



# LAND FOR WILDLIFE

## SOUTH EAST QUEENSLAND

AUGUST 2021 VOL. 15 NO. 3

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Land for Wildlife South East Queensland Team, December 2020

# GLOSSY BLACK -COCKATOO BIRDING DAY, 11-12 SEPT 2021



Glossy Blacks are one of Australia's smallest and rarest cockatoos. Once a year, volunteers come together to participate in the Glossy Black Conservancy's bird count. This year, the Birding Day takes place 11-12 September across SEQ and NE NSW. Registrations are open now at <http://bit.ly/GBCvolunteer>

Knowing where Glossy Black-Cockatoos are means we can do a better job of habitat protection. While we're seeking volunteers to join us for our annual Birding Day, Glossy Black-Cockatoo sightings can be recorded anytime at [glossyblack.org.au](http://glossyblack.org.au).

In the lead up to the Birding Day, the Glossy Black Conservancy is also offering ID workshops in person across SEQ and online. Visit [glossyblack.org.au](http://glossyblack.org.au) and click News & Events for more info.



\*These above statistics reflect LFWSEQ membership across all 13 Local Governments.

Land for Wildlife is a voluntary conservation program that encourages and assists landholders to provide habitat for wildlife on their properties.

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**Front Cover:** A large, remnant Scrub Turpentine (*Rhodamnia rubescens*) tree on a Land for Wildlife property at Cedarton. Photo by De-Anne Attard.

**Front Cover Inset Photos:** Leeton Lee from Firesticks Alliance demonstrates a cultural burn; and Queensland Museum specimens of the Southern Pink Underwing moth, photo by Kate Umbers.

[www.lfwseq.com.au](http://www.lfwseq.com.au)

[facebook.com/lfwseq](https://facebook.com/lfwseq)

# Welcome TO THE AUGUST 2021 ISSUE

## EDITORIAL

I often say that nature is endless. Therefore, if one has a connection to the natural world, then one can never be too arrogant, alone or bored. This edition covers some of my favourite topics from the natural world – invertebrate conservation, ecological restoration, return of Indigenous fire management and seeing the spark ignited in people when the door to nature is opened.

The big news is that in March this year, the LfWSEQ program reached a milestone with the registration of our 5000<sup>th</sup> LfW property. It has taken 22 years to get here and would not have been possible without the support and ongoing interest in the natural world by landholders across SEQ. For the past decade, the annual average registration rate into LfWSEQ was 232 new properties. Last year recorded our largest ever intake with 374 new properties. This fast tracked our reaching the 5000<sup>th</sup> mark and occurred when Timotheos Firestone and his 70ha property at Laceys Creek joined LfW. You can read more about the 5000<sup>th</sup> celebration and Timotheos' conservation journey overleaf.

The other exciting undertaking is the re-introduction of Indigenous fire

management to LfW properties in the Lockyer. It took a devastating fire season in 2019 to trigger the recognition that Traditional Owners have long-known how to use fire to manage this country and to minimise the risk of catastrophic wildfires. The re-introduction of cultural burning not only signifies better management of the natural world, but also takes a genuine step along the path of reconciliation to enable and respect Traditional Owners being back on their country.

There is a call out on pg. 11 to landholders who have subtropical rainforest on their properties. In particular, we are looking for properties that have wild Carronia (*Carronia multiseptata*) vines. There is an innovative project that is propagating Carronia to boost the population of this vine as it is the sole food source for the beautiful but rare Southern Pink Underwing Moth. I hope LfW members can help ensure this project's success.

I would like to congratulate all LfW members who have taken the next step in their conservation journey and have added a conservation covenant or Nature Refuge to their property to protect the conservation values in perpetuity. Pages

8-9 tell the story of Ian and Di and how they decided to enter into a Voluntary Conservation Agreement (VCA) and the flow-on benefits. It is fabulous to see Ipswich City Council's Voluntary Conservation Covenants program, which kickstarted just this financial year, has already received applications.

Finally, I would like to thank Marc Russell and Michael Mills who worked with the LfW program for Sunshine Coast and Moreton Bay Regional Councils respectively. Marc is pursuing his own native plant nursery enterprise and Michael has accepted a position with the bushcare team on the sunnie coast. We welcome David Curmi to the LfW team.

Stay safe and feel free to get in touch.

**Deborah Metters**  
Land for Wildlife Regional Coordinator

**We welcome all contributions.**

**Please send them to:**

The Editor

✉ [deborah@seqlfw.com.au](mailto:deborah@seqlfw.com.au)

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## Climate & Weather REGIONAL OUTLOOK

Jul-Sept 2021



**Daytime and Night-time Temperatures.** It is likely that daytime temperatures will be below median with night-time temperatures warmer than average.



**Rainfall.** Above median rainfall conditions are likely for most of Australia.



**Streamflow.** Low to near median streamflows are most likely in south-east Queensland.

### Influences

- El Niño-Southern Oscillation (ENSO) is neutral and has little influence on the Australian climate.
- Southern Annular Mode (SAM) is neutral and has little influence on Australian rainfall during autumn.
- Indian Ocean Dipole (IOD) is negative, which increases the likelihood of above average winter-spring rainfall.
- Australia's climate has warmed by ~1.44°C since 1910.
- Southern Australia has seen a 10-20% reduction in cool season (April-October) rainfall in recent decades.

### Sources

[www.bom.gov.au/climate/ahead/](http://www.bom.gov.au/climate/ahead/)  
[www.bom.gov.au/water/ssf](http://www.bom.gov.au/water/ssf)

## Weeds to Watch Jul-Sept 2021

Mist Flower is a low-growing perennial herb that flowers around this time of year. It generally grows in wetter regions along gullies and creek banks. It can be controlled manually or with a foliar-sprayed herbicide.



