this koala has been through a lot. Most of the time I was happy with the drawing, but I did feel sad for it while drawing the skin. But I'm happy with the drawing, and I will always feel hope when I see it."

Layla said: "Where I live on the Tweed Coast we have a beautiful family of Koalas that our community fights to protect. To see them become extinct would be really sad because they are a big part of Australian history & I want to do whatever I can to help protect them. This is the inspiration behind my artwork."

Samira said: "This artwork I have drawn, represents the peace and beauty of a leather-back turtle, and to know that this species is endangered makes me guilty and devastated. Part of this endangerment is because we throw plastic rubbish into the ocean. ... I am very proud to draw this to make people more aware that we need to take caution of the creatures we share the earth with."

Orchids and Fire

Margaret Bradhurst with permission
Friends of Royal National Park Newsletter May 18

The recent summer bushfires in the Royal National Park are not all bad news to lovers of native terrestrial orchids because the fires occurred when most terrestrial orchids were in a dormant state and underground. However, to those interested in the orchids which grow on trees (epiphytes) and rocks (lithophytes) it is a different story.

These orchids which are found in rainforest and on rocky escarpments, spread themselves over tree trunks and rock surfaces and are very vulnerable to being killed by hot summer fires. In some cases infrequent fires also have a detrimental effect on terrestrial orchids because vegetation which has grown unchecked for many years has become so dense that the understorey plants, including orchids, do not get enough light to enable them to flower. Once this dense vegetation is removed by fire, orchids which have remained dormant underground for many years can reappear and bloom.

***Burnettia cuneata* Lizard Orchid**



Image: [Pinterest](#)

Burnettia cuneata is an interesting terrestrial orchid which will flower only after a hot summer fire. It grows in swampy habitats normally where *Leptospermum* and *Melaleuca* species can be found. It is quite rare in the Royal National Park, being more commonly found in Victoria and Tasmania. Because it needs fire, flowering can be many years apart. Leaves have been replaced by small brown bracts on a stem 5-10 cm tall. The white or pinkish flowers

have darker veins and are difficult to spot because they do not always remain fully open when in flower. Flowering is in September.

Glossodia major

Large Wax-lip Orchid, Parson-in-the-Pulpit



Image: [Travel Australia with AusEmade](#)

Glossodia major is one of the species of terrestrial orchid which flowers well after a hot summer fire. The flowers are often larger and in increased numbers. The stem is up to 30cm tall and the flowers mauve to deep violet and occasionally white. It flowers from August to September.

Pyrorchis nigricans (Image: [Orchids WA](#))

Red Beak Orchid, Undertaker Orchid



Found in coastal heath and forest *Pyrorchis nigricans* is another terrestrial orchid which depends on fire to stimulate it into flowering. It is not often seen in the Royal National Park but is more commonly found in Victoria and Tasmania. Some of the ground-hugging rounded to heart-shaped leaves (often referred to as 'elephants ears') may

appear each year but fire is usually needed to produce any flowers. There are two to eight white nodding flowers with red veins, on a fleshy stem about 8-15 cm tall. It has been given the name Undertaker Orchid because the flowers turn black as they fade. It flowers from August to September.

Save our Flora

Australia completes world's largest cat-proof fence to protect endangered marsupials

Feral cats kill a million native birds every night and have caused extinction of 20 native species

[Naaman Zhou @naamanzhou](#)

The Guardian Australia Thu 24 May 2018

The world's largest cat-proof fence has been completed in central Australia, creating a 94 square kilometre sanctuary for endangered marsupials. The 44km fence – made of 85,000 pickets, 400km of wire and 130km of netting – surrounds the Newhaven wildlife sanctuary, a former cattle station that has been bought by the Australian **Wildlife Conservancy**.

Endangered species such as the bilby, the burrowing bettong and the mala (also known as the rufous hare-wallaby) will have a chance to replenish their populations inside the massive sanctuary, safe from Australia's feral cat epidemic. Feral cats **kill a million native birds every night** across Australia and have caused the extinction of 20 native species since

At a conservative estimate, AWC says cats have been killing 73,000 native mammals, reptiles and birds a year in the current fenced area in the Northern Territory. Atticus Fleming, the conservancy's chief executive, said the mala population was expected to grow from 2,400 to 18,000 over 10 years inside the sanctuary.

