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Thank you to our supporters!

Public Trust Fund: Total now stands at \$10,095.98

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

President's Report

Hello once again to all of our QFS members. I hope that everybody that has been affected by the fires in the last few months are doing okay and I wish you all the best in your recovery. Hopefully the fire season doesn't continue the way that it has started. At least there has been some much needed rainfall in many areas over the last several weeks. With a bit of luck this rainfall will continue without the destructive storms as many areas still need much more rainfall in the coming months.

The QFS AGM was held on the 22nd of October 2023. For the first time in many years we held the AGM face to face which was great to be able to meet with most of the committee and numerous members of the society in person this year. The meeting was held at the Karawatha Forest Discovery Centre and I would like to thank them for their hospitality and the use of their great meeting room.

We also offered a Zoom meeting option for those that couldn't attend the AGM in person. It was a successful meeting and it was great to have many members attend the meeting in person as well as via Zoom. Congratulations to all of the elected members of the new committee for the next 12 months. I am excited to be able to continue on as the President of the QFS for my fourth year and I look forward to working with the newly elected committee as well as our members and the community.

Other positions on the committee include Brett Malcolm, who has been elected as the new Vice President. Andrew Knowles has joined the committee as our new Treasurer and we look forward to working with you. Jenny Holdway has been elected as the Secretary for the QFS once again. Jono Hooper was also re-elected as our Events and Initiatives Coordinator. Desley Fricke has stayed on as our Minutes Secretary and Kayla Beaton has continued in her role as our Editor. Thank you to all of the newly elected committee for investing some of your valuable personal time into the QFS for the next 12 months.

After the AGM, we had both of our guest speakers Roy Farman and Jordy Groffen talk to the members about how their research has progressed throughout the year. Both of these university students received the Ric Nattrass Research Grant of \$1,500 each from the QFS earlier in the year. Both of these presentations were very interesting and I know that I learnt a lot from both of them as I'm sure all of the members in attendance did. Both of their presentations were very well received and they each took quite a few questions afterwards for the members that were in attendance.

It is great that we have students out there doing research into different aspects to help protect frog species into the future and I feel proud that the Queensland Frog Society can help be a part of this. None of this would be possible without our memberships and the generous donations that we receive. If you are interested in helping contribute to the research into frogs you can now donate online through the *Donate Here* tab at this link: http://www.qldfrogs.asn.au/ric-nattrass-research-grant/

Continued....

I was lucky enough to get to do a quick frogging trip near Canungra, in the Gold Coast hinterland mid November. Many frogs were only heard as the terrain was quite difficult to access where the frogs were calling from. It was just after some decent rain and storms the night before. I was happy with the frogs that we heard and saw for the outing compared to many locations lately.



There were numerous Great Barred Frogs (Mixophyes fasciolatus) heard and one seen as well as several Eastern Sedge Frogs (Litoria fallax) heard calling from high in the gum trees. We saw some male Stony Creek Frogs (Litoria wilcoxii). There were heaps of Tusked Frogs (Adelotus brevis), Bleating Tree Frogs (Litoria dentata), and Beeping Froglets (Crinia parinsignifera) present, but we only heard all of these species calling. We also heard a few Ruddy Tree Frogs (Litoria rubella) calling as well as a few Emerald Spotted Tree Frogs (Litoria peronii). A big thank you to Dave from Aircrete Domes Australia for showing me around your beautiful property.

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

Regards Ashley Keune

Containers For Change

We are excited to announce the Queensland Frog Society has begun fundraising with Containers for Change.

At any Containers for Change depot you will now be able to donate the refund directly to the Queensland Frog Society. Your donations will go towards containing our Ric Nattrass Grants and other initiatives.

Remember - you can now take WINE BOTTLES to collection points!





Team Member number



Update on Ric Nattrass Grant Recipients

Jordy Groffen

Can parental care behaviour and breeding microhabitat protect Critically Endangered nursery frogs from rising temperatures on Wet Tropics mountaintops?

Jordy is conducting a comprehensive study on the breeding biology of nursery frogs, specifically Cophixalus and Austrochaperina. The focus is on understanding how these terrestrial breeders, facing increased vulnerability due to climate change, make microhabitat choices and exhibit parental care behaviors critical for their survival.

