



AN ONLINE INDEPENDENT NATIONAL PROJECT
Conservation through Cultivation

**Project launched on
 14th November 2013**

Maria Hitchcock Administrator
 Bulletin Editor

Bob Ross Conservation
 Legislation

Membership Individuals: 147
 Groups: 19
 International 3

Membership is free.

Please encourage others to join.

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.



Prostanthera marifolia by Amanda Orme BFA

Botanical drawing in pencil and watercolour 2012 COFA Annual 2012

**You can now access all our
 previous E-Bulletins online**

Go to

**[http://coolnatives.com.au/
 SaveOurFlora.html](http://coolnatives.com.au/SaveOurFlora.html)**

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

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

Save our Flora

Maria writes:

This issue is about the genus *Prostanthera*, one of my favourite groups of plants. I have quite a collection in my garden and find them to be very drought hardy and able to cope with the competition in my large bush gardens. A friend has had a large collection for many years and has many hybrids come up on his bush block. This is a problem with plants taken out of situ and grown in good conditions with lots of other species from the same genus. There is less hybridisation in the wild as colonies of similar species are spread more widely apart. Some species are now confined to single or a few remnant patches and need to be preserved in some way to prevent extinction. Fortunately *Prostanthera* tend to be fairly tough plants and able to withstand the ups and downs of our weather patterns.

Prostanthera are aromatic plants with strong oil content in their leaves. There is potential here for commercial exploitation of distilled oils used in perfumery, pharmaceuticals or the cleaning industry. Papers have been written and trials undertaken but so far nothing important has eventuated, such as the tea-tree oil industry. Some of you may have more information on this topic.

Prostanthera rotundifolia (pictured) is now being marketed as Native Thyme. The dried leaves have a strong flavour and are best used sparingly to flavour meats. The bush food industry is slowly growing in Australia and there may be scope for more *Prostanthera* species to be tested and marketed. Unfortunately this industry has been largely ignored. It seems to have languished at the grass roots level. Farmers are looking for alternative crops to tie them over during times when traditional crops don't bring in the returns needed for a viable income. Our native plants have such potential, particularly those containing essential oils. I would welcome your comments and links to articles, etc. This is a conversation we need to have.

Are you growing any of the threatened *Prostanthera* species listed on this page? Would you be happy to share some cutting material with other members. Please let me know and I will add them to the list on our exchange page.

Critically endangered

Prostanthera albohirta Qld
Prostanthera clotteniana Qld
Prostanthera marifolia NSW

Endangered

Prostanthera askania NSW
Prostanthera euribioides SA
Prostanthera junonis NSW

Vulnerable

Prostanthera calycina SA
Prostanthera cineolifera NSW
Prostanthera cryptandroides ssp *cryptandroides* NSW
Prostanthera densa NSW
Prostanthera discolor NSW
Prostanthera galbraithiae Vic
Prostanthera nudula SA, NT
Prostanthera palustris NSW
Prostanthera schultzei NT
Prostanthera sp. Dunmore Qld
Prostanthera sp. Mt Tinbeerwah Qld
Prostanthera staurophylla NSW, Qld
Prostanthera stricta NSW



Save our Flora

Prostanthera eurybioides

Monarto Mintbush

Endemic to South Australia and listed as endangered this species occurs at Monarto and in the Mt Monster area near Keith. It is described as a low spreading shrub growing up to 1m in height with aromatic ovate leaves, hairy branchlets and mauve tube shaped flowers with brown or orange dots inside the floral tube. This species is spring flowering.

There are two isolated locations with one being in the Mt Monster Conservation Park. The natural habitat is granite outcrops on sandy loam soils in a mallee woodland containing *Melaleuca uncinata* and various Acacia species.

Its survival is threatened by low seedling recruitment, habitat degradation due to weed infestation, grazing pressure and human activity.

