LAND FOR SOUTH EAST QUEENSLAND NOVEMBER 2024 VOL. 18 NO. 4

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December 2023



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Land for wildlife

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www.inaturalist.org/projects/lfwseq To join contact your local LfW Officer

Land for Wildlife South East Queensland acknowledges this Country and its Traditional Custodians. We acknowledge and respect the spiritual relationship between Traditional Custodians and this Country, which has inspired language, songs, dances, lore and dreaming stories over many thousands of years. We pay our respects to the Elders, those who have passed into the dreaming; those here today; those of tomorrow. May we continue to peacefully walk together in gratitude, respect and kindness in caring for this Country and one another.

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 Soap Tree (Alphitonia excelsa) stands out in an ironbark forest, Lockyer Valley, with the lights of Toowoomba City in the background. Photo by Deborah Metters.

Front Cover Inset Photos: A Habitat Module nest box installed; Male Regent Bowerbird at a bird bath, photo by Alison Armstrong.

Editor: Deborah Metters

Proof-readers: Tony Mlynarik, Todd Burrows, Peter Copping and Michael Reif. Prepress: Kingfisher Creative Printer: Greenridge Press





Land for Wildlife South East Queensland Team

EDITORIAL

Welcome to the november 2024 Issue

Conservation is a hard thing to measure. Trees take a long time to grow. Eroded soils and threatened species can take even longer to recover. So how can we prove that LfW actually works? Over the last few years, we have tried different ways to answer this question. We have asked your opinion, that of LfW members, through a survey and we have looked at change over time geospatially. Both tell us that we are on the right track.

To take this one step further, we are working with researchers at James Cook University and University of Tasmania to track the effectiveness of LfW services offered to landholders over a three-year period. Tasmanian LfW members are also involved, so it will be interesting to compare different services from different regions. To get involved, please just complete the survey using the QR code on the backpage. We would love your input.

I often say that nature is endless, as are the ways that people can connect with nature. A few years ago, I started taking photos of the Milky Way with interesting trees in the foreground. I am still learning astrophotography but mostly I enjoy being out in nature on a starry night. The article about dark skies introduces another way for people to connect with nature and to do their bit to reduce light pollution.

It is great to see this program continually grow, especially in ways that help landholders achieve their conservation goals. As the membership stretches over 5,600 properties, the number of officers also needs to grow. I would like to welcome Greg Tasney who is joining the Scenic Rim Regional Council team. This is the first time there have been two officers for the Scenic Rim, recognising the region's rich natural and cultural values and the growing LfW membership base with large properties.

Similarly, it is great to see the Gold Coast team also expand – welcome to Mallika and Sascha. They bring a diversity of skills, and I look forward to seeing how the program will grow as a result. The City of Gold Coast has developed unique ways to engage meaningfully with landholders to achieve conservation. Pg 15 shares the story of one of the founding Gold Coast LfW Officers, Darryl Larsen, and the legacy that one person can leave.

Many LfW members are inspired to continue their conservation journey because of the stories that they read here. So, thankyou to those who shared their stories in this edition, and as always, I welcome your feedback and contributions.

Deborah Metters Land for Wildlife Regional Coordinator

We welcome all contributions. Please send them to: The Editor ✓ deborah@seqlfw.com.au ↓ 0437 910 687



CORRECTION

A big thanks to Beth Addison-Smith who noted that the plants shown in the article, *Tips on Controlling Yucca* (August 2024 Vol 18 No 3, pg 12) were not Yuccas. Oops! They were another spiky succulent, Mauritius Hemp (*Furcraea foetida*). Apologies for the mistake and thank you Beth for correcting us. Techniques for controlling spiky succulents like Mauritius Hemp and Yucca are the same. Photos by Greg Tasney.



Daytime and Night-time Temperatures.

Above average daytime and night-time temperatures are very likely with an increased chance of unusually high daytime temperatures.



Rainfall. Above average median rainfall is likely.

Streamflow. Forecasts range from high flows near the NSW border to low-median flows elsewhere in SEQ.

Climate Influences

- ENSO-neutral is likely to persist, but if La Niña does develop, it is likely to be weak and short-lived.
- The Indian Ocean Dipole (IOD) is neutral.
- Australia's climate has increased by 1.5°C between 1910 and 2023 leading to an increased frequency of heatwaves.
- Global sea surface temperatures persist at near-record warm levels.

Sources

www.bom.gov.au/climate/outlooks/ and www.bom.gov.au/water/ssf/

Weeds to Watch

Oct - Dec 2024

Yerba Porosa (Porophyllum ruderale) is an emerging weed in SEQ with currently <10 observations in Brisbane and Logan. It is a typical daisy (Asteraceae) with lots of seeds in a dandelion puff-like structure. Look for the serrated leaf margin, unpleasant pungent smell of crushed leaves and long flower bracts. If you think you have this plant, please take photos and send them to your LfW Officer or put them on iNaturalist for ID. Control using foliar spray with herbicide or hand remove the entire plant. Seeds can be viable for 7 years, so follow-up treatment will be required. Photos by Craig Welden









ur small holding is off grid and has no town water supply. It is next to a creek, but during the drought, when the creek was regularly reduced to a puddle, we installed a bird bath that is replenished daily with a small battery-operated timer. We have a wildlife camera fixed on it which records the varied wildlife that uses the bath.