African Tulip Trees usually flower in spring making it a good time to identify and control them. They are often found in disturbed sites and forest edges. Control with registered herbicides using cut stump or basal bark methods.



Mile-a-Minute is an invasive vine often growing on forest edges and along waterways. It reproduces both vegetatively and via seed. Can be controlled manually (remove all the plant) or with herbicide.







# CELEBRATING THE 5000<sup>th</sup> LFWSEQ PROPERTY

In March 2021, the Land for Wildlife program in SEQ reached a milestone with the registration of our 5000<sup>th</sup> property. Congratulations Timotheos Firestone on being our 5000<sup>th</sup> LFWSEQ member and thank you for your commitment to conservation.

We thank Land for Wildlife members Sandra and John Field for hosting a celebration event on their Cedarton property in June. They only joined the program last year, but have already cleared swathes of lantana and are learning about the native plants and wildlife that call their property home. They are shown here with Timotheos. We congratulate all new and long-term Land for Wildlife members.





I care a lot about nature and leaving the environment better than I found it. I joined the Land for Wildlife program as I heard it meant I could get free native trees and a sign that would show visitors what I'm doing, but I've since found it offers so much more than that. The wealth of knowledge, various useful events, and meeting wonderful other people in the Land for Wildlife community can't be underestimated.

A few months after joining the program, I was told that my property was the 5000<sup>th</sup> Land for Wildlife property in SEQ. I feel very proud and privileged to be here and I have great respect for the 4999 property owners who have come before me.

I have owned my 70ha property on the eastern foothills of the D'Aguiar Range for one and a half years. Over that time, I've cleared out a kilometre of the worst Lantana and Giant Devil's Fig from the seasonal creek, although it's a constant battle to maintain that. I've planted some native plants including the Richmond Birdwing butterfly host vines that I received from a Land for Wildlife event. I've also released a few rescued and rehabilitated brushtail possums with my friend Jess and the Pine Rivers Koala Care Association.

Learning the ecosystems is such an important conservation goal. Managing the property absolutely requires an active, working knowledge. Conservation is a lot more complicated than 'plant 100 trees' because, as per the Land for Wildlife report for my property, there are different ecosystem types even just within the one property. There are so many plants, birds, frogs, insects, weeds, natives, fungi, etc., to identify and then know how to respond to. Learning about fire and its use in land management has been very eye-opening, especially as a programmer from the city.

I have really loved building a relationship with the land and its inhabitants. I come back to a tree after a few weeks and see that it has grown. I'll always smile when I see the Brush Turkey who my friend Grace and I removed a paralytic tick from. Turkey is pretty relaxed around me now. I love hearing a clang at night, to step out and see the local bandicoot embarrassingly falling over a plant pot. Everything has so much character when you look for it.

As much as I wish the place was already pristine, I also enjoy that I can justify running around with a scythe or machete because the property is so choked up with weeds. The land needs me as much as I need it. It's heart-nourishing to explore and find things: mushrooms growing out of tiny cracks in rocks, species I haven't seen before, a staghorn hiding under vines, bioluminescent fungi or edible berries on the native mulberry. It's like finding treasure.

When I bought the place, I was told there was a dry creek, but I'd never even seen it. One day, after a lot of rain, I took my machete and followed the sound of running water, cut through a thick wall of Lantana, and found this gorgeous mini waterfall and rock pool.

I truly believe we are meant to be in nature, as humans, and it's psychologically beneficial for us to learn to find our place in it. Once you've been still for a while, and the wildlife stops seeing you as an intruding predator, it's really amazing what comes out. Just recently, I was sitting in between the buttress roots at the base of my favourite strangler fig, and a Noisy Pitta came right up to me. It would hop a metre closer, look at me, hop again, until it came within a metre or two. It's a really gorgeous, colourful forest bird.

We can all get so caught up in the human world, but I feel very complete when I'm secluded deep in nature.

**Timotheos Firestone**  
5000<sup>th</sup> Land for Wildlife SEQ member  
Laceys Creek, Moreton Bay

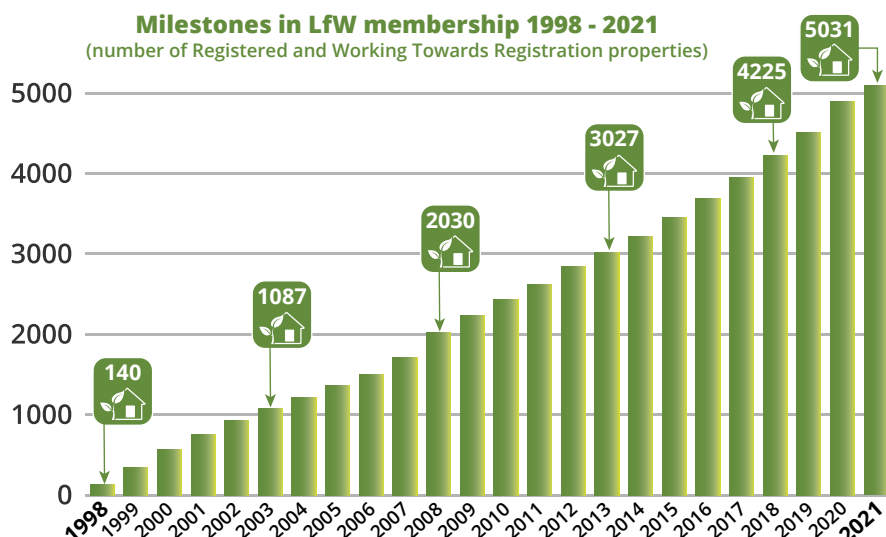


**Cr Peter Flannery, Mayor of Moreton Bay Regional Council, with Timotheos Firestone, the 5000<sup>th</sup> LfWSEQ member, at the celebration event. Tubestock of Richmond Birdwing Vines were offered to local Land for Wildlife members who attended the event.**