A regional Recovery plan is underway. This is an extract from the plan:

‘In five years time the target for this species is to:

- increase the number of individuals from the current 193 to over 250
- increase our knowledge of the ecology of this species, particularly in relation to recruitment so that management actions have been implemented to increase recruitment at all priority 1 populations
- reduce the abundance of priority threats at all priority 1 populations so that they are no longer directly impacting on those sites
- enhance 30% of priority 1 populations through targeted habitat restoration and revegetation

In ten years time the target for this species is to:

- increase the number of individuals from the current 193 to 350
- reduce the abundance of priority threats at all populations so that they are no longer directly impacting on those sites
- enhance 100% of priority 1 populations through targeted habitat restoration and revegetation.’

Enrichment Trials:

‘Within the project area previous estimates suggested 1656 *P. eurybioides* individuals were present within the general Monarto area. Of these the majority, approximately 1413 individuals, have been planted, with approximately 243 occurring naturally. Of those individuals planted out in the Monarto area, State Flora Murray Bridge planted approximately 1000 plants in 2003 at Rocky Gully Reserve (P. Collins, pers. comm.). These plants were all propagated from cuttings from an unknown but small number of remnant shrubs within the reserve (P. Collins, pers. comm.). The current study found only 452 surviving plants of the initial 1000 plants. Other planted individuals within this area were seedlings propagated from locally collected seed, with 130 located within the grounds of Monarto Zoo, 67 were planted by the land holder in the south-western portion of a Heritage Agreement at Monarto (Jusaitis and Smith 1999), and 196 translocated to Section 530, Hundred of Monarto (Jusaitis et al. 1998). A further 10 plants reportedly survive from an initial 30 plants that were planted on private land in 1996 (Jusaitis and Smith 1999) and another 10 plants were planted on a property under a Scientific Heritage Agreement (grazing prohibited), however their origins are unclear. Of the five populations recorded during this field survey, three are conserved in Heritage Agreements, one is conserved in a Forestry SA reserve and one is not conserved. No new populations were recorded during this survey.’

‘The impact of fire on *P. eurybioides* is not thoroughly understood, however plants have been reported to have regenerated after a fire on one property in 1988 and seed germination is known to be stimulated by the use of smoked water (Jusaitis and Smith 1999).’

Refs:

www.naturalresources.sa.gov.au/files/...aa36.../monarto-mintbush3.pdf

http://en.wikipedia.org/wiki/Prostanthera_eurybioides

[South Australian Murray Darling Basin threatened flora Recovery Plan \(6.72mb pdf\)](#), Obst (2005)

Save our Flora

***Prostanthera marifolia* R. Br.**

Seaforth Mintbush

Syn. *Prostanthera* sp. 'Manly Dam'

Thought to be extinct but rediscovered in 2001. It is a small erect shrub growing to 30 cm in height with ovate leaves up to 12mm x 6mm in size and small (12mm long) purple to mauve flowers which occur in the axils throughout the year. It is known from a small population in the Manly-Warringah area (Duffy's Forest Ecological Community) and is closely related to the vulnerable *P. densa* and *P. junonis* (Gosford district).

It grows in woodland dominated by *Eucalyptus sieberi* and *Corymbia gumnifera* in deeply weathered clay soil with ironstone nodules. It was first described by Robert Brown in 1810 and collected from populations around Middle Harbour. A survey of the sites in 2005 counted 90-130 individual plants.

It is unknown if the species is resistant to fires. The greatest threat is habitat loss due to small scale clearing, road widening and maintenance activities due to proximity to housing or amenities such as a golf course. (Wakehurst Golf Club)

Other threats include urban stormwater run-off and seepage, fertiliser and herbicide drift, weed invasion, excessive human traffic and rubbish dumping, inappropriate fire regimes and infection by soil pathogens such as *Phytophthora cinnamomi* may also pose threats.

A detailed botanical description can be found at <http://www.environment.nsw.gov.au/determinations/prostantheramarifoliafd.htm>

The remnant population is confined to the Northern beaches suburb of Seaforth in Sydney, NSW occurring on 3 small sites all within a 2 km radius and fragmented by urbanisation.

The sites are being monitored and have been included in the Threat abatement plan for natural

eco-systems which may be affected by *Phytophthora cinnamomi*.