The bird bath is very popular even during the wetter years. We record the variety of wildlife that visit the bath and have gradually found a seasonal pattern to some visitors. We created our bird bath using:

- A 100 litre Maze mini water tank \$90.
- A Maze stand for the tank \$30 (this allows tap timer to be fitted, and a little bit of gravity feed when pot and tank are on the same level). We bought our tank at Bunnings but they can be ordered directly from Maze.
- A battery-operated low-pressure water timer. This depends on what's available at the time – currently Holman electronic low pressure tap timer about \$60 at Bunnings.
- Water bowl ours is deep and the birds regularly bathe in it. We bought a heavy-duty plastic bowl at Bunnings but any waterproof pot will do.
- Put a rock in the tub and a decent branch across the bowl. The wildlife use them all. We used a small star picket nearby to secure the hose and branch across the bowl.

 Various bits of hose and click on fittings depending on placement of your tank and bath.

Our tank and bird bath are on the same level and it works fine - just adjust the drip rate to roughly top it up daily. We can probably get by with topping up the tank every month or so; and we regularly give the bowl a decent scrub. The tank can be put in a convenient location to refill it. Make sure that the water is going into the bowl. The hose end should fall down to the bird bath, without any drips falling outside of the bowl.

During the drought we had to increase the flow rate and re-fill the tank more frequently. We couldn't keep up during the 2019 bushfires when demand and evaporation were high and access by us was limited. When a neighbour's cow got trapped inside the electric fence it hovered by the dripper getting every drop at re-fill time, so some monitoring is required!

Our most frequent visitors to the bird bath are Satin Bowerbirds, Eastern Yellow Robins, Lewin's and Yellow-faced Honeyeaters, Australian Magpies and Pied Currawongs. We also get lots of bush rats, melomys and Long-nosed Bandicoots visiting too.

Regular but less frequent visitors are Lace Monitors, Grey Shrike Thrush, Bassian Thrush, Regent Bowerbirds, Swamp Wallabies, Brush-tailed Possums, Barshouldered Doves, Eastern Spinebills, Australasian Figbirds, Crimson Rosellas, Bell Miners, Rufous Fantails and the Emerald Dove.

Seasonal visitors include Spangled Drongos, Noisy Friarbirds, Olive-backed Orioles, Eastern Koels and Scarlet Honeyeaters.



Occasional visitors include Sacred Kingfishers, Spectacled Monarchs, Variegated Fairy-wrens, Wonga Pigeons, Noisy Pittas, Green Catbirds, New Holland Honeyeaters, Red-browed Firetails, King Parrots, Wompoo Fruit-doves, plus cats, foxes, dogs and Cane Toads.

Article and photos by John & Alison Armstrong Land for Wildlife members Burnett Creek, Scenic Rim









PRESERVING OUR Dark Skies



The Dark Emu is a well-known First Nations astronomical constellation made up of dark areas within the Milky Way. The Emu's head is the Coalsack Nebula with its beak pointing downwards, its neck stretching left through the Southern Cross Pointers and its body and legs stretching to the horizon.

rtificial light at night has transformed the way we live over the last 150 years, but it can have downsides for both humans and wildlife. Artificial light at night can cause:

- Disruption to plant pollination because many pollinators, like moths, are nocturnal.
- Changes to flowering and plant reproduction cycles.
- Changes to sleep, hibernation or torpor (winter dormancy) of wildlife.
- Difficulties for some animals to hide from predators or to find food.
- Changes to animal migration, dispersal and orientation.
- Delays to animal breeding.

Artificial light at night is increasing globally and across SEQ. The good news is that light pollution, unlike other forms of pollution, is relatively simple to fix at a small scale, and it disappears fast, literally at the speed of light!

The greatest impediment to combating light pollution is awareness. Most people do not know it exists or how widespread the problem is as light polluted night skies can still appear black to our eyes.

Last year, the Australian Government updated a useful publication, <u>National Light Pollution Guidelines for Wildlife</u> that provides detailed information about the different types of light and how animals perceive and respond to different lightwaves. It details the impacts on marine turtles, seabirds, bats and other wildlife. It states that artificial light is a significant stressor for invertebrates and is a contributor to the well-studied global declines in invertebrates.

The Australasian Dark Sky Alliance is an organisation that advocates for the preservation of the night-time environment.

Everyone can do their bit to help, especially Land for Wildlife members with properties near bushland areas.

Sunshine Coast Council is proposing to establish a Dark Sky Reserve in the Sunshine Coast hinterland under the International Dark Sky Places Program. A Dark Sky Reserve would support responsible lighting practices and bring communities together in celebration of the night sky. More information can be found on the Sunshine Coast Council <u>website</u>.

Article and photo by Dr Ken Wishaw Australasian Dark Sky Alliance

The National Light Pollution Guidelines for Wildlife (2023) suggest that landholders can help by:

- Start with natural darkness and only add light for a specific purpose.
- Use adaptive light controls to manage the timing, intensity and colour of light.
- Light only the area needed.
- Use low-intensity lighting and keep it close to the ground.
- Use non-reflective, dark-coloured surfaces near lighting fixtures.
- Avoid cool white lights use warm yellow-amber colours with a low CCT (correlated colour temperature) of 1,000-3,000 K (Kelvins).

