



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
 Founder, Bulletin Editor
 Armidale NSW 2350

Membership

Membership is free.

Please encourage others to join.
 eBulletins are sent by email only.
 Feel free to share them with
 friends and colleagues..

New members will receive the
 latest e-Bulletin. Earlier Bulletins
 can be accessed on our website.
 (See address above)

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.



Acacia pycnostachya
 Image: M. Hitchcock

In this issue:

Maria writes	2
UN Decade of Eco-System Restoration	3
Australasian Seed Science Conference	4
Australia's National Environment Standards	5
Plant Heroes	6-7
Trees of Indigenous significance	7
ANPC News	8
National Threat Dataset	8
Seed/cuttings exchange	9/10

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>

Maria writes:

As I write this column, regional NSW is in lockdown which has caused a major disruption to most of our lives and local economies. We were locked down because of the uncontrollable spread of the Delta strain which has leaked out of Greater Sydney into the regions and is now impacting our Indigenous communities out west.

Armidale has had no cases for several weeks now and with any luck our LGA along with Tamworth and the Northern Tablelands might come out with restrictions this weekend. I believe that we will be coping with Covid 19 for several years until we get a vaccine that gives longer lasting immunity and most of the world is vaccinated. That could take a decade. The upside of all this is that rampant development has been halted in many parts of our country giving the environment a bit of breathing space.

We have had a cold wet winter here on the Northern Tablelands and are looking forward to some warmer weather. With the regular rainfalls it is going to be a bumper Spring. Now is the time to get all those native plants in the ground so they can make some good growth before the next dry spell. National Wattle Day is coming up in less than a week on 1st September, followed by Threatened Species Day on 7th September.

Use these national days as opportunities to plant some wattles and some threatened flora, preferably local to your area. *Acacia pycnostachya* and *A. pubifolia* are two fabulous threatened wattles from the northern part of my region. They have stunning rod like flowers and are very hardy, being able to adapt to a wide range of climatic environments. Get to know the threatened species of your area and set a goal to plant as many of these as you can. Encourage others to do the same.

We can't just rely on our overworked and financially overstretched Botanic Gardens to do this work. It's up to all of us to do our bit and I know that all of you are involved in your own way. The threats to our endangered flora grow every day. Australians on the whole have a terrible ignorance about their flora. They are more knowledgeable about birds and other animals but the historical preference for exotic plants in gardens has swamped people's interest in our

Let's Celebrate!

27th March
Earth Hour

22nd April
Earth Day

5th June
World Environment Day

8th June
World Oceans Day

1st August
National Tree Day

1st September
National Wattle Day

7th September
Threatened Species Day

8-15th November
Pollinator Week

flora. This is gradually changing but we still have a long way to go.

I was honoured to have the ABC's 'Gardening Australia' crew film in my bush garden in late April for their 'My Garden Path' segment. It will go to air on Friday 1st October. The program has gradually changed emphasis over the last few years featuring more ecology and plants of indigenous significance. I have also noticed more of my own nursery customers selecting plants from my rare and threatened species page which is very heartening. In the meantime stay safe and get out those planting tools!

The UN has declared the Decade of Ecosystem Restoration 2021-2030

<https://www.decadeonrestoration.org/>

The UN Decade on Ecosystem Restoration is a global rallying cry to heal our planet. There has never been a more urgent need to revive damaged ecosystems than now.

Ecosystems support all life on Earth. The healthier our ecosystems are, the healthier the planet - and its people. The UN Decade on Ecosystem Restoration aims to prevent, halt and reverse the degradation of ecosystems on every continent and in every ocean. It can help to end poverty, combat climate change and prevent a mass extinction. It will only succeed if everyone plays a part.

Do you work on ecosystem restoration on the ground? Do you know someone who does? The first stage of our application process to join the Decade Restoration Implementers' Hub is now open — click the link below to see if your initiative is eligible to apply!

[Join the decade hub](#)

We are looking for ground-level ecosystem restoration initiatives (RIs) that want to contribute their work to the #GenerationRestoration movement. To be eligible, you must already be past planning phases. Terrestrial restoration projects must be more than 50 hectares in size. There is no lower limit for aquatic ecosystems.

How many hectares are you restoring, in what kind of ecosystem, and where? Who is the best person to contact about your initiative? Do you have dedicated websites or social media accounts? What is the timeline for your project? We'll need this information, so come prepared!

Finally, submit your information through our application form. You will have a chance to review your entries before submission. Please ensure that your contact details are correct! That way we can contact you with announcements and tips for future steps of the process.

Is your garden
a threatened species

sanctuary?

All you have to do is

grow one or more

endangered species

Many are already

widespread in gardens

around Australia

Look for a nursery

licensed to sell

rare flora

UN Decade of Ocean Science for Sustainable Development (2021 – 2030).