**Two Critically Endangered plants, Scrub Turpentine (*Rhodamnia rubescens*) and Native Guava (*Rhodomyrtus psidioides*), were found on Sandra and John's property. Shown on the front page of this edition is the *Rhodamnia rubescens* while *Rhodomyrtus psidioides* is shown above. Both of these species have suffered major declines due to the introduced pathogen, Myrtle Rust. See the backpage article for more information. Land for Wildlife Officers, like Wendy Heath shown above with John Field, can support landholders to identify and manage threatened species. Photos by Deborah Metters and De-Anne Attard.**

**Milestones in LfW membership 1998 - 2021**  
(number of Registered and Working Towards Registration properties)





# Indigenous Fire Management AND TRAINING IN THE LOCKYER



During autumn and winter this year, a series of fire management workshops were delivered by Victor Steffensen and Leeton Lee from Firesticks Alliance on four Land for Wildlife properties and several council reserves across the Lockyer. Victor Steffensen is one of Australia's leading fire practitioners and learnt from Traditional Elders about their fire management techniques that have been used to manage this country for thousands of years.

Victor has a detailed understanding and love of the Australian bush and the ways of the Indigenous 'Old People' who inhabited this land before colonial influences. Fire is an essential part of the landscape and can either be used for good or can result in devastating damage such as the 2019/20 wildfires which swept the country.

Using fire in a way that is appropriate and ideal for a particular landscape can promote so many positive ecological factors. By engaging Indigenous fire practitioners to undertake cultural burning there is also a huge positive social community aspect of getting people back on country and in touch with their land and the community that now lives there.

Numerous properties in the Lockyer, including several large Land for Wildlife properties, were severely burnt in the wildfires causing untold injury to ecosystems, wildlife, infrastructure, landholders and their communities. In total, approximately 22,000 hectares were impacted by the 2019 wildfires in the Lockyer Valley. These workshops were delivered by Lockyer Valley Regional Council as a priority project identified by the NRM Working Group with funding from the Federal Government's Bushfire Recovery Exceptional Assistance Immediate Support Program, Category D.

The workshops aim to reintroduce Indigenous fire management to:

- Make the landscape resistant to devastating wildfire.
- Increase the diversity of native ground cover species especially grasses, forbs and herbs.
- Protect and support the large 'Elder' old growth (veteran) trees.
- Increase food sources for native animals and humans in the landscape and thereby increasing the productivity of the land.
- Make the land more resilient to weather fluctuations.

- Get Traditional Owners and current landholders on country to build a greater connection to the land.

This is achieved by:

- Dividing the landscape up into 'burn' and 'no burn' zones.
- Introducing fire to the vegetation at times of optimal soil moisture and when the ground cover/ shrubby vegetation has only just begun to dry out.
- Using wetter parts of the landscape to act as natural fire breaks, so that fire lit in an area of the land where the vegetation is just right to burn will progress slowly to a wetter part of the landscape and will naturally be extinguished.
- Using fire to manage and reduce the prevalence of weeds.
- Using fire to manage and reduce unwanted native plants that are not meant to be in the particular type of forest.
- Using fire to reduce tree saplings as too many juvenile trees can lead to negative impacts on the old growth trees through competition for resources.
- Burning particular parts of the landscape at certain times of the year so that there is always green grass somewhere that can be accessed by grazing animals.
- Using a general rule of burning the upper, rocky areas of the land first (as these areas dry out first in summer) and progressing down the slope towards the wetter areas that are the last to dry out.
- Generally avoiding hot fires as these encourage vegetation that rely on hot fires (e.g. wattles and suckering vegetation) and promote more hot fires.
- Reducing a build-up of leaf litter and sticks on the forest floor as these lead to hot fires. Too much leaf litter also prevents germination and growth of herbs and forbs.
- Logs are retained in the landscape during cool fires as there isn't enough heat when burning native grasses to ignite the logs and large branches on the forest floor.
- Small animals are able to escape the slow-moving fire in a cool cultural burn, with a single ignition point and patchwork burn.
- Eucalypt trees benefit from the white smoke produced by cool fires as this cleans the trees and reduces impacts from insect attack.





**Victor Steffensen and Leeton Lee deliver fire management workshops in the Lockyer with Yuggera Ugarapul Traditional Owners from Wirrinyah Conservation Services, members of the local Qld Fire and Emergency Services and local Land for Wildlife landholders.**

- To achieve this a detailed understanding of the different vegetation types, native plants, fauna, rainfall patterns and geology is required. A vision of what the landscape should look like (pre-European colonisation), i.e. what plants should be there and what plants shouldn't be there is also required. This can be done through:
- A burning plan to help progress from a 'sick' vegetation state (e.g. overgrown with weeds or high litter build-up) to a healthy state (understorey of native grasses and forbs and herbs).
  - Extensive training and experience in managing the land through the use of fire. The Firesticks Alliance has developed a certified training course which is delivered in conjunction with TAFE around Australia that takes three years to complete.
  - Monitoring of the results of burning to assess the changes in vegetation, species diversity and density of cover.
  - Cooperation and collaboration among members of the community.

I was privileged to be involved in these workshops and have seen first-hand the benefits to the land and the Lockyer community by working with Traditional Owners and bringing back Indigenous fire management into our landscapes.

Land for Wildlife members who are interested in cultural burning are strongly encouraged to buy Victor Steffensen's book *Fire Country: How Indigenous Fire Management Could Help Save Australia*. Lockyer Valley landholders can register their interest in participating in a cultural burn in the future using this QR code.