National Light Pollution Guidelines for Wildlife available from <u>www.dcceew.gov.au</u>

Steps to assess your home's outdoor lighting: www. darksky.org/get-involved/home-lighting-assessment/

FIREFLY GULLY

Tagic on the Mountain

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Firefly Gully has been appropriately signed and has firefly light displays starting late winter to early spring most years. These unique beetles are welcome annual visitors and stay for a few weeks. The beetles come out at night and light up the darkness with their light show. The males fly around flashing their light to attract females, but they do need to be wary, as some female fireflies entrap males from other species and then feed on them! The light also acts as a warning to would-be predators to stay away. Fireflies have a few basic needs which are food, shelter, moisture and protection from pesticides. Fireflies are nocturnal beetles and are beneficial to have in your garden. They like to shelter in leaf litter and feed on slugs and snails.

Due to Richmond Birdwing butterflies being seen in this area some years ago, this property was chosen for a Richmond Birding Vine planting and the vines are now thriving.

In 2017 the owners had an issue with their electric boom gate the gate was going up and down as if ghosts were setting it off! An inspection of the gate's electrical box revealed the surprising culprits of the gate's strange behaviour - a family of Feathertail Gliders were nesting inside and their movement was triggering the gate! The owners quickly took up the task of making a Feathertail Glider nestbox in one day. The nestbox was placed in a nearby tree with the gliders taking up residence within days. This was certainly a good news story supporting the old saying, "build it and they will come!"

In the early years of the program, the owners partnered with Redland City Council and worked on controlling the invasive weed, Madeira Vine. Contractors were engaged through council and follow up works were undertaken by the committed owners. As anyone who has dealt with this weed will know, the control of Madeira Vine requires long term management. After initial weed control efforts, the owners worked in the gully below pulling vines, collecting fallen tubers on tarpaulins and disposing of them. This was very successful in reducing the large curtains of vines within the gully area.



The endangered Native Jute (*Corchorus cunninghamii*) is found naturally occurring in small numbers on hillslopes on this property. Native Jute has a short lifespan of 3-4 years and grows to 1.5m tall. Its stems are often reddish in colour with leaves between 5-15cm long and 1.5-5cm wide. The leaves are soft, smooth, and narrow with finely serrated margins. The owners have also planted this species on the site and collected seed for further propagation and genetic diversity. These plants are under threat from land clearing, habitat loss, weed invasion, inappropriate fire regimes and grazing. Native Jute has beautiful bright yellow flowers. These are produced year round, but are particularly spectacular during the peak flowering period from November to May. At IndigiScapes, you can view Native Jute in the gardens and purchase them from the nursery when there is available stock.

Both adult and larval Regent Skippers, a threatened butterfly, were found on this property and are just another example of the significant flora and fauna present.

This property is one of the natural gems of Redland City and is in the good hands of the owners who are committed to its protection.

Article by Maree Manby Land for Wildlife Officer Redland City Council





Maree Manby (left) with Jenny and Peter Spencer checking on one of the thriving Richmond Birding Vines (*Pararistolochia praevenosa*) that was planted to provide habitat for the stunning Richmond Birdwing butterfly.





An abundant number of Brisbane Tube Spiders (*Arbaniis longipes*) are found on the property at night, ready and waiting to pounce on passing prey. These spiders are the size of a 50-cent coin with a brown head and golden hairs. The body is mottled brown with brown legs and dark brown areas along its sides. Their burrow is up to 14cm deep and often found on embankments. Their burrow does not have a door but can have a flanged collar, often with leaves attached. Photo by Maree Manby.



Whilst undertaking a property visit last year, we were thrilled to come face to face with this Powerful Owl. This stately bird was feeding on a glider but was not too fazed by our presence. These birds are regularly seen or heard living and hunting in this area.

Thinking outside the (nest) box to provide HABITAT FOR THREATENED SPECIES

had the opportunity to attend the Great Eastern Ranges Conference in October 2022. Two standout speakers were Carl Tippler and Mick Callan from Habitat Innovation and Management. Based in Orange NSW, they recently developed a modular plastic moulded nest box that closely mimics a natural hollow-more effectively than any other nest box I've seen. It was evident that considerable thought had gone into the design of these boxes, aiming to replicate the characteristics of natural hollows that are essential for wildlife.

One such characteristic is the ability to match the microclimate provided by natural hollows. This is increasingly critical in the face of heatwaves and climate change. Known as Habitat Modular nest boxes, they are ingeniously designed with double-walled polypropylene and a timber insert to enhance insulation. These boxes not only last decades longer than traditional wooden ones but also feature a modular system that allows for customisation of box sizes, depths and entry points. This adaptability is particularly beneficial for species with specific habitat needs, such as the endangered Greater Glider.