Key Points:

- Conservation Concern: Terrestrial breeding heightens the vulnerability of nursery frogs to climate change.
- Microhabitat and Parental Care: The study aims to uncover the impact of nesting site choices and parental care behaviors on the species' success.
- Climate Threat: Nursery frogs, particularly in Australia, are under severe threat from climate change.

Research Methods:

- Camera Surveillance: Non-invasive cameras are deployed to observe parental care behaviors across different environmental conditions.
- Data Loggers: Loggers inside nests will reveal how microhabitats and parental care protect eggs from extreme climatic conditions.

Significance:

This research is poised to provide a detailed understanding of nursery frog breeding biology, with direct implications for guiding conservation efforts in their natural habitats.

Roy Farman

Roy is investigating Queensland's Quaternary fossil record, comparing the biogeographic ranges of fossil frogs with contemporary species and assessing their response to climatic change events.

Research Methods:

Roy employs a taxonomic guide of Australian frog ilia, Micro-CT scans, and geometric morphometrics. These methods aid in identifying fossil frogs from Queensland and enable the comparison of biogeography between extant and fossil frogs from Queensland fossil deposits.

Significance:

Insights into how prehistoric frogs coped with climatic conditions provide valuable lessons for species resilience amidst the current climate crisis. Identifying historical habitats may also assist in creating suitable translocation areas for vulnerable frog species.

Roy's project enhances our understanding of palaeobiogeographical patterns, skeletal elements among Australian frogs, the evolution of Australian frogs, and their relationships with other species. Moreover, it contributes to our knowledge of the frog species present in Queensland during the Tertiary and Quaternary periods.

Update:

To date, Royhas successfully Micro-CT scanned multiple living and fossil taxa from diverse Australian taxonomic groups, laying the groundwork for identifying Queensland's fossil frogs.

Hidden Havens: Australia's Farm Dams Serve as Crucial Sanctuaries for Endangered Frog Species

Freshwater-dependent frogs, in particular, are in a precarious situation as their habitats in rivers, creeks, and lakes are increasingly vulnerable.

However, research has found often-overlooked farm dams serve as crucial sanctuaries for over two-fifths of Australia's surviving frog species.

Through analysis of recordings from programs such as the FrogID app, the calls of frog species facing extinction have been heard in close proximity to these farm dams.

Australia boasts an extensive network of 1.8 million farm dams, with thousands more added each year. The pertinent question arose: which of these dams serve as vital habitats and for which species of frogs?

Leveraging the use of the aforementioned app, and the Melbourne Water's Frog Census app, it was found older dams with a medium surface area, situated in areas with rainfall catchments under 10 hectares, are key frog habitats.

Endangered species, such as Sloane's froglet and the Northern heath frog, thrive in these dams. It appears that farm dams provide refuge not just for common frogs but also for those at risk.

Older mid-sized dams steal the spotlight, with their established aquatic plants and surrounding vegetation, creating an ideal haven for frogs. The balance between protection from drying out and reduced danger from predators makes these dams essential for frog survival.

Interestingly, frogs and farmers can coexist harmoniously. While dam banks might face trampling by livestock, farmers can mitigate this impact by fencing off areas and protecting the environment.

This approach not only benefits livestock health and water quality but also safeguards breeding habitats for various species, including frogs.

As the federal government explores nature repair markets, farm dams could gain recognition for their role in supporting frog life. This prospect offers a mutually beneficial scenario for both farmers and frogs.



Executive Committee

Patron – Dr Glen Ingram

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

Vice President – Brett Malcolm *Email*: vicepresidents [at] qldfrogs.asn.au

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Frogshop Sales - Jenny Holdway Ph: 0491 140 720
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A WARM WELCOME TO NEW OFS MEMBERS!

Catherine Cox, Cheryl Esson,
Rachelle Brown, Andrew
Knowles, Lorraine Harbison,
Jani Forest-Wyatt.

DATES FOR YOUR DIARY...

15 April 2024 Jimboomba Garden Society

4-7 July 2024 Queensland Garden Expo at Nambour Showgrounds

3 & 4 August 2024 Off Grid Expo at Gympie Showgrounds



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

DEADLINE FOR MID-SUMMER FROGSHEET CONTRIBUTIONS IS

28 DECEMBER 2023