**Chris Hoffmann**  
**Catchments Project Officer**  
**Lockyer Valley Regional Council**



**Old trees are protected from being burnt during a slow-moving, cool cultural burn.**



Former Sunshine Coast Council Councillor Jenny McKay (centre) visits Ian and Di on their property to look at the extensive restoration work being undertaken.

## Two-way INSPIRATION



“No, this property is not for you. It’s too large, too rugged, too steep, no access and too expensive. It’s an environmental block” was what the real estate agent told Ian Webster and Dianne Lanskey when they first laid eyes on their property. Undeterred the couple bought, and for the last 19 years have been painstakingly restoring, their environmental block which has become one of the jewels in the crown of the Sunshine Coast Land for Wildlife program.

Their 12.9ha property is situated at Flaxton on the Blackall Range. After purchasing the block they joined Land for Wildlife in 2003.

Regrowth and remnant Lowland Subtropical Rainforest now occupies what was once weed infested and degraded paddocks. This was no easy feat, Ian and Di have planted over 31,000 seedlings, not to mention spending countless hours eradicating Lantana, Privet, Camphor Laurels, Bana Grass, Yellowberry, Japanese Sunflower, Glycine and other environmental weeds.

What I love about Ian and Di is their infectious enthusiasm and advocacy for bush regeneration. Not only do they spend many hours each week rehabilitating their own block but they also help neighbours with their weeding and planting endeavours, as well as volunteering at Barung Landcare Nursery. They have also hosted numerous Land for Wildlife workshops on their property and have provided private tours to local politicians.

It hasn’t all been plain sailing though, Ian and Di have faced many setbacks. From tractor rollovers to landslips. A leech in the eyeball to Brush Turkeys raiding their seedlings, but they never give up. Their resilience is inspiring. They inspire me.

Every time I visit Ian and Di, we would discuss my latest academic pursuits, Di in particular had always been incredibly supportive of my studies. When I visited in early 2019, they handed me a copy of *Wildlife Matters* magazine (Australian Wildlife Conservancy) and said, “We could see you doing something like this one day.” It was full of young biologists (many women) undertaking research fieldwork in remote areas, a great read. Later that week, I received a call that I had been selected as a research assistant for the Australasian Bat Society’s Bat Blitz II research trip to study microbats. The role would mean nearly a month in the Cape York wilderness. I was delighted to be chosen but I was also realistic, as a single mum I felt it was perhaps too much time away from my daughter. I resigned to the fact that I’d have to decline the offer. As I went to dial the number, I caught a glimpse of the *Wildlife Matters* sitting next to my phone and Ian and Di’s words ran through my head. In that moment I decided that I’d somehow

make it work, and so I went on the research trip and had the most incredible time. Land for Wildlife Officers are supposed to inspire their landholders, but it works the other way around too.

Ian and Di love nothing more than discovering a rare or threatened species on their property. In fact a friendly rivalry with their neighbours has manifested. As it stands, Ian and Di can boast of:

- Habitat for the Pink Underwing Moth – *Carronia (Carronia multisepealea)*
- Three-leaved Bosistoa (*Bosistoa transversa*)
- Sunshine Coast Myrtle (*Lenwebbia sp. blackall range*)
- Maroochy Nut (*Macadamia ternifolia*)
- Richmond Birdwing butterfly and its host plant, the Richmond Birdwing Vine (*Pararistolochia praevenosa*)
- Cobolt Rust (*Terana caerulea*)
- Broad-leaved Whitewood (*Atalaya multiflora*).

Nineteen years of hard work has certainly paid off as you can see from the digital imagery. Ian and Di have chosen to protect their legacy by putting a conservation covenant over most of their block. Through a Voluntary Conservation Agreement with Sunshine Coast Council they are able to access contractor assistance for their weeding projects. They have also taken advantage of council’s Landholder Environment Grants, obtaining funding for contractor assistance with weeding, plants and revegetation materials.

**Danielle Outram**  
Land for Wildlife Officer  
Sunshine Coast Council







**Above: This series of photos shows the transformation over four years from neglected steep pasture to a thriving rainforest 8m tall using revegetation.**

**Top right: Di points to a restoration site showing the results of assisted natural regeneration following weeding over a three year period.**

**Lower right: Aerial imagery of Ian and Di's property speaks volumes to their restoration success.**



#### *A few words from Ian and Di:*

One of the reasons we decided to buy our Flaxton property was its ruggedness, diversity of landscape and geological attributes – from steep hills and gullies to rhyolitic areas with a dramatic creek gorge containing remnant rainforest. Obviously the location was too difficult for early loggers to attack.

What kept us going when times were tough was discovering new hidden gems. These became our 'newest favourite area' - different vegetation, remnant large trees and rocky gorges.

One thing that we soon realised in our journey was the heavy lifting that vegetation does in the sustainability of the environment. Too often the emphasis is on the animals without the accompanying story of the forest/vegetation that sustains them.

Like many 'newbies' we didn't really know what we had or how and where to start the restoration of our property. Enter LfW, the Sunshine Coast Council and their wonderful and knowledgeable conservation officers. As we were weekenders to our property from 2002 to 2011, we needed all the help we could get. Over time our conservation officers have kept us on the straight and narrow, steered us away from our more outlandish projects and encouraged us to take advantage of council's Landholder Environment Grants (LEG).

Perhaps the best advice was to establish a Voluntary Conservation Agreement (VCA) over 90% of our property. Our lives changed after we received the VCA especially in terms of physical assistance to restore the property.

The great advantage of being involved with LfW is the sense of community. You become part of a community that shares the same values – repairing past environmental mistakes and ensuring a

continued and increasing diversity of flora and fauna. Community also means revealing to the wider population what has been lost, what can be achieved and the transformation that is possible.

