



**AN ONLINE INDEPENDENT NATIONAL PROJECT
CONSERVATION THROUGH CULTIVATION**

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Project launched on 14th November 2013

Maria Hitchcock OAM
 Founder, Bulletin Editor

Membership
 Individuals: 240
 Groups: 22
 International 3
 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.



Darwinia apiculata Image: [Russell Cumming](#)
 Kings Park BG Flickr

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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>

Maria writes:

Thank you to our two regular contributors Ralph Cartwright and Victoria Tanner and all the groups who send newsletters for me to scan and select the odd article. I couldn't do it without you.

July on the Tablelands was a cold and fairly miserable month. I like to do much of my structural gardening in winter but the weather kept me indoors for much of that time. Covid 19 has changed much of the way we look at the world. We watch in alarm at the case numbers rising in Victoria and feel for our members who are caught up in that mess. This is the time to take stock - finish those projects that have been hanging around for a while and embark on new ones that just required the impetus to get started.

Thus it is I have started on a major renovation to my home which involves knocking out an external wall and adding on to the western end of my home. This is a job that has been lurking in the back of my brain for several years now but I just couldn't bring myself to make a start. It's quite a process but I'm now well on the way with plans being drawn up, an engineer ready to go and copy of title deeds acquired. Will keep you posted.

The Bushfire Summit came up with many recommendations, one of which is to levy fossil fuel companies for a disaster management fund. That went down like a lead balloon but something has to be done. In the meantime properties on the Central Coast started sliding into the sea. Climate change is having a real impact on our environment and it requires serious action. The call is growing stronger and stronger for an economic recovery based on 'green' jobs.

With the prospect of millions of unemployed Australians looking for work in 2021, many of them young people, it just seems common sense to look to our future needs and not continue to prop up old technologies. Our National Parks and Reserves have been starved of funds and expert personnel for years. It's time to reverse that trend in order to manage them responsibly to prevent catastrophic fire events. At the same time we will be preserving essential habitat for rare flora and fauna.

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)

**Is your garden a
native plants**

sanctuary?

All you have to do

is grow one or

more threatened

species.

Each devastating fire knocks out more and more species and puts others like the Braidwood Waratah on the endangered list. It has been shown that our current biodiversity and environmental protection laws are ineffective, leading to an irreversible state of decline. What is required are some legally enforceable national environmental standards. Is that at all possible? One effect of covid19 has been the States exercising muscle, closing borders to citizens of other states in order to contain infection. Premiers have been at loggerheads with one another over border issues and people who are caught up in border regions have had their lives seriously impacted. One would think it was pre-Federation 1899 not 2020.

In the meantime I hope you are all safe and well and look forward to your contributions. Spring is just around the corner - we have just had a hatching of 7 tiny little Wood duck chicks.

From the members

Jean and Alan Wright



Hibiscus insularis Image: Jean & Alan Wright

We are members of the Parramatta Hills Group (APS) and read with interest the article on *Hibiscus insularis*. We have had one of these growing in our garden for about 10 years and have always kept it pruned without special watering. Two years ago, we thought it had finally gone – the leaves had black spots and the whole plant was looking very sick. In desperation, we gave it a severe pruning and that obviously had a positive effect. The one thing we have not been able to do is propagate and any suggestions as to how we could do this will be welcomed.

Australian Network for Plant Conservation News July 2020

Invitation to comment: Listing of Plains Mallee Box Woodland of the Murray Darling Depression and Riverina Bioregions

The “Plains Mallee Box Woodland of the Murray Darling Depression and Riverina Bioregions” was originally nominated, under the name Ridged Plains Mallee Woodland, for listing as a threatened ecological community and prioritised for assessment in 2015.

Proposed Conservation Status: Critically Endangered.

The draft Description and Listing Assessment and a Consultation Guide (with indicative distribution map) is now available for comment until 26 August 2020 [here](#).

Climate change threat to tropical plants - UNSW Sydney, 2 July 2020

Half of the world’s tropical plant species may struggle to germinate by 2070 because of global warming, a new UNSW study predicts.

Tropical plants closer to the equator are most at risk from climate change because it is expected to become too hot for many species to germinate in the next 50 years, UNSW researchers have found.

The research, published in the journal *Global Ecology and Biogeography* last month, was the first to look at the big picture impact of climate change on such a large number of plant species worldwide.

