

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 OAM
 Administrator, Bulletin Editor

Membership

Individuals: 222

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.



Lobelia claviflora
 Image: [Flickr](#)

**Is your garden a
 native plants
 sanctuary?
 All you have to do
 is grow one or
 more threatened
 species.**

In this issue:

Maria writes	2
ANPC News	3
New flower discovered	4
New Rainforest key	5
The Red List	6/7
Eucalyptus Family Tree	8/9
Save our Flora Banner	10
NSW Threatened species report	11
Seed and cuttings exchange	12/13

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



Save our Flora

Maria writes:

This relentless drought continues to create havoc in many parts of NSW. We have all seen the fish kills in the Darling and been drawn into the controversies relating to water buy backs. Somehow that whole system of water management appears to be broken. While I recognise the sovereignty of the four States over their rivers and farmlands, I also recognise that there will always be competing interests and South Australia at the end of the line is the poor relative. Wouldn't it be nice if we could take 'money' out of the whole scheme and plan for the future health of the rivers and tributaries. Would welcome your thoughts on this topic.

As I write this the whole tedious and dishonest election campaign is coming to an end. Why isn't there truth in electoral advertising? It just seems strange that companies can be fined or even closed down for misleading claims about their products yet politics is a free for all. Why are journalists allowed to get away with blatant lies and creative writing when it comes to politics? It's a mystery to me. The Internet has played a big part in this campaign and it's very satisfying to see one candidate after another pull out because of nasty previous Facebook posts. Perhaps the pendulum is turning after all.

We had 2mm of rain for April which is the lowest on record for us. This was on top of the hot dry summer and very dry March. I have a backlog of planting to do and am waiting for a decent fall of rain. Planting in the winter in a frosty area is not ideal but frost protectors help. I use milk cartons with a couple of bamboo stakes. They are very effective and stop the rabbits as well. At least the soil remains reasonably moist for some time if you water the area well beforehand.

Australians are going to have to change their entrenched English attitude of spring planting to autumn planting if we continue to experience hotter summers. That will be a major change to the horticultural industry which relies on spring sales. In the meantime let's hope the drought breaks this winter.

As usual I'm indebted to all the members who send me newsletters or information about what is going on in the plant world. Keep them coming. I've now designed a small banner (see p. 10) which members might wish to purchase and install on the house, gate, shed, etc. It will let people know that your garden is playing a role in preserving our special rare plants. The banners are printed on alupanel, a durable aluminium compound material which will last for a long time.

Maria Hitchcock OAM

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.

Australian Network for Plant Conservation News - April 19

<http://www.anpc.asn.au>

[ACT Draft Woodlands Strategy consultation](#)

If you are interested in the ACT's woodlands, your feedback is sought on a new [Draft ACT Native Woodland Conservation Strategy](#). The ACT Government has developed the draft strategy to guide the protection, restoration and management of the woodlands—and the plants and animals that live in them—for the next 10 years. The strategy identifies how the ACT Government intends to: manage threats, work with the community and other partners, safeguard threatened species, enhance woodlands' resilience, ecosystem function and connectivity, and undertake monitoring and research. Now open for public comment until 24 May 2019. Have your say by writing a submission [here](#).

[The 39 endangered species in Melbourne, Sydney, Adelaide and other](#)

[Australian cities](#) - [The Conversation, 2 April 2019](#)

The phrase "urban jungle" gets thrown around a lot, but we don't usually think of cities as places where rare or threatened species live. Our research, published today in *Frontiers in Ecology and the Environment*, shows some of Australia's most endangered plants and animals live entirely within cities and towns. Australia is home to 39 urban-restricted threatened species, from giant gum trees, to ornate orchids, wonderful wattles, and even a tortoise. Many of these species are critically endangered, right on the brink of extinction. And cities are our last chance to preserve them within their natural range. [Read more](#).

