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MID-SUMMER EDITION



Photo by Jono Hooper; Mixophyes iteratus

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### RIC NATTRASS RESEARCH GRANT APPLICATIONS NOW OPEN

For more info, and to access the application form: <u>Click Here</u>



Thank you to our supporters!

Public Trust Fund: Total now stands at \$12,154.71 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 that everybody has had a happy Christmas and New Year period. I would like to wish everyone a happy, safe and healthy 2025. I have been lucky enough to be able spend quite a lot of time with my family over this period which has been lovely. I hope that you have got to do the same.

The state has seen a great start to the wet season, with many parts of Queensland receiving record rainfall or very high rainfall for December. Hopefully the wet weather is a little more consistent this year to allow for a good breeding season for our amphibian friends. The wet weather has definitely kept the frogs calling consistently on my property for the Summer so far.

The Christmas period is generally one of our guieter times of year in terms of memberships and displays but we are already booking in displays and activities with some Find a Frog in February activities, including the Tewantin State School Frog Survey at Heritage Park, several surveys that we will be teaming up with ECOllaboration during February and March as well as booking in the Off Grid Expo already. We look forward to getting out and about again doing some surveys as well as spreading information about frogs and frog friendly gardens.

A few of our committee members, Jono and Desley, and several of our members, were lucky enough to be able to go to Bellthorpe Stays from the 6th to the 8th of December. The camp was a huge success and everyone that attended provided very positive feedback about the camp regarding the frogs and other animals that were seen, the leaders: Jono and David, and about the stunning property itself. With this type of feedback it is definitely something we will look at running again. A big thank you to Jono for organising the trip on behalf of the QFS. Also, a huge thank you to David Clark for the great deal that we were given for the accommodation for the group and ensuring the group had such an inviting stay.

Our involvement in the Containers for Change Program has been going for one year now and we have continued to receive steady donations throughout this period. This money will go directly towards our scholarship recipients to help them with their vital frog research. Thank you to all that have donated your recyclable containers to the Queensland Frog Society. For the time that we have been involved we have now raised a total of \$364.70 which is a great outcome. The team member number to donate to the Queensland Frog Society is C11218433. You are more than welcome to share this team number with as many friends and family as you wish.

Continued...

We are looking forward to giving away our Ric Nattrass Research Grant this year as we had no applicants in 2024. If you are interested in applying for a scholarship or know somebody that is looking at doing research into frogs this year, let them know as applications are now open! Applications will close on the 17th February which isn't too far away. Check out our website for more information.

Also, if you are interested in joining in with our Zoom management meetings (which are held on the third Wednesday, of every second month), email one of us on the committee and we can send you the link to attend. We would love to see more of our members at our meetings!

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

Regards, Ashley Keune

# FROG CAMP 2024

Photo by Jono Hooper; Mixophyes iteratus



Our first frog camp since 2017 took place on the weekend of 6-8 December 2024 in Bellthorpe, located south of Maleny and Conondale in the Moreton Bay hinterland. We were very grateful to our hosts, David and Wendy of Bellthorpe Stays, who provided some lovely and very affordable cabin-style accommodation, nestled amongst their 400-acre property.

The camp kicked off with a causal afternoon tea and conversation with the 12 camp attendees, overlooking the eastern extent of the property. We did find ourselves battling to be heard over the deafening sound of the cicadas, though, which sang from dawn to dusk! After a quick dinner, we met at the Old Dairy shed for the official welcome and safety briefing. By this time, we could already hear the raucous chorus of great barred frogs (*Mixophyes fasciolatus*) from the creek below.

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#### 15 JANUARY 2025



We followed David along one of the many walking tracks, down along the wetland area of the creek, where we say many of the aforementioned species and also heard many, many of the vulnerable tusked frogs (*Adelotus brevis*) in chorus. I had never heard this many before! Also joining along in song were eastern sedgefrogs (*Litoria fallax*), including many we saw, as well as hearing clicking froglets (*Crinia signifera*), dusky gungans (*Uperoleia fusca*) and an occasional call from an emerald-spotted treefrog (*Litoria peronii*).



