

Photo by Jono Hooper; Litoria pearsoniana



### IN THIS ISSUE

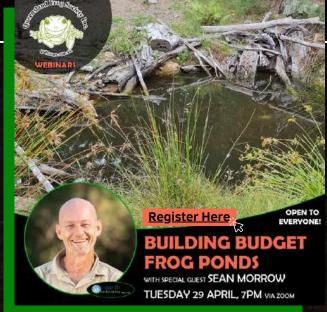
Pg 2 - President's Report

**Pg 4** - Over 3,000 Baw Baw Frogs Released into the Victorian forests

Pg 5 - 'Lost' Frog Species Rediscovered in Chile
After 130 Years

**Pg 6** - Breakthrough for Endangered Victorian Frogs

**Pg 7** - Two New Frogs Discovered in Litoria rubella





Thank you to our supporters!

Public Trust Fund: Total now stands at \$12,376.31

Any donations over \$2.00 are tax deductable, and all are added to our <u>research grant fund</u>, which is awarded annually

## **President's Report**

Hello once again to all of our QFS members. I hope you are all well? Unfortunately, numerous areas around the state have been impacted by natural disasters over the last few months. With the impacts of Cyclone Alfred in SEQ, the record flooding in Western Queensland and multiple flooding events in Northern Queensland, my heart goes out to all the people that have been impacted by these natural disasters over the last few months and I wish you all a speedy recovery. At least once these devastating flood waters recede, the land will come back to life and provide water, food and habitat for the animals in the coming years once they are able to return. Please reach out for help from friends, family or designated organisations if you are struggling or not coping.

As mentioned in the last Frogsheet, the QFS teamed up with ECOllaboration on the Sunshine Coast to help facilitate some frog surveys. The QFS attended five of the 15 organised surveys during late January, February and early March. This is a great initiative of ECOllaboration to run these surveys at 5 different locations on the Sunshine Coast. During these annual surveys vital data is recorded as well as raising awareness of frogs in the local are to a range of people.

I personally attended two surveys with Trevor from ECOllaboation. The first one was at the Maroochy Botanical Gardens on the 21st of February. We had a good turnout of 12 attendees but we didn't see or hear any frogs for the night even though it was quite wet and rained much of the afternoon prior. The habitat was suitable for a wide range of frogs. This was not normal for this particular site, so potentially the cyclone that was travelling down the coast may have impacted the activity of the frogs. On the next trip ECOllaboation went on to this location, they saw numerous frogs, which shows the importance of multiple surveys at a location to determine what species are present. We did see heaps of interesting creatures, particularly Giant King Crickets and it was still a great night out frogging.

The second survey that I attended was at a private property at Dulong. This was a stunning property with a huge range of native fauna and flora but unfortunately, we only had 4 attendees at this event. Maybe the Friday night football deterred people from attending! This property had numerous Beeping Froglets that could be heard and we found three Giant Barred Frogs and heard a couple more. We found a male and female Stony Creek Frog, heard numerous Tusked Frogs, heard numerous Great Barred Frogs and we located one Great Barred Frog. We also saw heaps of cool plants and creatures including a Rakali or water rat. The flooding that went through the lower parts of this property impacted the ground cover significantly and left the soil exposed for much of the survey area, so it lowered the numbers of frogs seen compared to prior surveys at this location. Jono Hooper attended three other surveys on behalf of the QFS at different locations.

Continued...

Photo by Ashley Keune; Mixophyes iteratus

Photo by Ashley Keune; Mixophyes fasciolatus



I'd like to sincerely thank Trevor and ECOllaboation for the work they did with these 15 surveys and we look forward to working with you on these surveys again in the coming years and on other projects in the local area.

The QFS also organised a frog pond building workshop at Sean Morrow's house on the 1<sup>st</sup> of March. You definitely couldn't get someone more experienced to talk about building frog ponds! This was a great event that had 15 people attend, including Jono Hooper and myself. We had people travel from Brisbane, the Glasshouse Mountains, the Gold Coast, Hervey Bay plus some people from around Gympie and the Sunshine Coast. This event was very well received by the attendees.

We went around and had a look at all of Sean's frog ponds and he spoke about their construction and why they were built in these particular places. After looking at the ponds and going for a walk around his beautiful property, we went back for a BBQ dinner at Sean's house. We had some sausages on bread with onions, sauce as well as a few salads and fruit. After we cleaned up a little and let our dinner settle for a bit, we then we went back out frogging. We only saw a few Striped Marsh Frogs though. We also heard some Graceful Tree Frogs, Tusked Frogs and some Emerald-spotted Tree Frogs. This was an unusually low number of frogs to be seen and heard at Sean's property, so potentially the approach of Cyclone Alfred may have changed the behaviour of the frogs.