This global push, which begins this year, is designed to bolster marine science and leverage it to sustainably manage the Earth's underwater resources. That dovetails with [Sustainable Development Goal 14](#) to conserve and sustainably use the oceans, seas and marine resources by 2030.

The [UN Ocean Conference](#)¹, set for 2022, is also designed to stimulate science-based innovation and mark a new chapter in global ocean action. In the meantime, initiatives such as UNEP's [Clean Seas](#) and [Glowing Gone](#) campaigns call on all people to join a global movement to restore the world's oceans.

AUSTRALASIAN Seed Science Conference

On behalf of the Organising and Scientific Committees of the Australasian Seed Science Conference 2021, we look forward to welcoming you to the Australasian Seed Science Conference 2021, which is taking place as a

**completely virtual event
from 6 - 10 September 2021.**

We are very much looking forward to delivering the event in an entirely new format for this forum and connect virtually with you all.

Final program confirmed

The final conference program has been confirmed and is available to view here: <https://seedscience2021.com.au/conferenceprogram/>.

All sessions will be recorded and will be available to view on-demand after the conference.

Standard Registration is now open

[Click here](#) for more information on registration rates and to register for the Conference.

Virtual Poster Sessions, Social Events and Networking for Early Career Researchers

Given the ongoing impacts of COVID lockdowns and the limited time we have in the program to cover all of the incredible science you have to share, we're working on a virtual social networking option to run a poster session, social events and networking opportunities for Early Career Researchers. We'll provide updates on these shortly!

Looking for more information?

Please feel free to visit the [Conference website](#) for further information on the Conference and contact the Conference Managers at any time if you have any questions.

Program & general enquiries:
assc2021@arinex.com.au

Registration enquiries:
register.assc2021@arinex.com.au

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)

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.

The government's idea of 'national environment standards' would entrench Australia's global pariah status

[Martine Maron](#), [Brendan Wintle](#), [Craig Moritz](#)
The Conversation June 24, 2021

A growing global push to halt biodiversity decline, most recently agreed at the G7 on Sunday, leaves Australia out in the cold as the federal government walks away from critical reforms needed to protect threatened species.

The centrepiece recommendation in a landmark independent review of Australia's national environment law was to establish effective National Environment Standards. These standards would have drawn clear lines beyond which no further environmental damage is acceptable, and established an independent Environment Assurance Commissioner to ensure compliance.

But the federal government has instead pushed ahead to propose its own, far weaker set of standards and establish a commissioner with very limited powers. The bill that paves the way for these standards is currently before parliament. If passed, the changes would entrench, or even weaken, already inadequate protections for threatened species. They would also create more uncertainty for businesses affected by the laws.

Australia is one of only a handful of megadiverse countries. Most of our species occur nowhere else — 87% of our mammals, 93% of our reptiles, and 94% of our frogs are found only here in Australia. Yet, Australia risks global pariah status on biodiversity. Last week, threatened species experts recommended the koala be listed as endangered, despite a decade of protection under national environmental law. And this week, a UNESCO World Heritage committee recommended the Great Barrier Reef be listed as "in danger".

Indeed, Australia has one of the worst track records in the world for biodiversity loss and species extinctions.

Australia's national environment law — the Environment Protection and Biodiversity Conservation (EPBC) Act — was introduced 20 years ago, and has not slowed extinction rates. In fact, threatened species populations are declining even faster.

This isn't surprising, given the lack of mandated funding for threatened species and ecosystems recovery, poor enforcement of the law, and the lack of outcome-based environmental standards. It has allowed for hit after hit on important habitats to be approved.

The independent review of the EPBC Act, led by former competition watchdog chair Professor Graeme Samuel, set out how Australia can turn this around. Samuel concluded the EPBC Act is no longer fit for purpose, and set out a comprehensive list of recommended reforms, founded upon establishing new, strong national environmental standards. And he included an explicit warning: do not cherry-pick from these recommendations.

So how do the government's proposed standards, released in March, compare to the Samuel review's recommended version?

The Samuel review's standards specified what environmental outcomes must be achieved by decisions made under the EPBC Act, such as whether a particular development can go ahead. For example, the standards would have required that any actions must cause no net reduction in the population of endangered and critically endangered species.

Samuel developed these standards by consulting multiple sectors, and attracted general support. The government's proposed standards bear no resemblance to these.

Instead, the government's proposed standards repeat sections of the existing EPBC Act, adding zero clarity or specificity about the outcomes that should be achieved.

[Read more](#)

Plant heroes: the people behind plant translocations

<https://www.environment.nsw.gov.au/news/plant-heroes>

Plant translocations and the people behind the conservation of threatened species can often go unnoticed or their stories are locked away in academic journals or long reports.