[Read more.](#)

After last summer's fires, the bell tolls for Australia's endangered mountain bells

Kingsley Dixon *The Conversation* July 8, 2020

Hidden in the Stirling Range national park in Western Australia – an area so diverse, so ecologically important, I've described it as a “coral reef out of water” – are Australia's spectacular mountain bells.

When Western botanists encountered these predominantly bird-pollinated plants, they found them so intriguing and so unlike anything they knew (Britain has no bird pollination), they named them *Darwinia* after Charles Darwin's grandfather, Erasmus Darwin.

These breathtaking native Australian flowers are now at grave risk from recent fires, with many species listed on the government's provisional list of plants requiring urgent management intervention. The Stirling Ranges were ravaged by this summer's fires, and three-quarters of this WA national park now experience fire cycles twice as frequent as species recovery rates.

If it sounds grim, that's because it is. There's hope yet for the mountain bell, though, thanks largely to the efforts of concerned community members.

Why are mountain bells so special?

With an astonishing range of colours, the Stirling Range mountain bells are the glamour plants in WA's floral bouquet.

Standing up to 60cm tall, these glorious shrubs are a gardener's dream. They have neat foliage and pendulous, bell-like flowers in colours ranging from yellow, to greens, to striking reds and multicoloured variegated blooms.

Darwinia has just 70 species – a modest number compared with some plant genera in Australia.

They occur in southeastern *and* southwestern Australia. *Darwinia* split from their ancestral lineage 16 million years ago with the southwest, including the Stirling Ranges – a cradle of the genus. The chance dispersal of seed to southeastern Australia meant the two nodes of diversity were separated by the Nullarbor and central desert, and evolved in splendid isolation. How these heavy-seeded plants managed such an epic journey across the Australian deserts

remains a mystery. Nectar-hungry Australian birds found the rewards in the rain-protected, bell-like flowers irresistible. In what was a blink of evolutionary time, mountain bells capitalised on birds as a better system for pollination than offered by insects, and new species appeared across the peaks of the Stirlings.



Darwinia oxylepis Endangered Image: G. Worth Flickr

Today, there are ten species of mountain bells. All but one are only found in the Stirling Ranges, often on single peaks or in highly restricted locations. And many feature on the provisional list of plants requiring urgent management.

Virtually each peak could have its very own mountain bell. I recall my first encounter with the mountain bells years ago. I'd spotted the delicate cherry-coloured blooms of Wittwer's bell nestled in a small wooded hollow, midway along the main drive through the Stirlings. I eagerly sought out other mountain bell species and, soon enough, realised I had an untreatable case of “bell fever”.

A biodiversity hotspot at a crossroads

Traditional owners revered the Stirling Ranges as sacred land that had endured countless ice ages and climate ravages. But today, the Stirling Ranges are at a crossroads. The discovery of dieback disease (*Phytophthora cinnamomi*) in 1974, as well as fires both prescribed and natural, have taken a heavy toll on the plants and animals in the park. Last summer's cataclysmic fires scorched half of the Stirling Ranges national park, and the danger the mountain bells now face is emblematic of the broader problem of biodiversity loss.

Mountain bells (cont.)

Many plants and animal species here may never recover. Yes, many Australian plants evolved to cope with bushfire - but not with how frequently these fires are re-occurring.

The Stirling Ranges national park is like no other, with an astonishing 1,500 plant species, eclipsing the flora of the British Isles.

Threats abound

Contemporary fire is now one of the single greatest threats to what remains of this extraordinary ecosystem.

The mountain bells need more than 15 years or more to rebuild their soil seed bank, as these plants are killed by even the mildest of fire.

We knew this was coming. Dire predictions by conservation scientists as early as 2015 warned the Stirling Ranges faced a biodiversity meltdown, and that mountain bells were particularly at risk of extinction.

Though the fires have retreated, the once thriving populations of mountain bells are reduced to blackened stems. It is indescribably sad to see.

For some species, the 2020 bushfires came hot on the heels of an out-of-control prescribed burn in 2018, and few species can survive such short interval fire. Scientists are surveying the damage, to see if parts of the soil seed bank survived to grow the next generation of mountain bells. But it may be too late for some species. Time will tell.