The track soon led us into some amazing remnant rainforest - the same regional ecosystem as Mary Cairncross on the adjacent Blackall Range, featuring large strangler figs and piccabean palms beside the creek. Great barred frogs remained plentiful, so much so that avoiding stepping on them was challenging, as were the myriad of crayfish burrows predominately of the Maleny spiny crayfish (Euastacus urospinosus), though the larger Conondale spiny crayfish (U. hystricosus) also occurs on the property. As we ventured on, the low, guttural calls of the vulnerable giant barred frog (Mixophyes iteratus) could be heard, and we soon saw several of these seriously impressive frogs. A large spiny rainforest katydid (Phricta spinosa) also caught our attention, nearby. Many cascade treefrogs (Litoria pearsoniana) could be heard calling from piles of flood debris along the creek, with some pairs in amplexus (the mating position of frogs). As we continued along the trail, a bright green glow caught my attention - bioluminescent fungi! It was however just out of reach, growing on a tree trunk a metre above head height. We finally arrived at the top of the Heritage Falls group, a rocky section of the creek, before it drops in elevation. Here, we hoped for the odd southern orange-eyed treefrog (Litoria chloris) and indeed, one was spotted on a low overhanging branch, much to the excitement of the crowd. By this time, it was about 10:30pm – much to the surprise of us all! We made our way back along the track towards our base at the Old Dairy, before dispersing and calling it a night in our cabins.

The next morning, some of us attempted to listen to the dawn bird chorus, though again the cicadas made that impossible! We met up at base where we ventured outside of the property to the old Bellthorpe sawmill, with David as our guide. He, Wendy and the local community had been involved in restoring components of the old mill, as much of the old equipment had been buried following the mill's closure. We also visited the former primary school, which still remains and is caretaken by a fellow who also gives much of his time to restoring the buildings which are used from time to time by groups for research purposes. We retreated back to base at midday for a shared BBQ lunch and further conversation, before resting up and preparing for the next instalment of the evening.

At 4pm we all gathered and headed off in 4WD vehicles down into the as yet unexplored section of the property, which remains largely in-tact or undisturbed from historical logging activities of the region. After walking along a section of Palm Creek, and driving through several creek crossings, we arrived at the location where the marsupial frogs (Assa darlingtoni) are known from. Unfortunately, and not too surprisingly, we heard none calling during the cicada chorus, despite spending good effort listening out for them and searching under palm fronds etc. We left for our cabins and a quick dinner, before meeting back at base and venturing to the upstream section of the creek we visited the night before.

Our first stop was a cattle trough, where David knows several broad-palmed rocketfrogs (*Litoria latopalmata*) call reliably from. We headed to the trough and quickly spotted one not far from the base of the trough. We then began to walk down to the creek, but before getting too far, I spotted a female tusked frog, which was a great opportunity to show this species to the group, as thus far we had only heard the males calling. Continued...

Also present in good numbers were slender bleating treefrogs (Litoria balatus), which were hanging around the cattle yard and timber piles behind the Old Dairy base. As we ventured through open pasture grass, a loud chorus of the dusky gungans could be heard from a nearby dam. Several of us walked down to the dam, and it wasn't long before one of these male frogs was spotted amongst the very long pasture grass. This individual was a much lighter colour than others I had seen before, and again was a great chance for people to see a species that isn't often encountered. The remainder of the evening was spent walking along a section of the creek which is in the process of restoring the riparian vegetation. And to David's great delight, a large female giant barred frog was spotted on the track, guite a distance further upstream than he has found them in the past - an encouraging sign! In the distance we could hear several emerald-spotted treefrogs and a good chorus of slender bleating treefrogs, so we made tracks above the creek to where the small dam was. At this point, most were keen for an earlier night than the night before, and as we retreated to our base, a golden crowned snake (Cacophis squamulosus) was spotted; the first snake sighting of the camp!