Studies show that Greater Gliders are highly sensitive to elevated temperatures while in their dens, necessitating very specific hollow characteristics to thrive. These requirements include a hollow depth of at least one metre, an entrance size of 15cm or more and a height up a tree of at least 15 metres. Forming such a hollow naturally in a tree could take over 100 years. Greater Gliders need two to four of these specific den trees within a 2-hectare range. Moreover, they face intense competition for these scarce resources from other hollow-dependent





species such as cockatoos, possums and owls. Considering their specific needs, the competition for resources, and the significant loss of these trees due to fires (both planned and unplanned), clearing, lightning strikes, natural falls, and trimming, it's clear why Greater Gliders and many other arboreal species are under serious threat.

Lying in bed one night (where I do my best thinking), I devised a project to test these new nest boxes on a remarkable property nestled in the hills of Upper Brookfield, which hosts a small population of Greater Gliders. This property, known as Feathertail Nature Refuge, is protected through a Queensland Government Nature Refuge and also a Brisbane City Council Voluntary Conservation Covenant. Its varied landscapes, towering eucalypts and thriving understory create a uniquely diverse habitat, home to many species rarely found in Brisbane. The property owner, Merryl, is as extraordinary as the property itself. Her enthusiasm for the land and the flora and fauna is infectious to all who visit. Merryl has embraced the role of caretaker, much like First Nations People and the previous owners, Geoff and Rose, as she is committed to protecting and enhancing the property for future generations.

My proposal, while promising, required funding. The timing was perfect as the Queensland Government had just opened their latest round of Nature Refuge Landholder Grants. I discussed my idea with Merryl, and she guickly came on board. Merryl had successfully applied in previous rounds, having secured funding for weed control and was well-versed in the application process. After obtaining quotes for the nest boxes and installation services from gualified arborists, we

submitted an application. Three months later, Merryl received fantastic news her application was approved for the installation of eight Habitat Modular nest boxes, with a follow-up inspection scheduled for six months after installation. We opted for a mix of boxes: five with two modules and three with three modules.

It should be noted that other businesses are also producing high quality, longlasting polyethylene nest boxes suitable for, and proven to be used by, Greater Gliders, so I encourage anyone looking to purchase nest boxes to research the growing market.

Close to 10 months after the concept was first conceived at the conference. we gathered at the property along with the arborists from Arborspec who were responsible for installing the nest boxes on our pre-selected trees. Their prior experience at installing Habitat Modular nest boxes meant that they understood our brief and what we wanted. We aimed to cover a variety of environments and chose a mix of Tallowwoods, Grey Gums, Ironbarks, and Brush Box trees located within the gully and on the eastern slope near the house where Greater Gliders had previously been spotted.

We watched in awe as the arborists adeptly used a fancy spud gun (a nod to my mischievous youth in the 90s) to launch their climbing ropes 20 to 25 metres over a tree limb. They then efficiently scaled the trees using a pulley system. This was certainly not a task for anyone with a fear of heights. Once positioned high in the branches, they hoisted up the rather heavy nest boxes, which were secured into place with a bracket screwed into the tree. Over the next eight hours the Arborspec team installed all eight boxes at heights ranging



from 15 to 25 metres. Additionally, they set up three Reconyx motion-sensor fauna cameras aimed at the boxes to monitor any wildlife activity over the following months.

As part of Merryl's in-kind support for the grant, she committed to monitoring the nest boxes and the surrounding areas by spotlighting. To her astonishment, the night after the installation, she spotted a Greater Glider inspecting one of the boxes closest to the house. Regrettably, this particular box was not equipped with a camera. A follow-up spotlighting event for other Land for Wildlife members was also organised with Matt Cecil from the Wildlife Preservation Society of Queensland; although that night, only Squirrel Gliders were observed.

After a long six months, the team from Arborspec was back to inspect the boxes in February 2024. They shimmied up the trees to check each of the eight boxes. The initial boxes showed clear signs of use, though no animals were present. This dramatically changed when they reached a two-chambered box in a large Tallowwood. Unfortunately, only the arborists witnessed what happened next: after they tossed a rope over a nearby branch, out scurried a Greater Glider, which took off into the canopy of the huge Tallowwood. No further discoveries were made in the remaining boxes, yet the team



Fauna monitoring camera pointing at the nest box entrance. Looking inside the insulated nest box.

was buzzing from their earlier encounter, and immediately uploaded the images from the cameras onto Merryl's computer.

As we scrolled through the hundreds of photos, we were astonished to find images of Feathertail Gliders, Squirrel Gliders, Owlet Nightjars, Brush-tailed Phascogales, Common Brushtail Possums and a Lace Monitor, all exploring and using the three monitored nest boxes. Most exciting, however, were the photos revealing the shaggy coat and fluffy ears of a Greater Glider. Notably, the two-chambered boxes attracted more interest than the threechambered ones.

Given that only three of the eight boxes had cameras, it left us wondering about the potential visitors to the other five. These results, while exciting, drove home the critical need arboreal animals have for suitable hollows. We shared our success with the Nature Refuge team and Carl and Mick from Habitat Innovation and Management, who were thrilled by the results.

Our achievements have only fuelled our motivation. Merryl plans to install permanent cameras on some of the nest boxes to acquire long-term data on their use. We also aim to install more nest boxes throughout the property and are hopeful for continued collaboration with all partners involved. This project's success is a testament to the power of









Three species of glider were using or visiting the nest boxes on Merryl's place - Squirrel, Feathertail and, the target species, Greater Gliders.

collaboration between the Queensland Government, Habitat Innovation and Management, Arborspec, Brisbane City Council, and of course, Merryl.