Community action

Is there a future for mountain bells? I like to think so. I have grown them in wildflower gardens from cuttings handed down from wildflower gardeners over decades. Through temperamental and often unpredictable to grow, mountain bells are remarkably easy to propagate.

A key part of saving our mountain bells is, I believe, intimately linked to the community of wildflower enthusiasts. These passionate, committed community members stand ready to help save the last bells.

The way we've done conservation in the past needs a reboot. For the mountain bells and many other threatened species to have a future, we need to embrace a new way of engaging with

community volunteers and particularly our traditional owners.

Everyone I have spoken to is ready to roll up their sleeves and help our plants, and animals struggling to come out of the fires. Such an approach will need trust, training and support - but it may be our only hope.

This article is a preview from Flora, Fauna, Fire, a multimedia project launching on Monday July 13. The project tracks the recovery of Australia's native plants and animals after last summer's bushfire tragedy. Sign up to The Conversation's newsletter for updates.

From the Friends of Ben Bennett Park: *Banksia Bytes* 23 July 2020



Ben Bennett Park Image: Elaine de Wet

We have an informal group in Caloundra called Friends of Ben Bennett (as in the bushland park). It formed in 2010 and they used to weed and clean up rubbish for about 5 years but now it's just on Clean Up Australia Day. We also do wildflower walks for council there in August. A couple of years ago we started meeting again, one reason being to have a voice in council/state govt plans to put a road through the southern corner of the park and RSL memorial garden.

On behalf of the group I've recently started a FB group called Friends of Ben Bennett as a way to share and record flora and fauna of the park. I was wondering if you could mention it in the Native Plants Sunshine Coast newsletter or on the facebook page as there may be members of NPSC who are fond of BB park and might like to share their images and see what others are posting.

<https://www.facebook.com/groups/friendsofbenbennett>

Plants at risk after the fires

Bushfire Recovery Expert Panel
Dept of Agriculture Water and the Environment
<https://www.environment.gov.au/biodiversity/bushfire-recovery/expert-panel>

The Minister for the Environment has asked the Threatened Species Commissioner, Dr Sally Box, to convene an Expert Panel to assist in prioritising recovery actions for native species, ecological communities, natural assets and their cultural values for Indigenous Australians, which have been affected by recent extreme fire events.

The Expert Panel will inform the further delivery of the Australian Government's response to the fire events, including priority emergency actions to support impacted animals, plants, and ecosystems, as well as medium and long term responses required to support the recovery of Australia's environment.

The Expert Panel, on 23 April 2020, released a list of 471 plant species identified as the highest priorities for urgent management intervention to support recovery from the 2019-20 bushfire. The plants span a variety of vegetation types and include rainforest trees and shrubs like Monga Waratah (*Telopea mungaensis*) and plants from subalpine vegetation, such as the Critically Endangered Bredbo Gentiana (*Gentiana bredboensis*).

Some species were considered threatened before the fires, and the fires have now likely increased their risk of extinction. Many other fire-affected plant species were considered secure before the fires but have now been burnt across much of their range and may lack an ability to recover without support.

Some species, like the Forrester's Bottlebrush (*Callistemon forresterae*), Betka Bottlebrush (*Callistemon kenmorrisonii*), and Grey Deua Pomaderris (*Pomaderris gilmourii* var. *cana*) are at imminent risk of extinction because all of their known or modelled range has been burnt and they are exposed to other stressors such as drought, high fire frequency or severity, or disease.



Telopea mungaensis Image: Robert Gourlay

This tree has been a part of the Australian landscape since its evolution, prior to the break-up of Gondwana. It has large, red flowers and can be found in areas with lots of water, such as along streams and in rainforest habitats. It's a close relative of the NSW floral emblem, the waratah (*Telopea speciosissima*). Its vulnerability to fire is high, due to the interacting effects of fire and disease on the species ability to recover.

Pre-fire conservation status: Not listed

What percentage of habitat burned?

Approx. 60%

Priority actions: Exclude forestry impacts, disease management, field inspections to assess resprouting and seedling emergence.

Mount Imlay Boronia

Boronia imlayensis

This is a showy, pink-flowered shrub found only in eucalypt woodland on a ridge top on Mt Imlay, near Eden in NSW. In this highly restricted range, at least 96% was burnt. Pre-fire drought conditions may have seriously compromised the ability of the shrub to resprout after the fires. Without adequate recovery of populations, this species is at risk of extinction.

