Little Liverpool Range Initiative

SEPTEMBER 2022

WINTER NEWSLETTER

Freezing through winter...

Winter passed by in a blur. During these past few months we were kept busy acquitting the LLRI Citizen Science Grant which we were successful in receiving at the end of 2020. To summarise the events and progress throughout the grant period, we have put together a final grant report. If you would like to see what we learnt, you can read the report here: https://www.llri.com.au/documents.

In August, the Griffith University hosted the Ipswich Koala Forum where koala conservationists from across south-east Queensland came together to talk about all things koala. During the event we heard from wildlife rescue veterinarians, the Ipswich Koala Protection Society, Ipswich City Council and Associate Professor Carney Matheson on his fantastic citizen science project run out of Griffith University. Assoc. Prof Carney definitely got everyone very excited about koala poo! If you were unlucky enough to miss the forum, the presentations are free to view at:
https://www.facebook.com/wildlife.watcherau/videos/1675183709522548

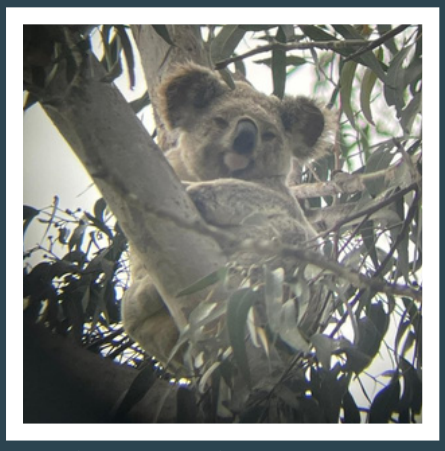

Fig 1. Looking out for koalas across the Range!

Fig 2. Citizen Science Report available online!

NEWS & FEATURES

Landholder highlights: Wildlife Warrior Astrid!

Written by Astrid Perkins

I joined the partnership programs last year when I moved to the area and was lucky enough to be able to rent the property I'm on from old family friends during all the covid madness. When I first moved here I wanted to know more about the land, and the property owner agreed to get a land management specialist from the Sunshine Coast to come down and walk the property with us to tell us more about it and help us with invasive pest issues. He then put us in touch with the LLRI and the rest is history!

I think being part of the LLRI and volunteer conservation agreement program has given me some confidence when it comes to knowing what's on the property - we came at it from a pest management need, but it's become so much more than that! It's been really educational as well - I didn't know how small the koala conservation areas were around SE Qld until I'd joined and been taught how to look at vegetation maps etc. It gave me an increased motivation to see what I could do as land tenant to ensure the property is as helpful to koala conservation as possible.

Unfortunately time and money constraints have meant that work on the property is happening very slowly - something a lot of people around here are probably familiar with! We've got some great advice from Shania, Ko and Dani from the Ipswich City Council Landholder Conservation Partnerships Program about how to implement our property management plan - now we just need to do it!

Fig 4. Brush-tailed phascogale (Phascogale tapoatafa) captured during camera trap deployment.

Fig 3. Wildlife habitat on the property

This year we've managed to get rid of some huge towering prickly pear plants, so that's a start! It's pretty rewarding seeing a pest plant three times as big as you fall onto plastic and slowly rot away, and a focus for me on my daily walks with the dogs to check and see no (plant!) pups have escaped. We recently went to a fire management plan workshop which was challenging to say the least! But it's also helped me understand how time works differently here, and that patience is a big part of restoring this beautiful part of the world back to a more natural state. In the coming year I'm looking forward to working with indigenous fire specialists to learn even more about how fire can help manage the weeds that have proliferated over the past few wet summers. I was really excited to learn from the koala-sniffing dog unit that we do have koalas traversing the property - even though I've never seen one I feel proud to know they're using this land to get about and I hope it long continues. And I loved finding out that planting trees close to the corners of the stock fencing can help koalas navigate the fences, so that's also a project for the coming year - thanks for the tip, Ryan! I also can't wait for the nesting boxes to go up too - even if I never see a microbat or glider use them, if they're getting used by native wildlife then that's a definite win for me.
I think ultimately if we could get rid of the invasive weeds and replant some native food or shelter trees in their stead, I would be a happy camper. The most important thing to me is making this land as welcoming and habitable for native species as it can be, to be a small section of a continuous whole of land owners and tenants who want this part of the world to retain it's natural beauty and ability to support the amazing flora and fauna that call this place home.

Fig 5. Mother of Millions infestation

Pest features: Mother of Millions - Bryophyllum delagoense

Many of you are probably aware of the nightmare that is the common Mother of Millions. You often see this plant growing in vast numbers and if not controlled immediately will become one of your most prevalent environmental weeds. This species is native to Madagascar and was initially introduced as an ornamental plant. Mother of millions grows quickly in the grasslands and woodlands of the Little Liverpool Range. Any part of this plant can become a baby plant so ensure when you are removing this species, bag it and ensure no small parts break off.

Livestock are at risk of being poisoned by this species. Therefore, the control of this species is not only important for the environment but also for livestock on your property. Mother of millions is a Class 3 Restricted Matter species, meaning that it cannot be given away, sold or released into the environment.

Keep an eye out for another species of introduced Bryophyllum which is emerging as a problematic species - Bryophyllum pinnatum.

LLR Native Species Profile

Common name:
Brigalow

Scientific name:
Acacia harpophylla

Brigalow is both a species and a vegetation community. Regional ecosystem 12.8.23 can be found on the LLR and is described as Acacia harpophylla open forest on cainozoic igneous rocks and can be found around the Marburg area. Brigalow can be found growing on fertile soils, often adjacent to or in the semi-evergreen vine thicket ecosystem, colloquially known as the Rosewood scrub. Historically, brigalow has been extensively cleared with only 5% of its original presence remaining in south-east QLD.