Conservationists plan to reintroduce a total of 11 endangered marsupials into the area, after trapping and removing the estimated 50 feral cats already there with the assistance of local Warlpiri trackers. The new species will include bilbies, numbats, golden bandicoots, western quolls and black-footed rock wallabies. Ten of the species had previously been hunted to extinction in the region.

When complete, the 94 square kilometre haven will be the largest cat-free area on mainland Australia, where **feral cats cover 99.8% of the continent**. Fleming said the sanctuary would revoke central Australia's status as "the global epicentre for mammal extinctions", having lost about 30 species since European colonisation.

"There are lots of things being tried. Better baits, better traps and in the long term stuff like gene-drive technology. But at this point in time, there's no silver bullet and no guarantee there will be a silver bullet. So these large feral-free areas are critical.



Construction is underway on the 44km fence. Photograph: Wayne Lawler/Australian Wildlife Conservancy

"When you get rid of the foxes and cats, these native mammals breed like rabbits. This is what Newhaven is all about. Even though you're putting a fence around it, you're doing that to recreate natural conditions. The irony is that it's the area outside the fence is unnatural because it's full of cats and foxes."

Fleming said the next stage in the project was to extend the sanctuary from 94 to 700-1000 square kilometres, making the world record fence even longer.

"The second stage will be a minimum of 70,000 hectares (700 square km). It might end up bigger than that. So a minimum of another 135km of fence line."

***Leionema westonii* (Rutaceae), a rare newly described species endemic to the Macleay Gorges, N.S.W.**

Dr Ian Telford NCW Beadle Herbarium UNE

In 2004, botanists Lachlan Copeland, while a PhD student at the University of New England, and Peter Weston, then Senior Principal Research Scientist at the National Herbarium of N.S.W., while collecting on a remote gorge edge in Oxley Wild Rivers National Park south-east of Armidale, New South Wales, discovered what they immediately realised was a new species of *Leionema*. The species was published in 2018 ([doi.org/10.7751/telopear1983](https://doi.org/10.7751/tehopear1983)) as *Leionema westonii*, the specific epithet honouring its co-discoverer.



Lachlan Copeland with *L. westonii* Image: J. Bruhl

Leionema westonii is a rhizomatous shrub to 70 cm tall with small glossy green leaves and terminal heads of flowers with white petals and pink anthers. It is superficially similar to *Leionema gracile*, another rare species restricted to several volcanic plugs in the Boonah area of south-eastern Queensland.

No fruit have been observed and the species may be sterile. Perhaps the population is clonal (untested), a single plant with stems linked by spreading rhizomes. An IUCN conservation coding

of “Critically Endangered” is warranted. The species has been brought into cultivation with cuttings collected during a BushBlitz expedition in 2015. Some 60 plants have been successfully grown at The Australian National Botanic Gardens, Canberra.



Leionema westonii (close up of flowers) Image: J. Bruhl

Save our Flora

ANPC News

June 2018

Martin Driver, ANPC Project Manager

[Report on Bring Back the Banksias workshop at Harcourt, Victoria 19 March 2018.](#)

More than sixty Victorian Banksia lovers came together at the Harcourt ANA Hall in central Victoria to hear the latest update on genetics research on *Banksia marginata* and to get a better understanding of what this means and what information it gives about the conservation status of this much-loved species. But most importantly of all, what can be done to restore them to the landscape. The hall was packed to capacity to hear Adam Miller from Deakin University outline his earlier genetics research relating to the Banksia of the Victorian Volcanic Plains as well as the most recent related work on the same species in North Central Victoria. The very successful night was co-ordinated by Bonnie Humphreys from Harcourt Valley Landcare and Connecting Country and highlighted the widespread fascination with the species and concern for its apparent decline and interest in restoration.

Adam's presentation reinforced the general concern that while the species is still widely scattered, it is only the fragmented remnants of a much more connected landscape that is left. As with the volcanic plains results, his current research for north central Victoria indicates that all the sites tested showed that remnants are generally isolated and at high risk of inbreeding and further decline.