Pre-fire conservation status: Not listed

What percentage of habitat burned?: 96%

Priority actions: Field inspections to assess resprouting and seedling emergence.

Two new *Acacia* species discovered

Acacia Study Group Newsletter 147, May 2020

- A. *Ispedleyi*, a critically endangered species, has been found at a single location in south-east Queensland, and *A. cineramis*, an endangered species found only in the Wimmera district of Victoria, has been rediscovered after 30 years. Acacias are important hosts of mistletoes, with 199 species recorded as hosting mistletoes. PhD research by Sean Walsh at the University of Melbourne into seed banks in fire-adapted native forests found *Acacia* seed bank densities varied from 50 seeds/m² (usually in young forests or dry sites) to up to several thousand seeds/m² at a 36-year old wet site.

APS NSW Rare/Endangered Species Framework

The following threatened species are being monitored by APS NSW members

Astrotricha sp. Wallagaraugh
Banksia penicillata
Banksia cunninghamii
Platysace clelandii
Melaleuca deanei
Macrozamia elegans
Acacia pubescens
Micromyrtus minutiflora
Acacia gordonii

For more information and a copy of their spreadsheet contact Tony Maxwell
tonymax@optusnet.com.au
 or phone 9651 6682.

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.

Virtual Science Seminars - The Royal Botanic Garden Sydney

Normally held at The Calyx, our science seminars are now virtual. Join us to hear from world-renowned speakers and scientists from the Botanic Gardens and other organizations. The most recent seminar was 'The Rainforest Seed Conservation Project' presented by Dr Karen Sommerville. In this seminar, Karen presented the results from testing over 300 species and discuss the difficulties encountered, the proportion of seeds that were suitable for standard or modified seed banking, and simple indicators that can be used to distinguish bankable from non-bankable seeds. [To see upcoming presentations and watch previous seminars click here.](#)

Australia's environment in unsustainable state of decline, major review finds

Lisa Cox *Guardian* 20 July 20

Australia's environment is in an unsustainable state of decline and laws set up to protect unique species and habitats are ineffective, a major review of the national environmental framework has found.

The interim report from the review of Australia's Environment Protection and Biodiversity Conservation Act (EPBC) recommends sweeping changes, including the establishment of a set of legally enforceable **national environmental standards** that set clear rules for environmental protection while allowing for sustainable development.

"The EPBC Act is ineffective. It does not enable the commonwealth to protect and conserve environmental matters that are important for the nation," the chair of the review, Graeme Samuel, said.

"It is not fit to address current or future environmental challenges."

The report's first lines are stark: "Australia's natural environment and iconic places are in an overall state of decline and are under increasing threat. The current environmental trajectory is unsustainable."

It goes on to reveal that community concern about the state of Australia's environment is high but trust in both national environmental laws and in state and territory governments to deliver environmental protection is low.

The environment minister, Sussan Ley, said the government would immediately commit to developing national environmental standards and will commence conversations that would devolve responsibility for environmental approvals to state governments.

But it will not support Samuel's proposal for an **independent environmental regulator** to monitor and enforce compliance with the law.

"Not surprisingly, the statutory review is finding that 20-year-old legislation is struggling to meet

the changing needs of the environment, agriculture, community planners and business," Ley said.

"This is our chance to ensure the right protection for our environment while also unlocking job-creating projects to strengthen our economy and improve the livelihoods of every-day Australians."

Guardian Australia has spent more than two years examining systemic failings under the act.

This reporting has uncovered widespread problems, including poor monitoring of endangered species, **major delays in the listing of threatened species and ecosystems**, failure to develop, update and implement **recovery plans** for species and habitats threatened with extinction, failure to **list key threats to species**, **failure to protect important habitat**, and threatened species funding being used for projects that **do not benefit threatened species**.

Australian Network for Plant Conservation News July 2020

[Connection With Nature - online survey run by Macquarie University](#)

Macquarie University is inviting people to participate on an online national survey study in which we are investigating how people's connection with nature by engaging with outdoor environments (such as gardens, local parks, natural reserves etc.) is related to the importance they place on such activities and whether this has changed since COVID-19.