[Have your say: Victoria acts on destructive feral horses in Barmah National Park](#)

[Invasive Species Council, 8 April 2019](#)

The Victorian Government has released a park action plan that tackles destructive feral horses in Barmah National Park, an internationally significant wetland and part of the largest stand of river red gum forests in the world. Barmah Forest supports nearly 300 native species of birds, fishes, reptiles, frogs and other animals and more than 500 native plant species, including endangered or vulnerable species. Changes to the natural flooding patterns, invasive plants and introduced grazing

animals – especially feral horses – are having a severe impact on Barmah Forest and action is necessary to protect the Barmah Forest's fragile ecosystems. [Read more](#).

Submissions are due by 30 May

[Creating a counterpoint to urban sprawl](#) - [The Age, 12 April 2019](#)

You can't take the politics out of a political cartoonist, even one who has retired and spends most days gardening. Peter Nicholson says all his horticultural pursuits – his propagating, his planting and his intense scrutiny of the 43 indigenous species listed under the Ecological Vegetation Class relevant to his cliff-top property in Mornington – have a political edge. Aesthetics play a part but so does "his philosophical and ecological position" on population growth. "It does have an economic perspective," he says. "I believe in a big Australia but if you are going to have a big Australia then you have to safeguard the indigenous vegetation wherever you spread." But it takes a lot of work to make a garden look effortless. Nicholson has been hard at it for a few years now. His first job was weeding, which yielded near-instant results. After removing thick infestations of boneseed, polygala, sow thistle, cat's ear and panic veldt grass, what he found growing on his newly open land was a "near complete representation" of all the species listed in *Ecological Vegetation Class 161 Coastal Headland Scrub*. The only plants he hasn't found are the five orchid species (four greenhoods and one maroonhood) listed for his sort of environmental niche. But from his wattles, sheoaks, moonahs, boobialla, sea box, white correa, grasses, daisies and other remnant offerings he began collecting seeds and cuttings, and he has been propagating ever since. He says he doesn't think about individual plants so much as whole plant communities and that he wants to create the sense of nature recolonising the cliff-top. [Read more](#).

[Weed detector dog unleashed in Hobart](#) - [ABC PM, 24 April 2019](#)

An alpine weed that was brought to Australia by hydro-electric workers and has spread in New South Wales, Victoria and Tasmania is being attacked by specially trained dogs. The dogs are sniffing out the orange Hawkweed, and their handlers will then poison the plant they hope to eradicate. [Listen here](#).

NEW FLOWER DISCOVERED IN A SWAMP WEST OF WEE WAA NSW

northerndailyleader.com.au December 31, 2018.
Madeline Link

A BOTANIST was performing some field work in northern NSW when something caught his eye. Richard Jobson from the Royal Botanic Garden in Sydney discovered a tiny new flower species in a swamp west of Wee Waa. "I saw a flash of purple from a tiny plant with a single flower about one centimetre in diameter - I knew I had found something new to science," Dr Jobson said.

He then had to wait several years until there was enough rain in the area for the elusive flower to re-emerge and provide the evidence to officially confirm it as a brand-new species *Lobelia claviflora*. "The deep purple bands on the flower's throat inspired the name 'claviflora', which comes from the Latin 'clavus', resembling the purple stripe decorating the tunic worn by persons of state in Ancient Rome," he said. "Besides its striking purple colour and tiny stature, another interesting feature is its inflated stems, which is possibly an adaptation that allows it to support itself in water."

Every year scientists discover about 2000 new plant species in different parts of the world. Director of Science and Conservation at the Royal Botanic Garden Sydney Brett Summerell said scientists here have been studying and documenting plant life in NSW and Australia for over 200 years. "Uncovering and understanding our biodiversity is essential to protect the future of threatened species," Dr Summerell said. "This discovery is yet another example of the vital scientific work being done by plant scientists in NSW."

Naming a species is the first step in understanding their relationship to other species, creating a conservation plan or investigating their medicinal qualities. Fieldwork is a critical component and this discovery highlights how we can still uncover remarkable biodiversity in the most unlikely places," Dr Jobson said. "These elusive swamps also harbour the likewise potentially threatened bladderwort *Utricularia fenshamii*; a plant only known to occur in one other site near White Cliffs, NSW."