Everyone responds to encouragement. The annual LfW tubestock incentive not only encourages you to keep on planting but also forces you to plan for a particular area to be revegetated. It also helps you to prioritise those areas at most risk. Let's face it, revegetation on larger properties is expensive. Tubestock incentives, together with LEGs have certainly enabled us to revegetate and restore major areas that we would never have been able to do otherwise.



# The Carronia YOU WANT TO GET!



A Southern Pink Underwing moth larva in defensive position barring its false teeth and huge fake eyes. Photo by Todd Burrows.



Tucked deep in the shady understorey of rainforest remnants scattered between Bellingen in NSW and Kin Kin in Qld, a remarkable moth lives out its secretive lifecycle.

Work over the past three decades by retired CSIRO research scientist Dr Don Sands (OAM), brought this amazing moth into the limelight, exposing its incredible ecology, threatening processes and of course, its superstar looks!

The Southern Pink Underwing (*Phyllodes imperialis subsp. smithersi*) moth grows to 16cm across and has striking colours. The front-wings are broad and deep brown with incredible markings that make the wings appear like a dead leaf. It even has a small white 'leaf miner scar' imitation in the centre, which makes it even more camouflaged when it sits motionless, wings closed, during the daylight hours. If the moth gets startled, it flashes its leaf-like wings to reveal the hindwings which are blotched fluorescent pink.

The moth has one of the world's most exotic and eccentric looking larva. It grows to an impressive 10-12cm long and is marked all down its flanks with opalescent brown, beige, aqua and pink. Like most caterpillars, this one has relatively small and indistinct head eyes; however, right

behind the head are a couple of segments that are covered in white 'tooth-like' markings and atop those, two huge blue false eyes with piercing black pupils. When you give this guy a fright, be prepared for a shock of your own as the larva lunges forward folding its real head inside the fleshy upper segments engorging the false teeth and eyes so that it appears like a tiny dragon is about to bite you. All of this, of course, is a show where the caterpillar has evolved such markings to keep its otherwise juicy, tasty body safe from birds and mammals that it shares its rainforest home with.

Dr Sands' work also discovered its sole dependency on one unassuming rainforest vine, Carronia (*Carronia multiseppalea*). This unusual plant is a rainforest specialist growing in primary rainforest and sometimes on disturbed rainforest edges. It is a member of the Menispermaceae family, which is a group of somewhat-toxic woody vines distributed across the southern hemisphere. Quite a number of moth larvae related to the Southern Pink Underwing also feed on vines belonging to the Menispermaceae family. Carronia is typical of this family in having fairly indistinct little olive-coloured flowers, a straggly vine-like growth form and characteristic elbow-shaped leaf-stalks.

**Above left: An adult Southern Pink Underwing moth, photo by Mark Graham.**

**Left: *Carronia multiseppalea* vine with the elbow-shaped leaf stalk (petiole) circled. Photo by Lui Weber.**



### ***How are the Carronia vine and the Southern Pink Underwing connected?***

Like all moth and butterfly caterpillars, the Southern Pink Underwing moth larva is fussy when it comes to food. For the Southern Pink Underwing, it has developed a special relationship with the Carronia vine. As more and more of our dark, cool lowland rainforest remnants are removed, many plant species with specific roles as foodplants disappear, and with them the insects that depend on them. Sadly, while the Carronia vine is still found in decent numbers, the moth, due largely to fragmentation of those remaining Carronia-containing rainforest patches, is now listed as Endangered under the Commonwealth's *Environmental Protection and Biodiversity Conservation (EPBC) Act*.

### ***What can we do to help reverse the decline?***

As part of the Back from the Brink docu-series created by Natura Pacific, a team is working with Native Plants Queensland's Dr Bonni Yee, as well as Dr Sands, to propagate up to 10,000 young Carronia vines. The team is using specialised culture methods in a Sunshine Coast laboratory to repopulate suitable rainforests and rainforest edges across the region. Selecting from a number of sites at varying

locations across SEQ, fruits and cuttings of Carronia are now being sought and taken to the lab and placed into special growing media to give the baby vines a good chance to establish.

This is where landholders like yourselves come in! We are hoping that we can get interest from Land for Wildlife members to keep an eye out for Carronia vines or their small round pinkish-red fruit. Please let us know if you have healthy vines on your property, or if you are able to collect some fruits. We can then arrange for the cuttings and/or fruit to be collected from your property and sent to the lab to be included in this effort to produce young vines for the moth. Once grown, Natura Pacific's Dr Mark Nadir Runkovski will work with Dr Yee to provide a male and female Carronia vine (they're dioecious organisms - they have separate male and female plants) along with a small Syzygium species (our native lillipillis) to our local councils within the moth's native range.

From the Sunshine Coast to Byron Shire, we aim to help councils and private landholders plant healthy, genetically-vigorous male and female vines along with the fruiting lillipillis to allow more land parcels to develop into potential breeding spots for the moth. The vines will provide

the foodplants for the caterpillars and the lillipillis provide food for the adult moths that suck the sugars from damaged and decaying rainforest fruits.

Ultimately, with support from councils and landholders, we hope to replicate the huge success of the work done by Dr Sands and the Richmond Birdwing Conservation Network over the past 20 years in recovering the similarly rare and beautiful Richmond Birdwing butterfly.

### ***How do I get involved?***

If you wish to register with this project and check your property for Carronia vines please send an email to the project coordinator, Dr Mark Nadir Runkovski at his email shown below.

You can also learn more about our docu-series, including the video on the Southern Pink Underwing, by searching 'Natura Pacific - Back from the Brink' on YouTube or listen to our podcasts on Spotify, Amazon Audible, Apple or Google Podcasts. Together, we can help save this remarkable moth from extinction.