Thank you to everyone who has been donating recyclable containers to the Queensland Frog Society. So far, \$431.80 has been raised. The team member number for donations is C11218433. This number can be shared with friends and family.

We hope you are enjoying seeing and hearing frogs in your area. If you have any stories or photos of your frog encounters, please share them with us for the Frogsheet.

Take care of yourselves, look out for each other and our environment.

Regards, Ashley Keune

# OVER 3,000 BAW BAW FROGS RELEASED INTO THE VICTORIAN FORESTS

Less than 500 individual Baw Baw Frogs (*Philoria frosti*) were previously estimated to inhabit the high altitude forests in Victoria. That was, until 3,000 Baw Baw Froglets and 40 adult frogs were released into the wild as part of the largest breeding program ever undertaken for this critically endangered species.

Led by Zoos Victoria, the frogs were carefully reintroduced to the Mt Baw Baw Plateau, a remote patch of cool temperate rainforest about 120km east of Melbourne.

Once common in this small alpine region, the Baw Baw frog has experienced a devastating population crash of around 98%, primarily due to chytrid fungus. Habitat loss from historic logging, changing weather patterns, and development have only added to the pressure. With fewer than 500 left in the wild, this release is a crucial step toward ensuring the species doesn't slip away entirely.

The frogs bred at Melbourne Zoo were raised under expert care, with every stage of their unusual underground life cycle replicated behind the scenes.

Unlike many frogs that lay thousands of eggs in open water, the Baw Baw Frog's eggs are laid in hidden, moist underground nests, where the tadpoles live a semi-terrestrial life before developing into tiny frogs.

This slow, specialised reproductive strategy means recovery takes time. Froglets released this year won't reach adulthood for another four to six years. But early signs are encouraging.

To give the adult frogs a better chance at survival, they've been fitted with tiny radio transmitters. Wildlife detection dogs will also help biologists locate the amphibians hiding under dense leaf litter.

Tracking will continue through October, when the males call in a brief annual window. Until then, it's a waiting game.



### 'LOST' FROG SPECIES REDISCOVERED IN **CHILE AFTER 130 YEARS**

Scientists in Chile have confirmed the return of a frog species not seen since 1893. Alsodes vittatus has been found alive and well—130 years after it vanished from scientific sight.

Originally described in 1902 based on specimens collected in the late 1800s. vittatus had long Alsodes researchers despite multiple expeditions into its last known habitat. But a recent mission led by Chilean researchers Dr Claudio Correa, Edvin Riveros Riffo, and Juan Pablo Donoso has changed all that. In 2023 and 2024, they rediscovered two separate populations of the frog in Chile's La Araucanía region.

The frog's original location was recorded only vaguely as being within the former Hacienda San Ignacio de Pemehue—an enormous estate with no precise coordinates. To find the exact location, the researchers turned to history: retracing the steps of French entomologist Philibert Germain, who first collected the frog in the 1890s. By studying Germain's notes and publications, the team pieced together a likely path he took through the estate.

That path led them to the Lolco and Portales river basins, where, at last, Alsodes vittatus revealed itself.

The frog's elusive nature meant that until now, no one had ever observed its behaviour, habitat, or threats in the wild. The team now warns that A. vittatus likely faces serious conservation risks, and given what's been seen so far, it may even qualify as endangered.

Sadly, A. vittatus is not alone. Many members of the Alsodes genus are either under threat or simply too poorly understood to assess. This rediscovery highlights just how little is known about the amphibians of South America's southern cone and how urgently they need our attention.

froa lovers in Australia. the For rediscovery of Alsodes vittatus is a reminder that absence doesn't always mean extinction.



Photo by Edvin Riveros; Alsodes vittatus

# BREAKTHROUGH FOR ENDANGERED VICTORIAN FROGS

In an exciting win for conservation, Melbourne Zoo has successfully bred two of Victoria's most endangered frog species for the first time; the Watson's Tree Frog (*Litoria watsoni*) and the Southern Giant Burrowing Frog (*Heleioporus australiacus*) — offering new hope for the species.

The Watson's Tree Frog was only identified as a distinct species in 2020 following genetic analysis. Just two years later, it was listed as endangered after the Black Summer bushfires devastated an estimated 85% of its known habitat. The Southern Giant Burrowing Frog, on the other hand, is a mysterious amphibian that spends most of its life underground, making it notoriously difficult to monitor in the wild.

Both frogs face severe threats including habitat destruction, extreme weather events, and chytrid fungus. Conservationists have long struggled to study or protect them due to their secretive habits and remote habitats.