Some of us spent the next morning trying to find and photograph birds often encountered on the rainforest margins, including the regent bowerbird (*Sericulus chrysocephalus*), whilst others attempted to sleep in and ignore the again raucous chorus of the cicadas! Overall, we detected 14 frog species, seeing and hearing most of these. Feedback from camp participants and our fantastic hosts have been overwhelmingly positive, as we look to run another camp in the new year. A big thank you to David and Wendy, and to our enthusiastic members who attended the camp!

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## **RIC NATTRASS RESEARCH GRANT APPLICATIONS OPFN**

Applications for the Ric Nattrass Research Grant are still open! This grant aims to support research into Queensland's frogs. A maximum of two grants, each worth \$1,500, will be awarded this year. If you are passionate about frog research, this is an incredible opportunity to contribute to the field. Applications close on **17 February 2025**.

For more information, and to access the application form: Click Here

# FEBRUARY IS COMING AND SO IS THE 'ARMY' OF FROG FINDERS JOIN THE TEAM!



Frogs are endearing, non-threatening and relatively easy to observe. Many are key indicators of a healthy environment. Therefore, humans could do well to take an interest in this animal group to ensure we know where they are and to keep their populations healthy.

The Find a Frog in February citizen science program is entering its 9th year and has a large community of over 1,800 people from all over the program area (Sunshine Coast, Noosa, Gympie and Fraser Coast council regions) who have been looking for frogs and submitting their observations. The program has been increasing awareness of frogs and their needs, and letting people know how to go about looking for frogs and how to make sure we give frogs the best chance. Until now 'Froggers' have sent in 23,400 records of 39 species.

The program area is home to over 45 frog species; 10 of these are listed as threatened or have disappeared – that's nearly 1/4! Frogs are easily affected by changes in the air, water and land. Collecting information on their whereabouts and the habitats they use means we can better manage the environment to protect them into the future. We offer these suggestions to help your local frogs:

- Make your frog observations count submit your photos and/or call recordings to FFF or a reputable database (see below).
- Monitor one or more sites every year during February.
- Keep some areas 'messy' logs and branches, leaf litter, rock piles, tall grass (a 'high-rise' structure provides homes for more beings than a single story dwelling).
- Provide water ponds, dams, swamps, low areas that fill when it rains, creeks all with a variety of vegetation, structures and even some bare areas.
- Don't move eggs, tadpoles or frogs about this increases the risk of disease spread.

Continued...

- Keep pollutants out of the environment chemicals travel easily in water that flows across the land, along drains and through the soil profile. Soap is a frog's enemy!
- Disinfect your shoes and equipment if moving between water bodies to stop the spread of frog diseases (use 1% bleach solution for 1 minute or dry items out completely).
- Promote the protection of waterways and water quality in your area.
- Consider protecting and reinstating wetlands (billabongs/swamps) that are grazed and/or have been drained or modified.
- Keep your cats indoors at night as they hunt frogs and other wildlife.
- Know the difference between Cane toads and native frogs and take care if you are controlling Cane toads.
- Act to reverse climate change (see 10 actions: <u>CLICK HERE</u>).

There are 4 ways to send in your observations:

- FFF record sheet at <u>https://mrccc.org.au/frog-in-february/</u> complete and send photos in for identification, verification and entry to the Queensland WildNet database.
- Email <u>findafrog@mrccc.org.au</u> with your photos and/or audio recordings for identification and lodgment.
- Join the 'Find a Frog in February' project in iNaturalist and submit your photos and recordings of calling frogs.
- Join the 'Find a Frog in Feb MRCCC' group in the FrogID app to submit your call recordings.