**Dr Mark Nadir Runkovski**  
**Natura Pacific**  
[mark.runkovski@natura-pacific.com](mailto:mark.runkovski@natura-pacific.com)



**Above: Dr Bonni Yee in the field looking at Carronia vines. Photo by Dr Mark Nadir Runkovski.**

**Far left: Carronia vine and their roundish pink-red fruit. Photos by Lui Weber.**

**Left: The laboratory on the Sunshine Coast where Carronia vines are being propagated. Photo by James Wills.**





## Weed Profile

# GOLDEN TRUMPET TREE

For eleven months of the year, Golden Trumpet Tree (*Handroanthus chrysotrichus* formerly *Tabebuia chrysotricha*) has a severe case of imposter syndrome. There is nothing golden to it that you would want to trumpet about at all. There is nothing that makes you want to look at it and take notice, especially in winter when it's dropped all its leaves. Then for about one month of the year in spring, before it has regrown its leaves, it decides to live up to its name a little too well by bursting into a mass of bright yellow trumpet-shaped flowers which almost blind the passerby.

Now before I make you want to go out and buy one of these beauties, I must point out Golden Trumpet Tree is an emerging environmental weed. It has been planted widely as a street tree and its long seed pods (up to 40cm long) have many wind-dispersed papery seeds that float off from the edge of the road to germinate profusely nearby. If this sounds familiar then you won't be surprised that Golden Trumpet Tree is in the same plant family (Bignoniaceae) as Cat's Claw Creeper. Like Cat's Claw Creeper, seedlings of Golden Trumpet Tree form an underground tuber which probably assist them getting through tough times.

Native to Central and South America it has been recorded as naturalised in northern NSW and SEQ. Seedlings can have 1, 3 or 5 leaflets and leaves usually have teeth.

Adult leaves can have serrated margins or not. The trunks have rough furrowed greyish bark and the leaves each have five leaflets coming from a central point (i.e. pinnately-compound). After the yellow flowers have finished, long furry brown seed pods hang from the branches. Seedlings, new growth on adult trees and seed pods all have brownish hairs.

I spent a couple of years with a Land for Wildlife landowner at Eudlo on the Sunshine Coast wondering where all their Golden Trumpet Tree seedlings were coming from. Every visit we'd look around to see if there was an adult tree lurking in the forest nearby. One visit in spring, I looked up the hill to see the parent tree across the road as a yellow blur on the horizon. In the perfect spot for a southeasterly wind to blow the seeds down the hill into the forest. Mystery solved!

There is often a lag between when an emerging environmental weed is recognised as a legitimate or legislated environmental weed and even longer for them to be removed from street tree lists and nursery shelves. Unfortunately, Golden Trumpet Tree is being seen on more and more properties in SEQ. You can control Golden Trumpet Tree in the same ways as other seedlings and trees through hand weeding when small, or mechanical and chemical methods. Contact your Land for Wildlife Officer for more information.



Article and photos by Stephanie Reif  
Land for Wildlife Officer  
Sunshine Coast Council



## Weeds of the Sunshine Coast (2nd Ed.)

Joan Heavey and Sonia MacDonald

The latest edition of *Weeds of the Sunshine Coast* is a comprehensive and valuable tool for conservation land managers across SEQ. This impressive reference book contains large, clear photos and scans of pressed weed specimens showing essential identification information, such as flowers and fruit. This book details over 290 weed species.

The weed species are broken into their various growth forms (herbs, trees and shrubs, vines and climbers, aquatic weeds, sedges and grasses), providing easy reference when searching for an unknown invasive plant in the field, or at the dining room table examining a sample.

Recommended weed control and disposal methods are also included for all species.

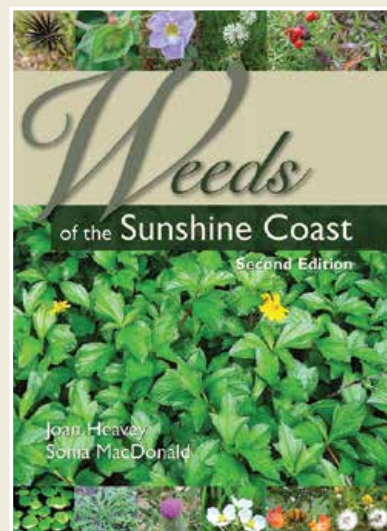
Both authors have extensive experience in botany and bushland restoration and have

a keen interest in the impact of weeds on native bushland. The initial project began as they compiled weed information to assist their respective bushland volunteer groups. It was this information that was consolidated to bring about the first edition of this book in 2013.

This second edition add a further 33 weed species with updates to all species' names. A 'Quick Comparison Guide' of native and exotic *Ludwigia* is also included.

For anyone starting their journey into bushland restoration or just interested in learning more, this is an essential part of any tool kit.

**Review by Kylie Gordon**  
Land for Wildlife Officer  
Sunshine Coast Council



Softcover | A4 size | 2020  
330 pages | \$45 +postage  
Noosa Integrated Catchment Assn. (NICA)  
Available from NICA on 07 5449 9650 or  
via <https://noosariver.com.au/shop/>

## PeakFinder App

The mountains are calling, but what are they called? Have you ever been on a bushwalk or walked through your property and lost your bearings in hilly terrain? PeakFinder makes it possible to identify all the mountains and peaks using your smart phone or device without the requirement of being online.