His research and the genetic principles that underlie it provide some key recommendations for the future of the species. Adam outlined the need for the regional groups involved in Banksia restoration to focus on bolstering populations sizes and connectivity across the landscape to reduce inbreeding threats. Adam also highlighted the value of capturing seed from the widely scattered current populations and bringing them together in multiple seed production areas. This approach will help broaden the genetic basis of seed for combating environmental change, assist in overcoming current seed shortages, and reducing pressure of seed supply from dwindling remnants. This will now be the big

challenge for the groups to develop the plan and look for funding to put it into action.



Banksia marginata Image: M. Hitchcock

This project was supported by the National Landcare Program, Kara Kara Network, North Central CMA, the Wetttenhall Environment Trust, Connecting Country and the efforts of many volunteers. Bonnie's co-ordinating efforts are also part of a much wider program of Bringing Back the Banksia's in north east Victoria, southern NSW, northern NSW and South Australia coordinated by the ANPC and funded by the Wetttenhall Environment Trust to cover the entire genetic range of *Banksia marginata*. The research analysis work is being undertaken co-operatively by both Adam Miller and Maurizio Rossetto from the Royal Botanic Gardens, Sydney Restore and Renew program.

For those wanting a more detailed insight into this research or a copy of the VVP report you may contact Adam Miller at a.miller@deakin.edu.au

Read more about the workshop at

<https://connectingcountry.org.au/saving-the-silver-banksia-presentation/>

Save our Flora

Seed and Cuttings Exchange

Please send all requests directly to the person making the offer or the group email saveourflora@gmail.com

Please follow the correct protocols for requests of seed or cuttings. These are detailed on the next page. Please note that some species are in very short supply and cutting material may be limited.

Maria Hitchcock

16 Hitchcock Lane Armidale NSW 2350

Correa eburnea, *Correa calycina*, *Callistemon pungens*

Zieria adenodonta, *Zieria prostrata*, *Zieria floydii*

I also sell some rare species through my online nursery

<https://coolnativesnursery.com>

Arthur Baker

55 Moran ST Gatton Qld 4343

Gardenia psidiodes, *Grevillea quadricauda*, *Grevillea*

glossadenia, *Eucryphia wilkiei*, *Graptophyllum ilicifolium*

Xanthostemon formosus, *Phaius tancarvilleae*,

Plectranthus nitidus, *Zieria prostrata*, *Grevillea mollis*?

Eremophila nivea, *Dodonaea rupicola*, *Xanthostemon*

arenaris, *X verticulatus*/seeds or cuttings

Kunzea flavescens, *K graniticola*, *Callistemon pearsonii*

Callistemon flavovirens{seeds}, *Melaleuca irbyana*

Lilaeopsis brisbanica {Water plant}, *Hernandia bivalis*

Spathoglottis pauliniae {Tropical ground orchid,

Rhododendron Lachiae

Charles Farrugia (email saveourflora@gmail.com)

Eremophila denticulata ssp trisulcata

Eremophila denticulata ssp denticulata

Eremophila nivea (blue form)

Eremophila nivea (white form) - limited.

Eremophila vernicosa – extremely limited

Russell (email saveourflora@gmail.com)

Boronia clavata

Denise & Graeme Krake

752 Warrigal Range Rd. Brogo NSW 2550

Seed of

Hakea dohertyi, *Hakea ochroptera*

Hakea longiflora, *Grevillea maccutcheonii*

Geoff & Gwynne Clarke

Grevillea humifusa - cuttings

Angophora robur - seed

Dodonaea crucifolia - cuttings or seed

This was named a couple of years ago by Ian Telford who came down from Armidale to look over our block. Many people were calling it *Dodonaea hirsuta*, but it is not very hairy and has no hairs at all on the fruits. It also grows in a nearby flora reserve. If people would like to try this I can

make it available when the material is ready. I have grown it successfully from cuttings, but it does not live long after planting out. It also produces seed and I can collect that after the next flowering (spring fruits). It grows happily around the block, popping up from seed here and there, produces plenty of seed, but it is not long lived even when self sown. Fruits are showy reds.