Article by Cody Hochen Land for Wildlife Officer Brisbane City Council

References & Further Reading

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Eleanor and John at their Cave Creek property. Photo by Melanie Mott



FROM CANAL LIVING TO Hinterland Dreams

E leanor and John are one of the first landholders I met when I started with Council and for those of you who have not had the pleasure of meeting them, they are compassionate about all living things. They are also both very humble and writing a story for this Land for Wildlife magazine, would not have even crossed their minds. A wildlife carer whom I met a few years ago referred to Eleanor as the grandmother of animals, a mentor and true friend.

When I met Eleanor and John, I visited their home in Lower Beechmont in the Gold Coast hinterland which is about 15 minutes west of Nerang. We were there to chat about weeds, specifically how the contractor was going with controlling them and chatting about ongoing restoration goals for the property over the coming financial year. As well as having a property in the Land for Wildlife program, Eleanor and John also manage their property in partnership with Council through a Voluntary Conservation Agreement (VCA) and regularly engage a contractor to carry out ecological restoration. So, I was there to see how things were going.

Once we had a bit of chat, we walked through the work zones and Eleanor shared some stories about the property. I could tell straight away that Eleanor was passionate and proud of how far her property had come over the years. She spoke about individual trees and how fast they were growing, she talked about how cleared their property was when they first purchased it and how much it had come back naturally. She showed me their little grove of threatened Mount Tamborine Zieria (*Zieria collina*) and a number of other threatened plants. Of course, we also chatted about weeds on the property and had a look at some of the larger infestations of Lantana and Easter Cassia.

I have visited Eleanor and John multiple times since that initial visit and over the years Eleanor has revealed many more things to me, not only about their property but about herself and John.

Surprisingly, Eleanor and John's conservation journey didn't start in the hills of Lower Beechmont, it began when they moved to a small canal block in Runaway Bay in the mid-eighties. It was in this home that Eleanor found herself caring for two macropod joeys - a Red Kangaroo and an Eastern Grey. You can only imagine how big the grassed area was where she cared for them – it was tiny, resulting in her making multiple trips to the hinterland each week to collect grass and browse. Their canal house and land area was devoid of any native wildlife, so very quickly, Eleanor set about creating a wildlife haven, much to the dismay of their neighbours! She planted Eucalypts, Acacias, Syzygiums and an array of other species on their small canal block to encourage wildlife to visit.

"Living in Runaway Bay by the sea, lovely though it be, was becoming untenable. We had to move. We found a few hectares in the mountains behind the coast, one of seven lots, each of which had been partially cleared by the developers, built a house and set about rehabilitating the damaged land. As well as tackling the weed problem we planted hundreds of trees, species native to the area but not necessarily local provenance, as at that point I was unaware of the importance of this".

Eleanor's passion has grown from their small canal block in Runaway Bay to where they reside, in Lower Beechmont. The idea of creating a wildlife habitat along the canal and planting a handful of trees grew into deciding to buy a degraded grazing property, planting hundreds of trees, watching many more grow naturally and thrive, then purchasing an adjoining property and replicating the dream by restoring that one.

Today, the properties have a combined area of 6.2 hectares, are almost entirely weed free and support remnants of subtropical and warm temperate rainforests, small areas of previously logged wet sclerophyll forests along with a small patch of dry montane eucalypt forest. Recent flora surveys revealed that the properties contain over 211 native plant species including threatened species such as the Critically Endangered Scrub Turpentine (*Rhodamnia rubescens*) and a very healthy population of the Vulnerable *Zieria collina*, which





is endemic to the Tamborine and Beechmont Plateaus and not found anywhere else on Earth.

Recent fauna surveys recorded numerous threatened species including the Koala, Tusked Frog, Long-nosed Potoroo and Albert's Lyrebird.

What I love about Eleanor and John is their passion for wildlife and dedication to caring for the environment. Eleanor has cared for hundreds of animals, mainly mammals, including the occasional dasyurid (antechinus and planigale) as well as a few birds and reptiles. In 1996 after the State Government strongly urged the wildlife carers Native Animal Volunteer Service (NAVOS) to become independent, Eleanor helped form a volunteer wildlife carer's rescue operation called "WILDCARE". Skip forward over twenty years and Wildcare Australia Inc., as it is now known, is recognised across Australia for its skilled team of wildlife volunteers who rescue and care for sick, injured, orphaned and displaced native wildlife. Education is a key focus of Wildcare, and Eleanor used to run and host wildlife workshops from her home in Lower Beechmont on behalf of Wildcare Australia.

"From as early as I can remember I was fascinated with plants and animals and this developed into a passion for protecting the unique flora and fauna we have in this country and ensuring that we would do all in our power to conserve the ecosystems that had survived, revegetate where necessary, and nurture back to health those habitats that had been damaged or destroyed".

Eleanor and John's ongoing pursuit of protecting the environment has taken them to the next level in conservation by deciding to formally enter into a VCA for parts of their properties in 2010.