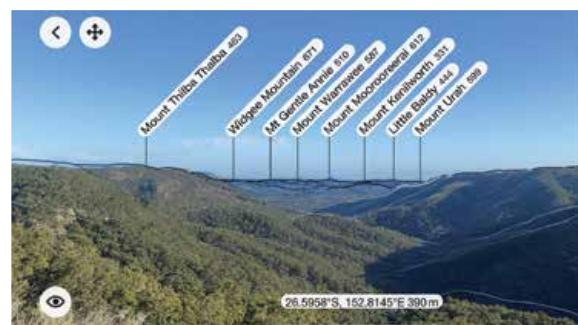
This application can be used to identify mountains and peaks across the world, including those in your local area. The application is easy to use - simply open the application, point your phone camera at

the landscape in front of you and the image overlays are provided. The application allows two viewing selections. Firstly, a basic line map with the elevation including names and outlines of the peaks. The second allows a photo overlay of the panorama drawing which you can save to your photo album for future use, such as the image shown here that I took on the Sunshine Coast.

**Review by De-Anne Attard**  
Land for Wildlife Officer  
Moreton Bay Regional Council



PeakFinder  
Google | 20MB | \$6.49  
Apple | 29MB | \$4.99



## Wildlife of Greater Brisbane (3rd Ed.)

Its been over 25 years since *Wildlife of Greater Brisbane* first hit the bookshelves, and it continues to be the go-to guide for identifying the wildlife of SEQ.

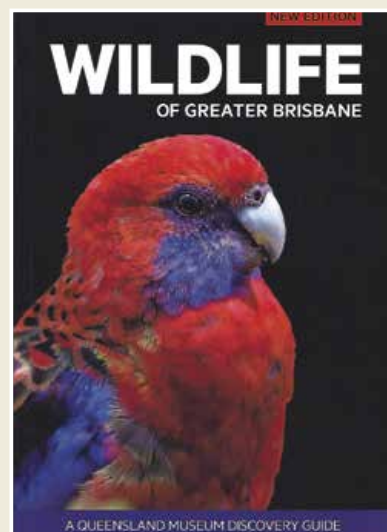
Several councils offer this book as part of their complimentary welcome pack to new Land for Wildlife members. It covers everything from amazing invertebrates like snails, scorpions, spiders, butterflies, bees, ants and beetles through to freshwater aquatic creatures like crayfish, fish and frogs. It finishes with the reptiles, mammals and birds that we more commonly know.

I found the new Introduction moving and I commend the authors on setting a fresh scene for this book. It addresses the swathe of issues facing our wildlife and unapologetically places humans as the cause, and also the potential redeemer, for many of our environmental threats. It spoke

to humanity's role in sparking covid-19 and that the pandemic acted as a clear warning for what can go wrong if the balance of the natural world is upset. The Introduction also rightly fills a gap from previous editions by acknowledging the First Nations people of SEQ and how their land management helped create and sustain habitats for wildlife.

Apart from the Introduction, the vast majority of the book remains unchanged from previous editions. Unfortunately, this means that 'recent' research or findings might be over 20 years old and may no longer be relevant. Regardless, this book remains a cornerstone reference book for any nature lover in SEQ and I congratulate the Queensland Museum for keeping this invaluable resource alive.

**Review by Deborah Metters**



Softcover | 2020  
450 pages | \$34.95  
Queensland Museum





# Honing a Passion FOR RESTORATION

I was hooked early! As a teenager, I travelled to and from school through a place called Binjour in Qld. Binjour is a whistle-stop on a red-soil plateau in the Burnett, west of Gayndah. With every bus trip I was mesmerised for a head-turning moment by a few remnant dry scrub trees near the side of the road. I knew little about trees but knew these were different from any in the surrounding eucalypt forests. I'm sure the allure of these trees contributed to my desire to restore red soil country.

Now, decades later in Maleny with my partner Laurie, we have 8 hectares of rich basalt soil. Growing conditions don't come much better with an annual rainfall many times higher than at Binjour.

We'd spent the previous ten years on a hard stony Spotted Gum block where growth was very slow, with several eucalypts dying in the protracted dry. I went there from the Sunshine Coast with native rainforest seedlings I'd grown in pots, carting them around like household chattels. A few I planted out died. I had not wanted to acknowledge that those plants wouldn't grow without constant attention. The rest are thriving now at our Maleny home.

Having a love of bushwalking, I'd found myself progressively more interested in what grew where and why. I'd crawled the length of hinterland creeks, reluctant to share my blood with the local leeches. I'd also learned to master the razor sharp, ratchet hooks of Wait-a-while (*Calamus muelleri*). Recognising the long hairpin and tight contour configurations along creek lines on maps, I knew where to find the

most interesting features – the waterfalls and gorges. With this came a deepening knowledge of the different ecosystems, their complexity and also the fact that I wouldn't understand everything. Soils and rainfall were only a part of the picture. Like dominoes, a storm event, fire or housing development would have a knock-on effect, upsetting the balance.

A tree which interests me is *Turraea* (*Turraea pubescens*). Naturally occurring in drier places than ours, I've seen *Turraea* as a handsome small tree in Brookfield, Brisbane and a little less handsome in a dry year at Pine Mountain, Ipswich. I was surprised however, when we found the same species fruiting when only the size of a sparse shrub in the Burnett. There were several of them growing south-west of Binjour at Auburn Falls in a tiny patch of dry scrub on rich soil with more extreme diurnal temperatures. It was just above the reach of a seemingly modest river that transforms to a momentous torrent in flood. Such is the force that the massive granite boulders have been ground waxy smooth over a period of time that renders my lifetime insignificant.

Populating our ex-dairy with its camphor-crowded gully is another adventure. It is a long-term and achingly physical adventure. It's a chance to put the right pieces of the puzzle in the right place. I scour sources for evidence of species that may have occurred here before. Because the Maleny area was so useful agriculturally, the land was rendered nearly naked in the late nineteenth century, wiping out so much native flora and consequently fauna on the basaltic plateau. Luckily however, Mary Cairncross Park, and a couple of other

areas survived and give an impressive, though small portal into what species the area grew.