Dr Jobson's discovery and description of *Lobelia claviflora* has been published in the Royal Botanic Garden Sydney's *Telopea* journal.

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.

Rainforest key

Good news, the RFK7 is now released online we're circulating the new link, can you please distribute through your networks. Thanks again for your help http://www.canbr.gov.au/cpbr/cd-keys/RFK7/key/RFK7/Media/Html/index_rfk.htm

Frank Zich

Collection Manager / Curator, Australian Tropical Herbarium (CNS) & National Research Collections Australia (NRCA), CSIRO National Collections & Marine Infrastructure (NCMI)

E Frank.Zich@csiro.au

T +61 7 4059 5014

Postal: E2 building, JCU Cairns Campus,

P.O. Box 6811 Cairns QLD 4870

Street: E2 building, JCU Cairns Campus, McGregor Road, Smithfield QLD 4878

Web: <http://www.ath.org.au/>

Australian Tropical Rainforest Plants

Online: <http://www.anbg.gov.au/cpbr/cd-keys/rfk/index.html>

CITES Registration code: AU-047

Bush Heritage Australia News

Million dollar Bush Heritage donation for new reserves in Victoria

https://www.bushheritage.org.au/blog/million-dollar-gift-secures-new-reserves-in-victor?utm_source=BBCRM&utm_medium=email&utm_campaign=banter-may19

How to photograph landscapes - tips from the legend Steve Parish

https://www.bushheritage.org.au/blog/how-to-photograph-landscapes-%E2%80%93-tips-from-the-legend?utm_source=BBCRM&utm_medium=email&utm_campaign=banter-may19

Do you have a bush block that might be eligible?

Landholders' participation in biodiverse carbon plantings

More than 60 percent of land is privately owned or managed in Australia. Biodiverse carbon planting programs are being run to increase biodiversity and carbon values on private land. Research led by RMIT University has investigated a range of factors that may influence program participation rates and their relative impacts. The findings can help guide policy-makers to design programs that increase participation rates and appeal to the broadest possible range of landholders. Download the

[FINDINGS FACTSHEET](#)

Want to visit a Bush Heritage Reserve?

https://www.bushheritage.org.au/places-we-protect/visit?utm_source=BBCRM&utm_medium=email&utm_campaign=banter-may19

World Bee Day May 20





Save our Flora

Threatened Species Recovery Hub The Red List

<http://www.nespthreatenedspecies.edu.au/news/red-listing-our-national-icon-the-gum-trees>

People are often quite surprised to hear that relatively common plant species can be threatened and in trouble. But many species were once so widespread and abundant, that although they are still relatively easy to find, their numbers are only a tiny fraction of what they once were. So it is with many eucalypts. Although many of these icons of the bush have hugely declined, very few are listed as threatened and this prevents them getting the protection and conservation attention they need. **Rod Fensham** from the University of Queensland and the Queensland Herbarium is leading a new project to tackle this challenge.

The International Union for the Conservation of Nature (IUCN) was established in 1948 with a charter to protect global biodiversity. One of the first actions of the Union was to compile a list of the species that were prone to extinction and that historic list became the **Red List of Threatened Species**.

In the early days the assigning of a threat status to species was rather haphazard and relied strongly on the subjective opinion of experts with only nebulous criteria. Gradually the criteria were discussed, evaluated and refined until the current Red Listing criteria were established that assigns species to a range of categories reflecting their extinction risk from **Least Concern, Near Threatened, Vulnerable, Endangered, Critically Endangered to Extinct**. The categories incorporate an evaluation of the rarity of species but also the extent to which they have declined and are under future threat of further decline.

While the IUCN Red List has international recognition and has been useful for raising awareness about threatened species the legal powers to protect species under the international charter are scarce. However, various nations have adopted the Red List process and use them to underpin legislation to protect threatened species. These laws do have legal carriage and have been effective in influencing the way that developments proceed. Australia has adopted and adapted the Red List criteria and every state and territory and the federal government have their own lists. Over the years these lists have got out-of-step, and the IUCN Red List of Threatened Species is hopelessly out of date for Australian plant species. There are only two species of Eucalyptus on the register.