<http://www.environment.gov.au/resource/threat-abatement-plan-disease-natural-ecosystems-caused-phytophthora-cinnamomi>

Can any more be done? This is a species which is probably not in cultivation anywhere. Perhaps it has highly specific needs. Does anyone have any more information? One can only assume that all the urban habitat threats will eventually lead to the extinction of this species. Could the Wakehurst Golf Club be approached to fund a conservation project?

Refs: <http://openjournals.library.usyd.edu.au/index.php/TEL/article/view/6943>

http://en.wikipedia.org/wiki/Prostanthera_marifolia

<http://plantnet.rbgsyd.nsw.gov.au/cgi-bin/NSWfl.pl?page=nswfl&lvl=sp&name=Prostanthera-marifolia>

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**

Save our Flora

New flower discovered in Blue Mountains smells like rotting fish

Nicky Phillips *Science Editor SMH* 27/1/15



Thismia megalongensis

Not all flowers smell like roses, but a new plant discovered in the Blue Mountains sprouts blooms that smell like rotting fish. Botanist Greg Steenbeeke was one of three scientists to identify the new species in a small patch of rainforest in the Megalong Valley. "I've gone past the point where we found the plant several times a year for two decades and never knew it was there," said Mr Steenbeeke, the NSW Office of Environment and Heritage senior threatened species officer.

Despite its wafty odour, the plant, botanical name *Thismia megalongensis*, is hard to spy – its small orange flowers grow on the forest floor and are smaller than a five cent piece. "While it has a beautiful appearance with tiny orange flowers, this is no rose; the orange flowers give off a fungal odour when fresh and start to smell like 'rotting fish' as they decay," he said.

The flower's pong attracts insects like gnats, which feed on the nectar and then transport pollen to the next flower it visits. The plant's stench was likely caused by it feasting off a fungus, or fungi, which transfer nutrients from dead leaves and organisms in the soil to other plants. Mr Steenbeeke said the plant belonged to a lineage of plants, commonly known as fairy lanterns, that first sprouted around the time of the dinosaurs.

"It is amazing that we can find a plant that has developed symbiotically with fungi over tens of millions of years and gone undetected near a large urban centre like Sydney," Mr Steenbeeke said. The new fairy lantern is so small its seeds can be knocked off their flowers and on to the forest floor by a single rain drop. It also lacks roots and leaves.

It was Mr Steenbeeke's friend and horticulture TAFE teacher, Colin Hunt, who first spied the plant in 2011, initially believing it to be a specimen of a known plant. But closer inspection suggested the flower was unique, and a specimen was sent to the Netherlands for genetic testing by Dr Vincent Merckx at Leiden University. The tests revealed the orange flower's closest relative is a plant found in New Zealand, some 4000 kilometres away.

"The connection suggests it has evolved in isolation for a very long time, and genetic research on the plant's 'molecular clock' – a means of determining the time since separation from a common ancestor – suggests that these species actually separated from each other in the last 400,000 years," Mr Steenbeeke said.

While about 90 per cent of plants native to eastern Australia have been identified and named, a couple of dozen new species are discovered every year, he said.

Ref: http://www.smh.com.au/technology/sci-tech/new-flower-discovered-in-blue-mountains-smells-like-rotting-fish-20150126-12aghk.html?eid=email:nnn-130mn656-ret_news1-memb

Save our Flora

FAVOURITE KIMBERLEY BUSH FOODS AND MEDICINE TARGETED BY BIO-PIRATES

ABC Kimberley February 5, 2015 Vanessa Mills

Local gubinge plant cultivation may be affected by complex patent laws and loopholes in legislation, leaving Australian native plant industries behind as overseas companies snap up the rights. There's big money in cosmetics, medicines and health foods. And many products use chemicals or properties derived from plants, including the remarkable healing properties found in a number of Australian native plants.

Several years a major cosmetic company in the United States put a patent on the compounds found in the gubinge. The small green plum is world renowned for its high rates of vitamin C. A Gubinge plantation programme in Bidyadanga has yielded a good harvest. (Alex Smee) The tart fruit is slowly growing into a new industry for some Aboriginal groups in the Kimberley, and across the Top End where it is called Kakadu plum.