"Caring for wildlife and the study of wildlife biology and botany also provided a good foundation for the restoration work required. I participated in the Nature Search program and much to our delight discovered the Land for Wildlife program, so promptly registered our property. Our conservation journey now moved to another level with the assistance that the Land for Wildlife Officers provided,





such as management strategies and excellent workshops on a variety of topics. Protecting our property from future destruction became a matter of concern, so after looking at our options we decided to put a Voluntary Conservation Agreement on it, which is registered on the title deeds. There are also financial benefits for landholders who enter into such agreements.

With education, observation and experience, appreciation grows and the interconnectedness of everything, 'the web of life', demands our protection. Wonderful examples of this can be seen in the symbiotic relationships between plants and fungi, and plants and animals. This mutual dependence means that if one species of plant loses its symbiont, be it plant, fungus or animal, it cannot survive and this can also lead to a domino effect, and a failing ecosystem. There is another dimension for us too and that is the constant joy one experiences in seeing a new plant germinate, or an insect or bird making its living in our patch of bush, or the pleasure in just being surrounded by forest and silence, broken only by the occasional bird call or the rustle of a scurrying lizard in the leaf litter".

Whenever I visit Eleanor and John, I'm always inspired by their enthusiasm. Eleanor never fails to share a lovely story about her most recent discovery on the property, or an amazing wildlife interaction that she's recently experienced. Best of all, by using citizen science apps such as iNaturalist, she now gets to share her knowledge and findings with the world.

Thank you, Eleanor and John for your tireless compassion for all wildlife and the environment.

Article by Melanie Mott Land for Wildlife Officer **City of Gold Coast**

Quotes and photos by Eleanor Hanger Land for Wildlife member Lower Beechmont, Gold Coast

Golden ORB-WEAVER SPIDERLINGS

hile visiting a Land for Wildlife property at Mount Mellum in May, we stumbled across an unusual sight while walking along a path. We were in the right spot at the right time and were lucky enough to see one of nature's wonders. There was a curled up Native Rosella (*Hibiscus heterophyllus*) leaf that caught our attention, and upon closer inspection it revealed that the leaf was home to hundreds of tiny, moving animals! They were hard to identify and spotting the unusual formation raised more questions than could be answered straight away.

The Queensland Museum solved the mystery by revealing they were newly hatched Golden Orb-Weaver spiderlings and the egg sack had hatched 2-3 days previously. When the cluster of approximately 380 spiderlings emerge from the egg sack, they stay together for a few days before they leave the nest one by one and head into the big, wide world by themselves when they're ready to feed and make webs of their own.

There are three species of Golden Orb-weaver spiders in Australia and all are found in SEQ:

- Giant Golden Orb-weaver (Nephila pilipes)
- Humped Golden Orb-weaver (Trichonephila plumipes)
- Australian Golden Orb-weaver (Trichonephila edulis)

The female of all species is much bigger than the male who is a tiny 4-5mm. The male often sits on the edge of the web waiting for the right moment to mate. He needs to choose his moment carefully as the female spiders often eat the males after copulation. After mating, the female spider builds an egg sack out of golden silk for her 400 or so eggs to go into and puts it in a safe place by attaching it to a discreet position such as in a curled-up leaf or in a sprig of twigs. The egg sack stays in place for 30-60 days, whilst the female spider often dies shortly after laying the eggs. These amazing spiders have a short life span of approximately one year.

Golden Orb-Weaving spiders are found in warm areas in dry open forests and woodlands, coastal sand dune shrubland and mangroves in Australia, the Asia-Pacific region, South America, southern USA and southern Africa. These spiders have large, extremely strong webs. They build their vertical webs of golden silk between trees and shrubs, hoping insects will fly into them. They predominantly prey on flies, beetles, moths and cicadas but occasionally small birds or bats get trapped and the spider happily feeds on these as well. The web is so strong that people in South Pacific use the web as fishing line and fishing lures.

These spiders are very docile and often drop from their golden web if threatened. They are not dangerous to humans or animals and play a beneficial role in catching and eating insects and maintaining healthy ecosystems.

Large webs of Humped and Australian Golden Orb-weaving spiders are a common sight across SEQ in summer.

Article by Rhonda Bordonaro Land for Wildlife Officer Sunshine Coast Council





Giant Golden Orb-weaver. Photos by Matthew Lazzaro.





Humped Golden Orb-weaver. Photos by Greg Tasney.





BOOK REVIEWS

Weedlings and Seedling: A field quide to seedling identification for bush regeneration

By Rusty Linnane

Weedlings and Seedlings is a catchy title for this simple to understand yet detailed book. Rusty admitted to me that he is no expert, and this book is designed to help people that wish to solve the age-old dilemma, is it a weed or a native? It is very common to hear people discussing this in the bush regeneration field, and often those involved are volunteers that are faced with thousands of natives and many weed species. Trying to make sense of emerging plants can be an overwhelming job for people.

There is a real difficulty in telling some native species from weed species at the seedling stage. Rusty has aimed this book at comparing similar species of natives and weeds. He says it is important to know the weeds on site and close by, as this narrows the number of species on site you need to deal with.