Trees on the global agenda

Enter the Global Trees Campaign spearheaded by Botanic Gardens Conservation International and Fauna & Flora International and generously funded by Foundation Franklinia. A major objective of the initiative is to carry out a listing assessment for all the world's tree species, a huge undertaking because the current count indicates there are 60,065 of them.

The Global Trees Campaign has been focusing on developing countries; identifying and listing threatened trees and then working with local communities to recover the species at risk. Until now, Australian trees have received little attention, but that is about to change, starting with our most iconic tree group the gum trees, otherwise known as eucalypts. The Threatened Species Recovery Hub is working with Botanic Gardens Conservation International and the Australian Government's Department of Environment and Energy to undertake Red List assessments for 863 species in the genera *Eucalyptus*, *Corymbia* and *Angophora*.

The Red List (cont.)

The project has two key objectives. First, it will identify and carry out listing assessments for **every threatened eucalypt** to a standard that is satisfactory for the IUCN and for Australian Commonwealth, state and territory laws. Second, it will provide a new standard for Red Listing Australian plants that incorporates spatial data and estimates of population size using techniques developed through the hub's Red Hot Flora project.

To be listed as threatened, a species must satisfy one of a selection of criteria. One of these, called Category A, is based on decline in abundance. While this seems a logical way to determine that a species is at threat, unless you have a time machine, this criterion is hard to apply unless there is adequate historical data. However, there are other ways to consider what we have already lost. For example, the gum trees that line road corridors in agricultural areas are a clear indication of what we have lost from the adjoining crop land and improved pastures.

Assessing the threat status of eucalypts relies heavily on conversations with experts from around the country. Australia's eucalypt gurus are as interesting as the trees themselves and they have been essential to the project.

Take Malcolm French, for example. Malcolm is a real estate agent who made a living selling farms. To know rural property you need to know soil and Malcolm soon realised that eucalypts can be accurate indicators of soil conditions. As Malcolm kept his eye on the trees over many years he built a high level of expertise in the difficult subject of eucalypt taxonomy. His commitment to the subject produced *The Eucalypts of the Western Australian Wheatbelt*, a seminal book, complete with accurate distribution maps, that has become an indispensable text for the project. Malcolm is just one of many people who have devoted themselves to gum trees and generously shared their knowledge for this project.



Eucalyptus brandiana Image: [Philippa Nikulinsky](#)

One of the innovations of this project is using spatial data representing habitat decline to satisfy the criteria under Category A. Using this approach can result in the listing of some species that are still relatively common in the landscape on roadsides and in reserves, but that have suffered substantial decline. Many of these species have not been considered for listing previously. Other species that are naturally rare, but that do not exhibit past decline, nor are threatened by future decline will be delisted. This important project will result in the Red Listing of many eucalypt species, and lead the way for their recognition as threatened under Australian law. This is an important step in their long-term protection and conservation. It will also develop a new method to improve conservation status assessments for other Australian plants through the lens of the majestic and omnipresent gum tree.

For further information - Rod Fensham
rod.fensham@des.qld.gov.au

Save our Flora

A detailed eucalypt family tree helps us see how they came to dominate Australia

Andrew Thornhill

Research botanist, James Cook University
The Conversation April 9, 2019

Eucalypts dominate Australia's landscape like no other plant group in the world.

Europe's pine forests consist of many different types of trees. North America's forests change over the width of the continent, from redwood, to pine and oak, to deserts and grassland. Africa is a mixture of savannah, rainforest and desert. South America has rainforests that contain the most diversity of trees in one place. Antarctica has tree fossils.

But in Australia we have the eucalypts, an informal name for three plant genera: *Angophora*, *Corymbia* and *Eucalyptus*. They are the dominant tree in great diversity just about everywhere, except for a small region of mulga, rainforest and some deserts.

My research, [published today](#), has sequenced the DNA of more than 700 eucalypt species to map how they came to dominate the continent. We found eucalypts have been in Australia for at least 60 million years, but a comparatively recent explosion in diversity 2 million years ago is the secret to their spread across southern Australia.