To check the suitability of a desired species, herbarium records are easy to access online through the *Australian Virtual Herbarium*. The preserved, non-cultivated specimens of the herbarium are more useful than observational ones found on WildNet or Atlas of Living Australia. Vegetation survey derived lists such as Regional Ecosystem (RE) lists, though simplified, are a useful starting point.

Understandably, not every plant of every area is covered by specimens in herbaria. Many plants I've checked haven't been collected here. One in particular is *Cryptocarya obovata*. It has been collected to the north, south and west of Maleny. Our remnant areas include this tree, and it also regenerates readily here. It has been observed in Mary Cairncross Park.

There are many useful reference books such as *Subtropical Rainforest Restoration*, *Rainforest Trees of Mainland South-eastern Australia*. Another, *Mangroves to Mountains* is broader in scope and very useful for all vegetation communities. For the serious, learning how to use identification keys opens the door to competence. *Rainforest Trees and Shrubs* is an excellent key for plant identification. *Rainforest Plants of Australia* is the most comprehensive for rainforest restorations as it is digital and contains over 12,000 photos. See text box for more detail on these resources.

Through my passion I have become a member of the Plant Police! I would wear this label happily but it's often what's not





Photos of the restoration work on our property. Desirable nursery finds and growing many trees ourselves has improved the diversity greatly while keeping to appropriate local species.

Above: A mature, fruiting Pepperberry Tree (*Cryptocarya obovata*) has provided a handy supply of young trees which flourish here. This one has been in the ground for just one year.

planted rather than what is. For numerous reasons our native nurseries are unable to provide many of the plants that should be going into our revegetation patches. This can be due to a lack of access to wild seed, seed being unviable due to pollinator deficiencies, problems like Myrtle Rust and various germination issues. Genetic diversity can be an issue with cutting and tissue cultured plants, as each is a clone of its parent though this may be the only way forward for some species.

There are potentially hundreds of species that are unavailable through nurseries. I worry that it will be the lesser known and less popular (as in thorny or resembling weeds) species that will fall through the cracks. We have an old Giant Stinging Tree (*Dendrocnide excelsa*) in our gully. I feel slightly anxious as I work around it but I doubt its nettle-like leaves would cause me serious harm. There are also some very attractive species that generally can't be bought. I could only encourage others to seek the hard to find but relevant species. Nurseries sometimes have small quantities of a few of these.

With the complexity of ecosystems in mind and the chance of weediness aside, each missing species we supplant with a non-local plant potentially denies the environment a critical element of the network. What are we creating? Are we trying to replicate the landscape that existed prior to clearing?

It is the unavailable plants I think of first when friends mention planting for climate change. The endurance of the endemic plants in a changing climate may never get a chance to be tested. Their disappearance

is more likely due to clearing, weeds and the loss of pollinators than climate change at this stage.

The concepts of climate change and species extinctions are commonly accepted. Even with more knowledge, planting for climate change seems like a haphazard affair. What point in time in the future are we considering? What about climate suitability in the interim decades?

I remember the tenacity and adaptability of the delicate looking *Turraea pubescens* and say - local species have a right to be given a chance - the known and the lesser known, the desirable and the less desirable. Environmental restoration is a great journey!

**Article and photos by Gabby Bell**  
Land for Wildlife member  
Maleny, Sunshine Coast

#### References and Further Reading

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These root suckering Native Guavas on Land for Wildlife properties at Logan are showing no signs of Myrtle Rust.



Growing tips of Native Guava dying back due to Myrtle Rust.

## NATIVE GUAVA VS MYRTLE RUST

**N**ative Guava (*Rhodomyrtus psidioides*) was once common in SEQ just 11 years ago, but it is likely to go extinct in the near future. The reason for its quick decline is the result of an invasive fungus known as Myrtle Rust (*Austropuccinia psidii*), which was first detected in Australia in 2010. The Native Guava was once found throughout subtropical rainforests along the east coast of Australia from Gympie to Newcastle, but Myrtle Rust has been so devastating that almost all mature plants have been wiped out. For this reason, the conservation status of Native Guava was lifted to Critically Endangered under State and Commonwealth legislation.

Myrtle Rust produces millions of wind-blown spores, so it is easily spread. The leaves, stems, fruit and flowers of Native Guava are affected by Myrtle Rust, impacting its ability to reproduce. The Native Guava is so susceptible that all its foliage dies back, leading to its death. Plants may sucker from root stock; however, these new suckers are usually quickly infected with Myrtle Rust.

On some Logan Land for Wildlife properties, we've recently found a few Native Guava root suckers that have grown from a previously unrecorded plant. Some of these suckers are up to 4m tall with no rust. Finding these populations is important so that they can be monitored and treated if the Myrtle Rust does appear.

Native Guava was also recently found on a Land for Wildlife property at Cedarton where the celebration event for the 5000th LfWSEQ property took place. Unfortunately, the growing tips of these plants were affected by Myrtle Rust.

The University of Queensland has been researching the impacts of Myrtle Rust on Native Guava and other native plant species, and they found that the application of systemic fungicide as a foliar spray has been effective. Of the ones trialled, Bayfidan 250 EC fungicide at a concentration of 0.5mL/L of water has been the most effective, providing resistance to Myrtle Rust for about one year.

If you have patches of rainforest on your property, particularly along creek lines, please keep a look out for Native Guava and let us know if you think you've found one. Or, if you're already aware of them on your property and they're affected by Myrtle Rust, try treating it with a fungicide and keep your local Land for Wildlife Officer up to date on its progress. This information is useful to the researchers who are trying to help save the species.

Article by Nick Swanson  
Land for Wildlife Officer  
Logan City Council