'Plant Heroes' was started by Chantelle Doyle, collaborating with Michael Lawrence-Taylor, to highlight stories of people working to save plant species and is a collection of videos and podcasts about plant translocations. Each story is unique and includes the joys, struggles, failures and unexpected successes that can occur when trying to save a threatened species.

So far, 3 projects have been released with a number in production (including outside NSW). These highlight some of the fantastic work from the Saving our Species (SoS) program and its many partners.

Tumut grevillea (*Grevillea wilkinsonii*)



Tumut grevillea is a smelly (when flowering) but much loved and critically endangered plant that was discovered along a river by a local naturalist. The distribution of this species is highly restricted and is threatened by flooding, weed invasion and farming practices.

For videos of each segment click on the link
<https://www.environment.nsw.gov.au/news/plant-heroes>

Plant Heroes highlights the work that SoS officers, Greening Australia and local landowners have been doing to maintain the wild population. This has included setting up translocations which have been diligently loved and watered by SoS officers. Currently, over 85% of the total population of about 1750 plants is either from translocation plantings or recruited from previous plantings. SoS officers have also collected over 6000 Tumut grevillea seeds that have been used for propagation or will be put into long-term storage.

Nielsen Park she-oak (*Allocasuarina portuensis*)



When Nielsen Park she-oak was discovered in the 1980s, there were only 10 plants left in the wild. Plant Heroes highlights the journey of SoS officers, NSW National Parks and Wildlife Services and volunteers working to save this species.

Propagations were grown at the Australian Botanic Garden Mt Annan from the original 10 individuals in the wild and, through trial and error, the best location was found for planting seedlings. SoS officers and volunteers have not been able to successfully establish a self-sustaining population because it is reliant on fire to reproduce. Unfortunately, its habitat is right in the middle of Sydney, making it difficult to introduce a burn. However, Plant Heroes shows the unexpected success of this program. In the process of maintaining habitat for this species, 17 hectares of bushland has been regenerated, knowledge on how to grow, plant and look after threatened species has increased and the program has had a high level of community involvement.

Wollemi pine (*Wollemia nobilis*)



The wild population of Wollemi pine comprises fewer than 50 adult trees restricted to a tiny rainforest canyon in the Wollemi National Park and is on the brink of extinction.

Plant Heroes video and podcast showcases some of the work the Wollemi Pine Recovery Team is doing in partnership with SoS to establish new, geographically dispersed populations of the pine and reduce the risk of a single catastrophic event eliminating the entire wild population. The stories focus on the pilot translocation site established in 2012 near Mt Tomah.

More recently, the team have extended the learnings from this study to establish additional wild populations deep within Wollemi National Park. During the 2019-20 Black Summer bushfires, the wild and translocated populations were impacted by fire to varying degrees with the translocation sites hit hardest. Early observations of resprouting at the pilot translocation site suggest at least some trees will recover given time and an appropriate fire-free interval. Frequent fire is a major threat to the Wollemi pine, so the Recovery Team is working to exclude fire from the wild and translocation sites for as long as possible to enable their full recovery.

<https://www.smh.com.au/environment/conservation/real-sense-of-achievement-the-next-step-to-preserve-the-wollemi-pine-20210526-p57vef.html>

Plant Heroes website

More information, podcasts and videos can be found at [Plant Heroes](#)

Will your grandchildren have the chance to visit Australia's sacred trees? Only if our sick indifference to Aboriginal heritage is cured

Rob N. Williams *The Conversation* 9 July 2021

Trees have always been a point of conflict between colonisers and Indigenous people. At the very beginning of European-Indigenous interactions, skirmishes broke out because colonisers were ignorant of protocols and the desecration of important Indigenous sites and habitats. In the 19th century, as frontiers pushed west into the Country of Wiradjuri, colonists were indifferent to the sanctity of marked trees.

As a [news article](#) from the Daily Advertiser in 1941 reported:

The only carved tree [...] unfortunately fell victim to the advancing tide of civilisation and was cut up and converted into railway sleepers that now possibly lie somewhere along the line between Yanco and Hay, or Leeton and Griffith.

Most recently, the binary difference between Indigenous and non-Indigenous systems were in the spotlight as Djab Wurrung custodians and activists fought to prevent the desecration of [Djab Wurrung sacred trees](#). Dozens camped to protect a 350-year-old Djab Wurrung Direction Tree, and a [Grandmother Tree](#) estimated to be 800 years old.

This conflict showed it is not necessary for a tree to be modified for it to be considered sacred. It also showed us this failure, centuries old, is one born from a conflict of ideas and beliefs between Indigenous and non-Indigenous people.