Hundreds of species

The [oldest known Eucalyptus macrofossil](#), from Patagonia in South America, is 52 million years old. The fossil pollen record also provides evidence of eucalypts in Australia for 45 million years, with the [oldest specimen](#) coming from Bass Strait.

Despite the antiquity of the eucalypts, researchers assumed they did not begin to spread around Australia until the continent began drying up around 20 million years ago, when Australia was covered in rainforests.



Eucalyptus youngiana Image: [Currency Creek Arboretum](#)

But once drier environmental conditions kicked in, the eucalypts seized their chance and took over, especially in southeastern Australia.

There are [over 800 described species](#) of eucalypts. Most of them are native only to Australia, although some have managed to naturally escape further north to New Guinea, Timor and Indonesia. Many eucalypts have been introduced to other parts of the world, including California, where Aussie eucalypts make cameos in Hollywood movies.

Eucalypts can grow as tall trees, as various multi-trunk or single-trunk trees, or in rare cases as shrubs. The combination of main characteristics – such as leaf shape, fruit shape, bud number and bark type – provided botanists with enough evidence to describe 800 species and estimate how they were all related to each other, a field of science known as “taxonomy”. Since the 1990s and early 2000s, taxonomy has been slightly superseded by a new field called “phylogenetics”. This is the study of how organisms are related to each other using DNA, which produces [something akin](#) to a family tree.

Phylogenetics still relies on the species to be named though, so there is something to sample. New scientific fields rely on the old. There have been a number of eucalypt phylogenetic studies over the years, but none have ever sampled all of the eucalypt species in one phylogeny.



Our new paper in *Australian Systematic Botany* aimed to change that. We attempted to genetically sample every described eucalypt species and place them in one phylogeny to determine how they are related to each other. We sampled 711 species (86% of all eucalypts) as well as rainforest species considered most closely related to the eucalypts. We also dated the phylogeny by time-stamping certain parts using the ages of the fossils mentioned above. This allowed us to estimate how old eucalypt groups are and when they separated from each other in the past.

Not so ancient

We found that the eucalypts are an old group that date back at least 60 million years. This aligns with previous studies and the fossil record. However, a lot of the diversification in the *Eucalyptus* genus has happened only in the last 2 million years.

Hundreds of species have appeared very recently in evolutionary history. Studies on other organisms have shown rapid diversification, but none of them compare to the eucalypts. Many species of the eucalypt forests of southeastern Australia are new in evolutionary terms (10 million years or less).

This includes many of the tall eucalypts that grow in the wet forests of southern Australia. They are not, as was previously assumed, ancient remnants from Gondwana, a supercontinent that gradually broke up between 180 million and 45 million years ago and resulted in the continents of Australia, Africa, South America and Antarctica, as well as India, New Zealand, New Guinea and New Caledonia.

The eucalypts that grow natively overseas have only made it out from Australia in the last 2 million years or less. Other groups in the eucalypts such as *Angophora* and *Corymbia* didn't exhibit the same rapid diversification as the *Eucalyptus* species. What we confirmed with the fossil record using our phylogeny is that until very recently, and I mean in terms of the Earth being 4 billion years old, the vegetation of southeastern Australia was vastly

different. At some point in the last 2-10 million years the *Eucalyptus* arrived in new environmental conditions. They thrived, they most likely helped spread fire to wipe out their competition, and they then rapidly changed their physical form to give us the many species that we see today.



Eucalyptus erythrocorys Image: [Australian Native Plants Society](#)

Very few other groups in the world have made this amount of change so quickly, and arguably dramatically. The east coast of Australia would look very different if it wasn't dominated by gum trees.

The next time you're in a eucalypt forest, take a look around and notice all of the different types of bark and gumnuts and leaves on the trees, and know that all of that diversity has happened quite recently, but with a deep and long link to trees that once grew in Gondwana.

They have been highly advantageous, highly adaptable and, with the exception of a small number of species, are uniquely Australian. They are, as the press would put it, "a great Australian success story".