Another important piece of advice in the book is "leave it if you're not sure", let it grow a little larger before deciding to remove it. The book has a pictogram legend that is simple to understand, e.g. leaf margins, habitat, colour coding, and a section on colour coding leaf arrangements, and of plant forms.

Each page is coloured either green for seedlings or red for weedlings. Each page has a simple habitat description and shows the leaf arrangement, leaf margins, colour of fresh new growth, leaf veins, colour of underside of the leaves, scent of crushed leaves, white or clear sap, spines, thorns and stinging hairs. At the back of the book is a glossary of botanical terms to assist.

I see this book as a first of its kind. It combines natives and weeds together and should be essential for all bush regenerators. It will also be incredibly valuable for Land for Wildlife members who are restoring their properties and want to encourage the natural regeneration of native plants.



Self-published 200 pages | paperback | A5 Available from the author via email, rustleinthetrees@outlook.com \$28 plus postage of \$8.40 Please ask Rusty about bulk rates.

Review by Martin Bennett

Amazing Annoying Birds: Living with Australian Brush-Turkeys

By Ann Göth

Could a book title summarise any better, the community sentiment felt towards these birds! Love or hate them, the way we feel about these avian critters tends to be quite polarised. I remember when we chose Brush Turkey Enterprises as the name for our business 25 years ago, it drew a mixed response. We also figured it was memorable and apt considering we started off as a rainforest seed collection business and spent lots of time scratching around in rainforest leaf litter for seed. Brush Turkeys are also important in the development and spread of rainforest, so a worthy emblem for our business. Twentyfive years on I've even been honoured with the linibara name of Wawun-Dja "Scrub Turkey Man" for our ecological restoration / healing country work on our adopted home country of the Blackall Range.

Twenty or so years ago I was fortunate enough to meet Ann Goth in the earlier stages of her research into these Amazing Annoying Birds while she was based in Maleny. I've followed with interest her research over the years. The results of her research should well and truly tip us all into using the amazing epithet, because the ecology and lifecycle of these birds is truly amazing. That said. I've also lost crops of potatoes, taro, arrowroot, banana etc... to our namesake, which again leaves one feeling somewhat conflicted.

But let's get back to the book. It is a comprehensive summary of all things Brush Turkey. It covers all the current scientific knowledge on these megapodes and why they are a keystone species for many ecosystems in an engaging easy to read format. Chapters cover the value of Brush Turkeys to First Peoples, to the impacts on backyard gardeners to their ecology. A particularly engaging aspect of this book is the many interviews of people living and working with Brush Turkeys, which brings a genuine community feel to this publication.

Other topics include: the reasons behind their relentless move into our suburbs, their unusual incubation method and approach to child-rearing, their promiscuous and mischievous happenings on the incubation mounds, methods for deterring them and how you can help Brush Turkeys in the city.

I must admit my bias in having a long-term love affair with the Brush Turkey, but this book is well worth adding to your bookshelf especially if you are a gardener or bush regenerator who has a perceived conflict with Brush Turkeys.



r you love them or loathe them, this book will astound you.

Published by Natural Publishing 2023 158 pages | paperback (\$27) | eBook (\$17) | Widely available online

Review by Spencer Shaw Land for Wildlife member, Maleny, **Sunshine Coast** And Owner, Brush Turkey Enterprises www.brushturkey.com. au specialising in the restoration of native vegetation through education, consultancy and cultivation of native flora.

STUDENT BIO-BLITZING IN CAYMPLE

n July, the University of Queensland Ecological Society worked with Dr Gabrielle Lebbink to complete a Bioblitzstyle biological survey of her and her sister's Land for Wildlife property in the Gympie region. The survey aimed to document the many species of wildlife that call the property home. This collaboration was highly successful, with exciting discoveries and a fun weekend away for our members.

All observations made were recorded using publicly available citizen science programs. Specifically, an iNaturalist project and an eBird trip report, which can now be used to create an ongoing list of species that can be found at Gabrielle's property.

Over the three days, we utilised field monitoring techniques such as morning birdwatching surveys, freshwater dam surveys, nocturnal spotlighting walks and camera trapping which resulted in us being able to record over 128 species and over 200 observations on the iNaturalist project. On eBird we recorded 56 species which even included the sighting of a Barking Owl!

The usage of camera traps allowed for some notable observations including multiple detections of Koalas across the property, an echidna and confirmation of the presence of feral foxes.

Surprisingly, many invertebrates were found despite the winter cold snap at the time. Of the 128 species reported in the iNaturalist project, 83 were either arachnids or insects. This included the documentation of an understudied assassin bug species, *Ploiaria armstrongi*. Our recording of this species now constitutes the only public report of it on the Atlas of Living Australia database since its discovery in 1965.

An undescribed species of jumping spider in the genus Ananeon was also found, having only previously been known from a specimen found in the NT.

By surveying the dams for fish and freshwater invertebrates, we concluded that the water is in relatively good health due to the large diversity of aquatic life. This included many species of mayflies, water scorpions, predaceous diving beetles and multiple fish species. Importantly, one dam was seemingly entirely free of invasive fish species.

Another focus of our time on the property was learning about the invasive grasses and their impacts on biodiversity. Dr Gabrielle



Students from the UQ Ecological Society helping to clear a patch of Molasses Grass (*Melinis minutiflora*). Photo by Alex Barker.