[Read more and complete the survey here.](#)

Libby Woodward and Steve Syer

We are selling our lovely property at Denver, near Daylesford, so we can concentrate on the property north of Violet Town.

Denver was our home for most of the last 18 years and we very much want it to go to someone who cares about the environment and will continue to protect and value this beautiful property. There are 12 Threatened Species on the property.

There are three threatened plant species (not planted) found on this property:

1. *Dianella amoena* (Matted Flax-lily) is listed as Endangered under the EPBC Act in Australia and in Victoria.
2. *Dipodium pardalinum* (Spotted Hyacinth-orchid), which is rare in Victoria, has been found on the property, for many years, in the protected area and near the house.
3. *Platylobium rotundum* (Victorian Flat-pea) is classified as vulnerable and endemic in Victoria and is found in the centre of the protected area. The population of this species has greatly improved during the 12 years. Since it was discovered there are now many more individual plants in the population.



Dipodium pardalinum Image: Woodward/Syer

In total 10 threatened species have been planted in the re-vegetation area. For some species there are only a very few individuals such as: Hoary Sunray, Wiry Bossiaea and Australian Anchor Plant. Other species have a number of individuals and were grown from cuttings: Goldfields Grevillea, Small-flower Grevillea, Fryerstown Grevillea and Creeping Grevillea.

Lastly three threatened species have had larger populations planted: Dwarf Silver Wattle (*Acacia nano-dealbata*), Yarra Gum (*Eucalyptus yarraensis*) and Matted Flax-lily (*Dianella amoena*).



Dianella amoena Image: Woodward/Syer

We really hope the property will be bought by someone who will continue to care for it.

If you are interested or know someone who is please contact the agent:

https://www.realestate.com.au/property-house-vic-denver-134060750?fbclid=IwARosmKiGIBn-yicwTlsholMU8-yiohPavbkb0oybrryooGtEQFTRyG-Z_3U

Best Wishes
Libby and Steve

Libby Woodward and Steve Syer

Growers of high-quality native seed

50 Mains Road

Denver VIC 3461

<http://www.victoriannativeseed.com.au/>

A determination of the horticultural potential of the endangered *Persoonia hirsuta*

Nathan Emery

The Royal Botanical Garden Sydney, NSW

Australian Flora Foundation Newsletter

No. 32 July 2020

The aims of this project are to:

- Investigate the propagation potential of *Persoonia hirsuta* subsp. 'Yengo NP' for the development of a horticultural cultivar by identifying the factors affecting seed germination, rooting ability of vegetative cuttings, and its initiation into tissue culture
- compare the growth and vigour of juvenile plants from the different propagation methods.

Vegetative cuttings were collected in May 2019 from the nine known extant plants in Yengo National Park, NSW. A total of 350 cuttings were processed from the collection in the nursery at the Australian Botanic Garden Mount Annan. Four hormone treatments were trialled:

- Water soak (control)
- EsiRoot soak
- EsiRoot soak + Clonex green
- EsiRoot soak + Clonex purple

It takes up to 12 months for cuttings to strike. As of January 2020, 26 cuttings have struck with root development across the four treatments (7.5% total strike rate). Currently, strike rate is variable across treatments, ranging from 1-16%. The survival rate of cuttings treated with Clonex purple is very low (18%), indicating a possible toxic effect of indole butyric acid. Cuttings will continue to be monitored and struck plants will be measured for growth over the next twelve months.

In August 2019, 34 stem tips were collected from plants propagated from cuttings and initiated into tissue culture. Plantlets will continue to be sub-sampled to increase

replicates for ex-flasking out of tissue culture.



Persoonia hirsuta Image: Brian Myers Flickr

Fruit collection was not possible due to the unfortunate timing of fruit drop and the Gaspers Mountain bushfire. This fire burnt through the area where *P. hirsuta* subsp. 'Yengo NP' plants occur. It is possible that this sub-species is extinct in the wild if there is no recruitment and no new unaffected adult plants are found.

Consequently, the proposed methodology to assess the germination of this species will be amended to use a smaller fruit collection (approximately 230 seeds) made in 2018 and stored at the NSW Seedbank.

Two germination pre-treatments (smoke-water and GA₃) will be applied to the seeds and compared with a control treatment.