In 2022, tadpoles from both species were collected and brought into care at the zoo's Amphibian Bushfire Recovery Centre. Over the past three years, specialist keepers have been refining husbandry techniques and replicating environmental conditions—like seasonal temperatures and rainfall patterns—to trigger natural behaviours.

Their patience and dedication has paid off. This breeding season, both species produced viable clutches of eggs, marking a world-first for each. It is a significant step forward, especially for the giant burrowing frog, which relies heavily on environmental cues and changes in atmospheric pressure to emerge from its underground home and seek a mate.

The ultimate aim of the program is to breed genetically diverse, healthy frogs that can be reintroduced to the wild. Scientists hope that, in time, they'll be able to produce large enough numbers to help restore dwindling populations and bring these species back from the brink.



Photo by Stephen Mahoney; Litoria watsoni



Photo by Ken Griffiths; Heleioporus australiacus

### TWO NEW FROGS DISCOVERED IN LITORIA RUBELLA

The paper Systematics of the Little Red Tree Frog, Litoria rubella (Anura: Pelodryadidae), with the description of two new species from eastern Australia and arid Western Australia released on 28 February 2025 in the journal Zootaxa explores the Desert Tree Frog (Litoria rubella) species complex, revealing significant genetic, morphological, and behavioural diversity. Through molecular analysis, advertisement calls, and morphology, researchers identified four distinct lineages within the complex. Two new species were described: one from eastern Australia and another from arid Western Australia. These findings highlight the ecological adaptability of Litoria rubella and its relatives, ranging from tropical forests to arid zones, and emphasize the importance of recognizing cryptic species for conservation efforts.

The four distinct lineages within the Litoria rubella species complex exhibit differences in genetics, morphology, and advertisement calls:

- 1. Eastern Mesic Lineage Litoria pyrina: Found in eastern Australia, this lineage is adapted to more humid environments. Its advertisement calls have unique pulse patterns and frequencies compared to others.
- 2. Western Arid Zone Lineage Litoria larisonas: This lineage thrives in the arid regions of Western Australia. It shows distinct morphological traits suited to drier climates and has a different call structure.
- 3. Central Arid and Northern Tropics Lineage Litoria rubella: This widespread lineage spans central Australia and the northern tropics. It is highly adaptable to varying climates and has overlapping but distinguishable call characteristics.
- 4. Tanimbar Islands Lineage Litoria capitula: Located in the Tanimbar Islands, this lineage is genetically and morphologically distinct. It represents Litoria capitula and is separated geographically from the Australian lineages.

These differences highlight the ecological diversity within the Litoria rubella complex.

The eastern mesic and central arid lineages of Litoria rubella can be distinguished by their calls and physical traits:

Eastern Mesic Lineage L. pyrina

- Call: Features a series of short, high-pitched pulses with a distinct rhythm. The dominant frequency is slightly higher compared to other lineages.
- Appearance: Typically has a reddish-brown back with a dark stripe running from the snout to the groin. The belly is cream-colored, and the groin may show pale yellow or orange hues.

Central Arid Lineage L. rubella

- Call: Produces longer, lower-pitched calls with fewer pulses per note. The rhythm is more spaced out compared to the eastern lineage.
- Appearance: Adapted to arid environments, it has a paler, sandy-brown coloration with less pronounced markings. The groin and thighs may have faint mottling.

These differences reflect their adaptations to distinct habitats.

The towns that might serve as approximate boundaries between the eastern mesic lineage and the central arid lineage of Litoria rubella are likely located along the transitional zone between eastern Australia's humid regions and the arid interior. Towns such as Longreach and Charleville in Queensland could represent this divide, as they lie near the edge of the arid zone. Similarly, Bourke in New South Wales might also mark a boundary area. These towns are situated in regions where environmental conditions shift from mesic to arid, aligning with the ecological preferences of the two lineages.

Although conservation status requires formal assessment, all three species described meet the The International Union for Conservation of Nature (IUCN) criteria for Least Concern, owing to each of their large range sizes and absence of obvious threats.

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## A WARM WELCOME TO NEW QFS MEMBERS!

Susan Tarbit-Hutchison, Jenny Newmann, Joanne Logan, Lauren Schoenauer, Sue Armstrong, Anne Pennington.



#### DATES FOR YOUR DIARY...

29 April 2025

7pm QFS Webinars: Building Budget Frog Ponds with Sean Morrow. <u>Register Here</u>

**11-13 July 2025**OLD Garden Expo



PLEASE EMAIL **EDITOR@QLDFROGS.ASN.AU** WITH ARTICLES FOR INCLUSION IN FROGSHEET!

DEADLINE FOR THE WINTER FROGSHEET CONTRIBUTIONS IS

14 MAY 2025