This year's [NAIDOC](#) theme "[Heal Country](#)" asks all Australians to take stock of the ongoing threat and desecration of Indigenous heritage — including sacred, cultural trees. This heritage not only holds value for Indigenous Australians, but for all Australians as a cornerstone of our national identity.

[Read more](#)

Australian Network for Plant Conservation

[Banking on Seeds for Bushfire Recovery](#)

The ANPC has been working with the Australian Seed Bank Partnership (ASBP) on its project 'Banking on seeds for bushfire recovery.' The project aims to limit the decline of 25 Australian plant species from areas affected by the 2019-2020 bushfires. This project included extensive activities in seed collection, reintroductions and germination trials. The ANPC prepared various communication materials to share the findings of this project. You can download six fact sheets on species that were part of the project from [the ASBP website](#).

Up-listing of critically endangered ecological community

The Threatened Species Scientific Committee and the Department of Agriculture, Water and the Environment are inviting comments on a proposed up-listing for a nationally threatened ecological community. Listed as critically endangered, the **Eastern suburbs Banksia scrub of the Sydney Region** is a unique type of heathland that is found mainly in the eastern and south-eastern coastal areas of Sydney.

[Visit their website for more information.](#)

National threat dataset

Threatened Species Recovery Hub
Project 7.7 Research Findings Factsheet

Australia's biodiversity is facing ongoing declines since European arrival. The threats causing this decline and their relative impacts on our nation's threatened species have not been assembled in a consistent and up-to-date dataset to inform decision-making.

In this research, we compiled the first complete, validated, and consistent species-specific threat and threat impact dataset for all 1,796 nationally listed threatened plants and animals in Australia on November 2019.

The dataset uses IUCN approaches to estimate the relative impacts of each threat on each species, and defines eight consistent broad-level threats and 48 subcategory threats to help

inform conservation actions needed within Australia.

We found that the threats affecting most species are Habitat loss, fragmentation, and degradation then Invasive species and disease and Adverse fire regimes.

Different groups of species are threatened by different threats, with birds, frogs, mammals and reptiles most severely affected by Invasive species and disease. The ranking of threats also changes when the impact of the broad-level threat is considered, with Invasive species and disease impacting the most species at a high impact.

The research findings fact sheet identified five main threats to the survival of our threatened flora. These are:

- the introduction of invasive species (e.g., woody and herbaceous weeds, camels, cattle, horses, goats, cane toads, cats, foxes)
- widespread clearing of native vegetation for intensive agriculture and urban development
- grazing of the landscape by livestock
- the spread of introduced disease (e.g., Chytrid fungus, Phytophthora, myrtle rust)
- altered fire regimes

This threat impact dataset can inform policymakers, decision-makers and practitioners to determine the optimal responses to the processes impacting Australia's threatened species.

You can download the fact sheet here.

https://www.nespthreatenedspecies.edu.au/media/ugjn5oeg/7-7-threats-affecting-australia-s-imperilled-flora-and-fauna-findings-factsheet_v3.pdf

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 saveourflora@gmail.com

Boronia clavata, *Boronia keysii*, *Correa eburnea*, *Correa calycina*, *Correa baeuerlenii*, *Callistemon pungens*, *Grevillea iaspicula*, *Grevillea juniperina*, *Melaleuca irbyana*, *Phebalium daviesii*, *Phebalium speciosum*, *Prostanthera askania*, *Prostanthera staurophylla*, *Zieria adenodonta*, *Zieria prostrata*, *Zieria floydii*.

I am also licensed to sell some endangered species through my online nursery. All are grown from seed and cuttings taken from established garden plants. <https://coolnativesnursery.com>

Arthur Baker

55 Moran ST Gatton Qld 4343

Gardenia psidiodes
Grevillea quadricauda
Phaius tancarvilleae
Phaius australis
Kunzea flavescens
Kunzea graniticola
Lilaeopsis brisbanica
Choricarpia subargentea
Spathoglottis pauliniae
Spath plicata
Murdannia graminea
Thysanthus tuberosus

Russell (saveourflora@gmail.com)

Boronia clavata

Denise & Graeme Krake (seed only)

752 Warrigal Range Rd. Brogo NSW 2550

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. 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. 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.

Paul Kennedy (Leader ANPSA Hakea SG)

(saveourflora@gmail.com)

Hakea dohertyi, *Hakea ochroptera*, *Callistemon megalongensis*. The seed originally came from the Melaleuca Study Group seed bank many years ago.

Will Chance

Senna acclinis

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)

Don't forget to update your listing at least once a year!

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 \$1.10 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. 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 SEQld

Seed Suppliers

Victorian Native Seeds

Study Groups

Acacia SG
 Correa SG
 Garden Design SG
 Grevillea SG
 Hakea SG

Landscapers

Brush & Bush Tamworth NSW
 Indigenous Landscape Design
www.ilda.com.au