Emergency actions as drought hits critically endangered plant in Mount Kaputar National Park

NSW Department of Planning, Industry and Environment
7th July 2020

The National Parks and Wildlife Service and the Australian Institute of Botanical Science recently took emergency action after drought severely impacted a critically endangered plant in Mount Kaputar National Park.

National Parks and Wildlife Service (NPWS) Project Officer James Faris said emergency measures were enacted under the NSW Government's Saving our Species program, when it was discovered just three adult plants of *Zieria odorifera ssp. copelandii* remained.

"*Zieria odorifera ssp. copelandii* is a small shrub growing to 20 centimetres high on hard rock faces.

"This is an extremely rare plant species that is only found in the western part of Mount Kaputar National Park. This species was so badly impacted by the drought, I personally carried water up the mountain on the weekends during the worst of the dry and watered each of the plants. Despite our best efforts, drastic measures had to be taken, when their numbers fell to just three adult plants. Surveys were immediately undertaken across the site to locate any additional plants. As part of this work, approximately 300 seedlings were located within the site. This has given us some hope that the population will increase," Mr Faris said.

Scientists based at the Australian Botanic Garden Mount Annan have now harvested a small amount of genetic material for propagation from two of the adult plants plus removing 20 seedlings from the site in the hope of securing its survival. Dr Peter Cuneo is the Manager of Seedbank and Restoration Research at the Australian Institute of Botanical Science and is based at the Australian Botanic Garden Mount Annan.

"25 healthy seedlings are currently growing at the Nursery at the Australian Botanic Garden Mount Annan, which will help provide an insurance policy against the extinction of these native plants in the wild," said Dr Cuneo.

Mr Faris said other measures were also underway to protect the remaining plants on site.



Zieria odorifera subsp. *copelandii*. A. branch with single flowering inflorescence $\times 5$. B. abaxial view of leaf $\times 8$. C. inflorescence with flower $\times 12$. D. adaxial view of petal $\times 30$. All from Copeland 3432 (BRI). Del. B. Connell.

"While not impacted by fires which hit parts of Mount Kaputar National Park recently, the plants are susceptible to trampling by visitors and from browsing by macropods and feral animals. Cages have now been constructed around the plants to protect them from this kind of disturbance," Mr Faris said, "these measures are being undertaken alongside pest management in the park".

"Reducing the number of goats and other feral animals reduces the browsing pressure on all flora species. We will also be undertaking further follow up surveys within likely habitat to try and find any additional populations of the species. The more information we can gather on this species will help us to better understand, manage and monitor the threats it faces. There has been some good rainfall in the area since the beginning of the year and we are continuing to monitor the population. Hopefully they will flower and set seed in spring," Mr Faris said.

The *Saving our Species* program is the NSW Government's commitment to securing the future of the State's threatened plants and animals. To find out more, or to get involved with Saving our Species visit

Help save our threatened species.

Botanist Kingsley Dixon warns WA plants could be lost forever, but there is hope

ABC Great Southern

Toby Hussey and Gianni Di Giovanni

Thursday 9 July

<https://www.abc.net.au/news/2020-07-09/darwinia-endangered-plants/12436254>

Some of Western Australia's most vulnerable but "utterly unique" native flowers are at risk of being wiped out — but they can be saved by citizen botanists in their own backyards.

That's the view of the Curtin University botanist Professor Kingsley Dixon, who said the plants, which were easily propagated, could be saved from extinction if enough green-thumbed Australians chose to plant them in their own gardens. Professor Dixon said populations of native mountain bells in the Stirling Range National Park, about 380km from Perth in the state's Great Southern region, were especially at risk

The Stirling Range is a virtual oasis of native species — home to many plants only found on its slopes.

Endangered among those plants are those from the *Darwinia* genus, a "breathtaking" Australian native flower of yellows, greens, reds – and sometimes a mix.

Named after Charles Darwin's grandfather, there are only 10 known variants of the *Darwinia* group in Western Australia. Nine of those are only found in the Stirling Range.

Professor Dixon said the range was comparable to the Galapagos Islands — famed for its species diversity and known best for its role in Charles Darwin's development of the theory of evolution by natural selection.

"The (flowers) at the Stirling Range are utterly unique," he said. Finding the mountain bells and seeing them in bloom has been one of the great botanical joys of my career."