Fig 6. Brigalow found in the LLR. Photo Credit: Mick Drews

Platypus eDNA project

Written By Jack McCann

Since 2015, Ipswich City Council have been undertaking an annual platypus monitoring program to better understand platypus distribution throughout the city's waterways, and to detect any changes or impacts to their populations. The monitoring program is delivered through an innovative approach, searching for the presence of platypus DNA in water samples. This is known as 'eDNA' (environmental DNA) sampling, and works on the principle that animals will deposit small traces of their DNA into their surrounding environment through saliva, shedding fur and other forms. Sampling for eDNA involves passing a sample of water from a waterway through a fine-meshed filter and then analysing the filter media for the presence of platypus DNA. A 'Positive' result confirms platypus presence, whilst a 'Negative' result indicates platypus are likely absent from that reach.

The monitoring program has helped us build a strong general understanding of where platypus persist throughout Ipswich, with Sandy Creek, Woogaroo Creek and Opossum Creek being identified as strongholds, with multiple 'Positive' sites throughout these systems each year. Other systems such Six Mile Creek and Bundamba Creek may provide habitat to small or transient populations, with only intermittent 'Positive' results in these systems over the last seven years.

Fig 7. Platypus expert Tamielle Brunt captures platypus on camera and taking eDNA samples.

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The most recent monitoring program was undertaken earlier this year in June, at 22 sites across ten of the city's major waterways. Monitoring this year was of particular importance, with many questions being raised around how the flood events and continued land-use change may have impacted platypus habitat and distribution. This year's results indicated that the floods and other influences such as changes to habitat condition may be impacting platypus in Ipswich. Many of the usual locations we expect to record 'Positive' results came back as 'Negative', and many known reaches that provide good habitat conditions were impacted in the floods.

Erosion and soil lost from the landscape as runoff is the greatest contributor to declining habitat conditions through causing turbidity and sedimentation of waterways. This impacts all of the critical factors required for high quality platypus habitat, including;

- pool depth and water permanency,
- habitat complexity (i.e. in-stream habitat features),
- water clarity and quality, and
- food availability.

Maintaining dense vegetation and groundcover wherever possible is the key to limiting sediment entering our waterways through runoff, and achieving healthy waterways, good water quality and suitable habitat conditions.

Ipswich City Council intend on carrying out a follow up platypus monitoring program in December 2022 to investigate whether platypus return to their known habitat locations throughout Ipswich as waterways recover from the floods, or are now inhabiting new areas throughout the city.

Spring is in the air, but winter is still hanging on!

Written By the Queensland Trust for Nature

Recently, QTFN ecologists were out on Aroona Station and came across a beautiful Queensland Blue Gum buzzing with life. Watching the tree in awe for 10 minutes, birds fluttered in and around the flowers, some chasing the insect life feeding on the nectar, others foraging on the nectar themselves. Birds as small as the leaves and of more than 6 different species, it was a sight to see and a joy to watch. How many bird species have you seen in one tree?
The Queensland Blue Gum (Eucalyptus tereticornis) is a favoured food tree for the koala (Phascolarctos cinereus). But to an ecosystem it is so much more, roots providing bank stability in the riparian zone, the old growth trees providing large hollows for our hollowing nesting wildlife and the canopy providing shelter for our cattle.

For a variety of reasons, winter flowering trees can be hard to come by. By being a winter flowering eucalypt, the species provides a much needed food source for our birds, insects and even the grey-headed flying fox in the months leading up to Spring!

You bet we took the opportunity of seeing six species at once, we entered our sightings into iNaturalist!

Plan your biodiversity month

NATIONAL BIODIVERSITY MONTH

During September spend at least 20 minutes a day connecting with Nature.

1 Commit to spending 20 minutes a day in Nature	2 Download Seek by iNaturalist	3 Visit your council website to find local greenspaces	4 Learn about local biodiversity using Seek by iNaturalist	5 Whose Country you are on - Search the AIATSIS map	6 Count how many birds you see today	7 National Threatened Species Day
8 Go on a bug safari	9 Watch the 'Our Planet' series	10 Bushwalking with friends	11 National Bilby Day	12 Find your favourite tree	13 Share your Nature stories	14 Go for a stroll outdoors
15 Plan your trip to connect with Nature	16 Stargazing	17 Watch the sunrise or sunset	18 Road trip to a National Park	19 Cloud watching - what can you see?	20 Visit a local greenspace	21 Bird Watching
22 Discover your Backyard Biodiversity	23 Identify one plant using Seek by iNaturalist	24 Spend time on or near the water	25 Picnic in a local greenspace	World 26 Cassowary Day	27 Google "is QLD the most naturally diverse state in Australia"	28 Snap some wildlife photos
29 Learn how to reduce food waste	30 Listen to a Podcast about Nature					

Acknowledgement of Country

QTFN acknowledges the Traditional Custodians of Country throughout Australia and their diverse and continuing connections to land, sea and community. We acknowledge they were the first conservationists and scientists and have cared for this land for future generations. We pay our respect to their Elders past, present and emerging and extend that respect to all Aboriginal and Torres Strait Islander peoples today.

QTFN Queensland Trust for Nature

Upcoming events

October 2022 - LLRI Bioblitz

iNaturalist Statistics

4934	1441	131
Observations	Species identified	Observers