Lebbink was kind enough to give us an impromptu lecture, and we all worked to help clear the weeds.

This fruitful collaboration allowed undergraduate students to gain experience engaging with landowners and practise realworld employable skills while contributing to citizen science. The UQ Ecological Society is excited to return to Gabrielle's land in summer to hopefully expand the list of species that call her property home.

Article by UQ Ecological Society (uqecosoc@gmail.com)

To see more species that were found, visit the iNaturalist Project: EcoSoc Wolvi Winter Camp. Invertebrate photos by Hiroya Kidoguchi





A memorial tree planting for Darryl earlier this year provided an opportunity to acknowledge Darryl's career-long dedication to conservation. His wife, Rita (right), joined the planting and continues to restore their own Land for Wildlife property.

arlier this year we sadly learnt that one of our founding Land for Wildlife (LfW) Officers in SEQ, Darryl Larsen, passed away in February from cancer. Darryl was initially employed in 1998 to provide LfW services to landholders in Logan, Beaudesert, Gold Coast and

Redland councils. He then came to the City of Gold Coast as its first dedicated officer in 2001, where he worked as the Team Leader until his retirement in 2015.

In his time with the City of Gold Coast, Darryl passionately grew the LfW program and evolved it from 'a sign on a fence' program to one that provides meaningful support to landholders. This support equips landholders with resources and information to restore their properties and improve the landscape for people and wildlife on a citywide basis.

Darryl also established the City's Voluntary Conservation Agreement scheme, which protects ecologically significant properties in perpetuity. He instigated the Bushland Health Checks scheme for properties not quite large enough to qualify as LfW. He also oversaw the development of the City's Nature Conservation Assistance Program, which provides grant funding to private landholders for ecological restoration works on their properties. He had a talent for developing communication resources and an outstanding botanical knowledge that he was always willing to share. I always admired his ability to methodically key out plants and magically produce a hand lens when needed to look for domatia or other distinguishing botanical features.

Darryl was a true gentleman. He was kind, patient and thoughtful and with his gentle manner and wealth of knowledge, he mentored, inspired and empowered colleagues and landholders alike. He was a good friend to many and leaves a legacy of programs that the Conservation Partnerships team is proud to deliver.

Outside of work, Darryl had a great passion for playing Celtic folk music and met up with folk groups in Redcliffe and Maleny regularly to play. In fact, he participated in the Maleny group just two weeks before passing away and now the first hour of the fortnightly Maleny session is called "Darryl's Hour" in which Darryl's favourite tunes are played.



Following his retirement, Darryl did a significant amount of travel with his wife, Rita, with birdwatching the motivation for much of their travel. Rita and Darryl worked side by side on regenerating a patch of bushland along One Mile Creek Reserve in his home region of Moreton Bay, where he and Rita have their own LfW property.

In July, we planted 400 plants along Clagiraba Creek, to celebrate Darryl's life and honour his contribution to Land for Wildlife, private land conservation and the natural environment.

If you'd like to learn more about the history of LfW in SEQ and Darryl's long-term involvement, you may enjoy the article he wrote shortly before he retired entitled, *Looking back on 17 years of Land for Wildlife South East Queensland*, which can be found on the LfWSEQ <u>website</u> - just search Darryl Larsen.

Article and photos by Lexie Webster Former Team Leader Conservation Partnerships City of Gold Coast





Inviting Contributions **RESEARCH PROJECT**

e invite all LfWSEQ members to participate in a voluntary survey to share your experiences and insights about the Land for Wildlife program and your relationship with your property and nature in general.

This survey is part of a nationwide research project supported by the National Environmental Science Program (NESP). The Australian Government has set targets under the Global Biodiversity Framework (GBF), including the goal to conserve 30% of land, sea, and inland waters, and to restore 30% of degraded ecosystems by 2030. Your participation in this survey will help us assess the effectiveness of conservation programs and if/how they contribute to Australia meeting their international targets outlined in the GBF.

This large-scale research project examines how landholders perceive and interact with their properties over time. As part of this project, we are focusing on the Greater Glider, a recent addition to the Endangered species list. This unique and fascinating animal is found throughout SEQ and may even inhabit your property!

Citizen scientist platforms, on-ground surveys and landowner workshops will be used to hopefully find new populations and monitor the health of known Greater Glider populations.

This is a fantastic opportunity to lend your voice to important conservation discussions and to track how our perceptions of nature evolve over time. Participation is completely voluntary and all data will remain anonymous and only collective data will be shared. You can read more about the project on the NESP website: https:// nesplandscapes.edu.au/projects/nesp-rlh/conserved-and-managed-lands/

Thank you for your ongoing commitment to protecting our environment and for being a valued member of the LfWSEQ community. Please use the below QR code

to participate in the survey or use this link; (https:// utas.qualtrics.com/jfe/form/ SV_8raNA05pXDy6RtY).



Survey closes 15 December 2024



Greater Glider. Photo by Todd Burrows.







Rear-entry nest boxes for Greater Gliders made in timber, hardwood and 100% recycled high density polyethylene by Hollow Log Homes. Photos by Maaike Hofman.