For more information go to <a href="http://mrccc.org.au/frog-in-february/">http://mrccc.org.au/frog-in-february/</a>

Contact a team member: email findafrog@mrccc.org.au or phone (07) 5482 4766

'Happy frogging' from the Find a Frog in February Team. We look forward to hearing from you!

Find a Frog in February is proudly supported by the Sunshine Coast Council, Noosa Shire Council, Gympie Regional Council and the Fraser Coast Council, and delivered by the Mary River Catchment Coordinating Committee.

Photo by O. Scully, Litoria chloris

Photo by Eva Ford, MRCC

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# UNRAVELING THE MYSTERY OF CRICKET FROG SKITTERING

Cricket frogs, native to regions like Virginia and North Carolina, exhibit a fascinating ability to move across water in a way that seems almost magical. This behavior, often referred to as "*skittering*," has drawn the attention of scientists eager to understand the mechanics behind it and its potential applications.

A team of researchers at Virginia Tech, led by Professor Jake Socha, captured this movement using high-speed cameras. By recording at 500 frames per second, they showed that cricket frogs don't truly glide or walk on water. Instead, their motion involves a series of quick jumps paired with brief moments of submersion. This pattern, likened to how dolphins leap through water, involves distinct phases that occur in rapid succession.

The frogs' motion begins with a powerful push-off from their hind legs, launching them into the air. While airborne, their bodies maintain stability, creating the impression of a seamless glide. As they descend, their front legs touch the water first, followed by the rest of their bodies. Once submerged, they retract their legs to prepare for the next leap. This entire sequence is so fast that it appears almost continuous, giving the illusion that the frogs are walking or skipping across the surface.

Several physical traits enable this unique movement. The frogs' hind legs are highly muscular, providing the necessary thrust for repeated jumps. Their lightweight bodies reduce drag, allowing for quicker transitions between leaps. Flexible joints in their legs ensure efficient motion, while their slightly flattened bodies help them re-enter the water smoothly. Additionally, their skin minimises friction and aids buoyancy, contributing to their efficiency.

These findings go beyond biology. The mechanics of this movement could inspire innovations in technology, such as amphibious robots or devices designed for aquatic tasks. By studying the cricket frog's abilities, scientists can uncover insights that may influence future engineering advancements.

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### **Executive Committee**

Patron – Dr Glen Ingram

**President** – Ashley Keune *Email*: president [at] qldfrogs.asn.au

**Vice President** – Ryan Carleton *Email*: vicepresidents [at] qldfrogs.asn.au

Secretary – Jenny Holdway Ph: 0491 140 720 Email: secretary [at] qldfrogs.asn.au

**Treasurer** – Andrew Knowles *Email*: treasurer [at] qldfrogs.asn.au

**Events and Initiatives Coordinator** – Jono Hooper *Email*: events\_initiatives [at] qldfrogs.asn.au

**Newsletter Editor** – Kayla Beaton *Email*: editor [at] qldfrogs.asn.au

**Frogshop Sales** – Jenny Holdway *Ph*: 0491 140 720 *Email*: frogshop [at] qldfrogs.asn.au

### A WARM WELCOME TO NEW QFS MEMBERS!

Chen Pingchih, Rebecca Ayala, Dianiela Lopez, Lenny Minge, Mellissa Tonkin-Taylor, Ramola Yardi, Jodi De Labertauche, Carolyn Russell, and Michael Gray.



### DATES FOR YOUR DIARY...

**1 to 2 February 2025** Find a Frog in February Mini Bioblitz: <u>Click For Info</u>

**14 February 2025** Heritage Park Frog Survey

#### 22 February 2025

Frog Workshop + Frogging Afterwards at Mooloolah Landcare Nursery: <u>Click For</u> <u>Info</u>



PLEASE EMAIL EDITOR@QLDFROGS.ASN.AU WITH ARTICLES FOR INCLUSION IN FROGSHEET! DEADLINE FOR THE AUTUMN FROGSHEET CONTRIBUTIONS IS 11 FEBRUARY 2025