Darwinia meeboldii Image: Brian Walters ANPSA

Darwinias at risk

EPBC classified

Critically Endangered

Darwinia foetida

Endangered

Darwinia acerosa

Darwinia apiculata

Darwinia carnea

Darwinia chapmaniana

Darwinia collina

Darwinia ferricola

Darwinia oxylepis

Darwinia polychroma

Darwinia whicherensis

Darwinia wittwerorum

Vulnerable

Darwinia biflora

Darwinia masonii

Darwinia meeboldii

Darwinia nubigena

Darwinia squarrosa

[Australian Network for Plant Conservation News July 2020](#)

[Australia's first Indigenous Chair for Biodiversity and Environmental Science](#) - Curtin University, 21 July 2020

The Biodiversity Chair will be the first of its type in Australia and one of only a few globally that directly engage with First Nations Peoples. A key focus of the position will be building a Western-Indigenous science interface, so that landscapes for threatened species can be managed in new ways that are sympathetic to the maintained stewardship provided, over the last 65,000 years, by the Aboriginal people. Curtin Vice-Chancellor Professor Deborah Terry said she is thrilled that a person of Professor van Leeuwen's outstanding scientific and national profile has accepted the prestigious role. [Read more.](#)

[The forgotten German botanist who took 200,000 Australian plants to Europe](#) - The Conversation, 24 July 2020

It is not widely known that many Australian colonial natural history collections are represented in German museums and herbaria, nor that there are initiatives to transform these artefacts of colonial heritage and science back into objects from living cultures with living custodians and their own stories to tell. Dr Johann August Ludwig Preiss (1811–1883) played a significant role in this evolving story as the first professional botanist to collect systematically in the Colony of Western Australia from 1838 to 1842. His collections of flora and fauna were pivotal in opening this globally significant region of biodiversity to the world. [Continue reading.](#)

[Green Jobs Plan unveiled to support recovery](#) - WA Department of Premier and Cabinet, 27 July 2020

As part of the WA Recovery Plan, \$60.3 million will be invested in the Green Jobs Plan over the next three years. The plan will support projects that will protect our environment and create more than 1,000 conservation jobs State-wide. \$15 million has been allocated to set up a

Native Vegetation Rehabilitation Scheme. In combination with the State's \$8 million Offsets Fund for Recovery (OFFR) program, the scheme will target revegetation, habitat restoration and protection of existing vegetation. [Continue reading here.](#)

[Our Knowledge Our Way in caring for Country: Indigenous-led approaches to strengthening and sharing our knowledge for land and sea management](#) - CSIRO, 31 July 2020

The *Our Knowledge Our Way* in caring for Country Best Practice Guidelines, gives a voice to Indigenous land and sea managers who have found good ways to strengthen their knowledge and build partnerships for knowledge sharing in caring for Country. Indigenous Australians rights of ownership and management have been recognised over nearly half of Australia and their knowledge systems connect them to their Country and cultures. As significant landowners, managers and custodians, Indigenous peoples are applying their knowledge in caring for Country, generating many benefits. Indigenous peoples are learning from each about how to build on these successes. Researchers and policy makers tasked with solving Australia's complex environmental challenges are noticing many beneficial outcomes from Indigenous peoples applying their knowledge in management and seeking ways to grow these positive impacts. [Read more.](#)

[Global Botanic Garden Congress - Melbourne VIC, new dates announced 27 September - 1 October 2021](#)

Botanic Gardens Conservation International (BGCI)'s Global Botanic Garden Congress is the only global congress dedicated to botanic gardens and is a key event in the calendar for botanic garden leaders and staff. It is an opportunity for the botanic garden community to come together and share information and experiences. Held every three or four years the Congress includes internationally renowned plenary speakers and sessions covering topics relevant to botanic gardens such as policy, education, governance, conservation and research. [Click here for more information.](#)

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

Acacia pycnostachya

Boronia clavata

Boronia keysii

Correa eburnea

Correa calycina

Correa baeuerlenii

Callistemon pungens

Callitris oblonga

Grevillea iaspicula

Grevillea juniperina

Melaleuca irbyana

Phebalium daviesii

Phebalium speciosum

Prostanthera askania

Prostanthera cryptandroides

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

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

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)

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 clielok 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
 Epacris SG
 Garden Design SG
 Grevillea SG
 Hakea SG

Landscapers

Brush & Bush Tamworth NSW