Bob O'Neill

7 Hillsmeade Drive, Narre Warren South, Vic. 3805

I want to increase our range of *Lechenaultias* and *Correa pulchellas*. Can anyone help us out? Both of these groups of plants are doing well for us at Narre Warren South, Vic. I would be delighted to offer cuttings from our range to interested people. Some plants may be available to people who are able to come to our home address.

Paul Kennedy (Leader ANPSA Hakea SG) (email

saveourflora@gmail.com)

I have seed of *Hakea dohertyi* and a large plant of *Hakea ochroptera* from which cutting material could be taken. I also have a plant of *Callistemon megalongensis* which has not flowered yet, but cutting material would be available in autumn. The seed originally came from the Melaleuca Study Group seed bank many years ago.

Verna Aslin

20-22 Bega St Cobargo NSW 2550

Asterolasia beckersii and *Grevillea iaspicula*

Do you have any EPBC plants growing in your garden with sufficient foliage to share cuttings with our members? Let me know and I'll print it here. It would be easier if we can add your address so that members can contact you directly. Please make sure you follow the protocols on the back page. (Ed)

Save our Flora

Requesting and sending seed by post

Please follow these simple steps.

Make a request

1. Send your request by email first. It will be forwarded to the grower so you can request seed and ask for the address.
2. Send your request enclosing a self-addressed envelope with two 60c stamps attached. Post the envelope.

Send seed

1. When you receive an envelope with a seed request, package up the required seed which includes the name, provenance (if known) and date of collection. Add any tips on germinating the seed and post.

Receiving seed

1. Seed should be stored in paper (small manilla seed packets are best but any cheap envelopes will do) and kept in a cool dark place. Some people use those small paper lolly bags and staple them at the top. Add mothballs if you like. This will prevent insect attack. I save moisture absorbers from medicine bottles and add them to my seed drawer to ensure the seeds do not rot.

Seed life varies according to species. Acacias will last for many years while Flannel Flower needs to be really fresh. Old seed may not germinate and needs to be thrown out. Test some of your seed periodically. It's worth asking seed suppliers for the age of certain species of seed before purchasing.

Requesting and sending cuttings by post

Please follow these simple steps.

Make a request

1. Send your request by email first. It will be forwarded to the grower so you can request cuttings and ask for the address.
2. Purchase an Express Post small satchel for \$10.55. it will hold up to 500 gms.
3. Self address your satchel and place it in an envelope with your cuttings request. Add a label/s with the name of the species and sender. Pencil is best for writing on labels.
4. Post the envelope.

Send cuttings

1. When you receive an envelope with a satchel inside, cut about 6 stems of the requested species. The best time to do this is early morning. Store cuttings in the crisper part of the fridge until they are ready to be posted.
2. Wrap the cuttings in damp newspaper and place them in a cliplok plastic bag. Make sure you label each parcel with the names of the species and sender. Squeeze air out of the bag and fasten top.
3. Put the bag in the satchel and post.

Receiving cuttings

1. As soon as you receive your cuttings put the unopened plastic bag in the crisper part of the fridge until you are ready to prepare them.

Group Members

ANPSA Groups

APS Echuca Moama Vic
 APS Melton Bacchus Marsh Vic
 APS Sutherland NSW
 NPQ Ipswich Qld
 NPQ Sunshine Coast and
 Hinterland Qld

Botanic Gardens and Reserves

Burrendong Arboretum Wellington
 Crommelin Native Arboretum NSW
 Hunter Regional BG NSW
 Lindum Park Flora and Fauna Res
 Tamworth Regional BG NSW
 Swan Reserve Garden Vic

Nurseries

Bilby Blooms Binnaway NSW
 Cool Natives Armidale NSW
 Mole Station Tenterfield NSW
 Forest Heart Eco-Nursery SE Qld

Seed Suppliers

Victorian Native Seeds

Study Groups

Acacia SG
 Correa SG
 Epacris SG
 Garden Design SG
 Grevillea SG
 Hakea SG
 Waratah & Flannel Flower SG

Landscapers

Brush & Bush Tamworth NSW