Save our Flora

My garden is a

Sanctuary



for
rare and endangered
Native Australian Plants

Save our Flora
saveourflora@gmail.com

Special Offer!

Are you interested in purchasing one
of the banners pictured above to
display on your property?

A4 size 210mm x 297mm

Alupanel - white with colour

Laminated - holes in corners

\$22.00 plus postage

Send an expression of interest to
maria.hitchcock@gmail.com

Details of how to purchase will be
emailed to you



Save our Flora

NSW's threatened species rise, climate impacts increase, major report finds

Peter Hannam SMH 9 May 2019

The number of threatened plants and animals in NSW continues to climb and impacts on biodiversity and the economy from climate change will keep intensifying, according to the latest State of the Environment Report. Critics say the triennial report, released to parliament on Thursday, probably underplays the extent of the threats because some figures - such as land clearing rates - are only provided to 2014-15, and have accelerated since as native vegetation controls have eased.

The number of threatened species has risen three per cent since the last report in 2016, with 1025 varieties of plants and animals deemed at risk of extinction. Some 112 ecological communities are also at risk.

"The main threats to these species are habitat loss due to the clearing and degradation of native vegetation, and the spread of invasive pests and weeds," Mark Gifford, acting chair and chief executive of the Environment Protection Authority, said. Some 36 per cent of land-based vertebrate species in the state are threatened, while 10 of the 29 native freshwater fish in the NSW section of the Murray-Darling Basin - before the past summer's mass fish kill events - are "threatened with extinction", the report said.

The NSW report comes days after a United Nations report on biodiversity found about one million species are at risk of extinction in coming decades as the toll from humans' impact on the environment, including driving global temperatures higher, continues to mount.

"Climate change continues to pose a significant threat to both the environment and population of NSW," Mr Gifford said. "Its effects are already being felt and are anticipated to become more severe over the coming decades." The report found average temperatures for the 2008-17 decade are 0.99 degrees higher than the 1910-39 period, with 2014 and 2017 reaching up to 1.5 degrees higher.

Rainfall had become more variable, the sea-level rise had accelerated and there had been "some increase in the incidence of extreme weather events", it said.

Matt Kean, the new Energy and Environment minister, said the report showed the environment was "in good condition but we have more work to do". "We're using more cleaner and renewable sources for electricity, and greenhouse gas emissions are down 22 per cent since 1990," he said. "Industry and household waste to landfill is decreasing, littering is down, and garden and food waste recycling is increasing."

Critics, though, noted the land-clearing figures omitted any recent figures even though the department has collected them. Even so, approved vegetation clearing jumped 244 per cent since the previous report, "which is no surprise given the government changed the law to make it easier to bulldoze habitat", Daisy Barham, campaigns director for the Nature Conservation Council, said.

Other dated figures include waste and greenhouse emissions, the latter only to 2016.

The new report found four out of five indicators measuring the impact of climate change "are getting worse in NSW," Penny Sharpe, Labor's acting leader, said.

"Deforestation is driving extinction in NSW yet Premier [Gladys] Berejiklian has given into industry demands to destroy forests and woodlands across the state," she said. "It's no wonder the Berejiklian Government avoided releasing the report before the election, because when it comes to tackling climate change they have no plan to speak of."

Newly independent upper house MP Justin Field said the community expected "all sides of politics work together...it's not too late to turn this around and this is an opportunity with a new government and new minister to do just that".

"We need a reset on environmental policy in NSW," he said. "At the top of this list must be reducing carbon emissions; stopping native forest logging and protecting critical habitat for koalas and other threatened species, and taking on the impact of invasive species.

https://www.smh.com.au/environment/conservation/nsw-s-threatened-species-rise-climate-impacts-increase-major-report-finds-20190509-p51loh.html?promote_channel=edmail&mbnr=Mzg4MTA1Mg&id=email:nnn-130mn655-ret_news1

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, *C. calycina*, *C. baeuerlenii*, *Callistemon pungens*, *Zieria adenodonta*, *Z. prostrata*, *Z. floydii*, *Boronia keysii*

I also sell some endangered 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.

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

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