Patent rights can restrict similar products being launched onto the same market, for example an Australian made face cream using gubinge extract may not be allowed on the US market. Dr Daniel Robinson is from the Institute of Environmental Studies at the University of New South Wales. He's been working for several years on the implications of patents over Australian native plants.

"We've identified in fact hundreds. There's a number of endemic plants which indeed must have come from Australia or have been transferred out of Australia." Some of those plants are Davidson's plum, Hop Bush, emu bush and the Kakadu plum. "This is a massive loss of opportunity. It will mean that our biological resources could be exploited overseas without the opportunity for small start up companies and indigenous enterprises to exploit their natural assets in the country," Dr Robinson says. "It's also potentially culturally offensive to certain indigenous groups to be using these things and patenting them without their consent,



Kakadu plum *Terminalia ferdinandiana*

particularly where their knowledge may provide a lead to the research."

Patent and plant piracy

Dr Robinson has a forthcoming article titled Identifying and Preventing Biopiracy in Australia: Patent trends for plants with Aboriginal uses. "Biopiracy is... where people haven't sought consent and haven't agreed to share benefits where they've used both a biological resource and or traditional knowledge from a traditional group. There's been many cases globally and we're just uncovering some now in Australia."

Australian law offers some protection, requiring a benefits agreement and permits to be sought before patents can be issued. "I think the system needs to be tightened up a bit," says Dr Robinson. "Australia has signed an agreement called the Nagoya Protocol, and that is essentially about closing this loophole and making sure sovereign biological resources in Australia, and also biological resources that are under custodianship of indigenous groups and stewardship, require an agreement and permit on control."

Save our Flora

Seed and Cuttings Exchange

Please send all requests directly to the person making the offer.

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. Please note that in order to streamline this activity addresses will be published with the offers so that people can apply to the grower directly. Where there is no address please send your request to saveourflora@gmail.com

Maria Hitchcock

16 Hitchcock Lane Armidale NSW 2350

Correa eburnea

Callistemon pungens

Grevillea wilkinsonii

Zieria adenodonta

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 granitica

Callistemon pearsonii

C flavovirens{seeds}

Melaleuca irbyana

Lilaeopsis brisbanica {Water plant}

Hernandia Bivalis

Spathoglottis Pauliniae {Tropical ground orchid}

Rhododendron Lachiae

Charles Farrugia

Eremophila denticulata ssp trisulcata

Eremophila denticulata ssp denticulata

Eremophila nivea (blue form)

Eremophila nivea (white form) - limited.

Eremophila vernicosa – extremely limited – plant just recovering from a winter battering also I need to do some more grafts.

Russell Dahms

Boronia clavata

Denise & Graeme Krake

752 Warrigal Range Rd. Brogo NSW 2550

Seed of

Hakea dohertyi

Hakea ochoptera

Hakea longiflora

Grevillea maccutcheonii, [this seed is still green]

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. I think it's worth a try.

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)

I am looking for seed or cuttings of *Hakea pedunculata* which grows naturally on Cape York near swamps. We have moved into our new home at 210 Aireys St. Elliminyt Vic. and have now begun the task of reintroducing all the Banksia and Hakea species.

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

Save our Flora

Requesting and sending seed by post

Please follow these simple steps.

Make a request

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

Send seed

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

Receiving seed

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

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

Requesting and sending cuttings by post

Please follow these simple steps.

Make a request

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

Send cuttings

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

Receiving cuttings

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

Group Members

ANPSA Groups

APS Melton Bacchus Marsh Vic
 SGAP Ipswich Qld
 SGAP Sunshine Coast and Hinterland Qld
 APS Echuca Moama Vic

Botanic Gardens and Reserves

Hunter Regional Botanic Gardens
 Tamworth Regional Botanic Gardens
 Lindum Park Flora and Fauna Reserve
 Burrendong Arboretum Wellington

Nurseries

Bilby Blooms Binnaway NSW
 Cool Natives Nursery Armidale NSW
 Mole Station Native Nursery Tenterfield NSW

Seed Suppliers

Victorian Native Seeds

Study Groups

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

Do you belong to a group interested in growing or conserving native flora?

Why not ask them to join us?