




FROGSHEET

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*Members of QPWS and Currumbin Wildlife Sanctuary release Kroombit Tinkerfrogs at Kroombit Tops National Park.
Read more on **pg 2**. Photo courtesy of Queensland Government*



IN THIS ISSUE



Pg 2 – President's report

Pg 2 – Tinkerfrogs released at Kroombit!

Pg 3– Ric Natrass Research Grant 2023

Pg 4 – Heritage Park frog search report

Pg 6 – Dr Ed Meyer receives honorary life member award



**Thank you to
our supporters**

QFS President Ashley Keune and his frog-finding apprentices at Heritage Park in Tewantin. Photo provided by Ashley Keune.



Public Trust Fund: Total now stands at \$9,229.58
Any donations over \$2.00 are tax deductible

President's Report

HELLO AGAIN TO ALL OF our QFS members. It has been a while since our last newsletter as we are currently looking for a new Editor. To our outgoing (and interim) Editor Alice, you have gone above and beyond with your assistance with the newsletters for your time as Editor, especially of late. We can't thank you enough for the great work that you have done over the years. We wish you all the best with your future endeavours.

Our thoughts are with the people in North-Western Queensland that have been impacted by severe flooding in the last month. In the long term this will be beneficial for the environment but in the short term many families have been through a difficult time, not to mention the loss of livestock and fauna as a result of these floods. I wish you a speedy recovery.

The rain this year has been more widespread throughout the state but it has still been very patchy for certain areas. In southeast Queensland there has been much less rainfall than the last few years. As a result, there have been fewer species of frog sighted compared to previous years, and the numbers of frogs in this area is down significantly. Hopefully, this corner of Queensland will have some decent rainfall before the end of the wet season.

I was lucky enough to be able to join forces with Eva Ford from the Mary River Catchment Coordinating Committee to run the Find A Frog in February initiative at the Tewantin State School once again this year. You can read more about this on pg 4.

The Queensland Frog Society was approached by the Bulimba Creek Catchment Coordinating Committee to run a workshop at their lovely premises once again at Carindale. This took place during the school holidays on Tuesday, 11th April. We have a great connection with this group, and they are great supporters of the work that we do. We have done several presentations and workshops here over the last few years. A big thank you to Genevieve again for the invitation.

The workshop was directed more at children this time. We looked at different frogs in the area and investigated their appearance and calls, the life cycle of frogs, and we played a few interactive games to help the participants learn more about different frog habitats. We also built a few different styles of frog hotels that can be made without any tools.

Don't forget if you are interested in joining in with our general meetings, just get in touch so we can send you a link, and you can see what we get up to behind the scenes! We would love to see more of our members joining us at our management meetings. I look forward to seeing you soon.

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

Warm regards,

Ashley Keune



Tinkerfrogs released at Kroombit!

NEARLY 30 YEARS OF PERSISTENCE and vision has paid off when the first 24 captive-bred critically endangered Kroombit Tinkerfrogs (*Taudactylus pleione*) were released at Kroombit Tops two weeks ago! This is a huge milestone for this species, and one which a small group of QLD Frog Society volunteers helped to achieve during the Kroombit Frogsearch trips over the last three years, funded by a Community Sustainability Action grant awarded by the Queensland Government. Our own Dr Ed Meyer, Coordinator of the Kroombit Frogsearch program has been instrumental in the success of the captive breeding program, alongside Harry Hines of



*A captive bred Tinkerfrog being released at Kroombit Tops.
Photo courtesy of Queensland Government.*

QPWS and Michael Vella of Currumbin Wildlife Sanctuary. See the short release video [here](#).

Ric Natrass Research Grant 2023

CONGRATULATIONS TO JORDY GROFFEN AND ROY FARMAN, each a recipient of the 2023 Ric Natrass Research Grant! Jordy is a PhD student at James Cook University, and Roy is a PhD student at the University of New South Wales. Here is a summary of their work, in their own words.

Roy Farman

"My aim is to use the Quaternary fossil record of Queensland to explore the biogeographic ranges of fossil frogs and compare those ranges to living frog species today. Also, to compare the fossil frog response to climatic change events compared to living frogs."

The fossil record of Australian frogs is relatively unknown when compared with other animals. Australian fossil frogs are closely related to living forms today, with many living frogs represented in the fossil record. Understanding how prehistoric frogs dealt with climatic conditions in the past will help shed light on species that might be able to cope with our current climate crisis. Additionally, the earth's temperature has been rising due to climate change and is causing the shift of many frogs to occupy cooler and wetter habitats than what they used to inhabit. Identifying the habitats that frogs inhabited historically could potentially help us provide more suitable translocation areas for vulnerable frogs."



Roy in his PhD lab at UNSW. Photo courtesy of Roy Farman.

I intend on using my taxonomic guide of Australian frog ilia, as well as Micro-CT scans and geometric morphometrics to identify fossil frogs from Queensland and then compare the biogeography of extant and fossil frogs from Queensland fossil deposits. My project will benefit frogs in QLD by increasing our understanding of palaeobiogeographical patterns, understanding of skeletal elements among Australian frogs, the evolution of Australian frogs and their relationship between other species, as well as increasing our understanding of the types of frogs present in Queensland during the Tertiary and Quaternary periods."

Jordy Groffen

"Amphibians that breed on land, instead of in water, are at higher risk from climate change, making these species of particularly high conservation concern. Eggs laid on land are predicted to be at risk of desiccation from higher temperatures and lower moisture. The success of young will come down to microhabitat choices (i.e., nesting sites) and parental care behaviours. Nursery frogs (Cophixalus & Austrochaperina) are terrestrial breeders with 'direct development' — eggs are laid in moist leaf-litter and are attended through development by a male frog."



Jordy out in the field testing equipment. Photo courtesy of Jordy Groffen.

In Australia, nursery frogs are primarily restricted to the mountaintops of the Wet Tropics region in north-east Queensland. Nursery frogs are the most threatened animal genus in Australia, with five species listed as 'critically endangered' and others 'endangered' and 'vulnerable'. The primary threat is climate change."

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Climate change impacts are generally based on adults and the key knowledge gap is whether breeding biology in these species makes them even more susceptible to climate change than currently thought.

*Breeding biology of these species is very poorly known. I will study parental care across *Cophixalus* species, under varied environmental conditions in the field (low elevation, upland areas, heatwaves, drought), to uncover the details of nest choice and parental care. To do this, I am using non-invasive small cameras and data loggers in natural and artificial nesting sites in the rainforest. This will determine how variation in parental behaviour impacts larval survival and differs between species and microhabitats. The loggers inside the nests determine whether nest site microhabitat and parental care behaviour protect eggs from climatic extremes.*

My project will result in a detailed understanding of nursery frog breeding biology, particularly in the context of potential impacts of climate change. The

results will directly guide conservation efforts in the wild."



*A Robust Frog (*Austrochaperina robusta*) observed by Jordy while out in the field. Photo courtesy of Jordy Groffen.*

We wish Jordy and Roy all the best with the remainder of their PhDs, and we look forward to receiving updates later in the year!

Heritage Park frog search report

APPROXIMATELY 16 STUDENTS FROM YEAR 1 to Year 6 took part in the Find a Frog in February (FFF) initiative on Friday, 24th February. FFF is a citizen science program delivered by the Mary River Catchment Coordinating Committee. This program enables the community to help close the knowledge gaps that exist for our local frogs. It covers the Mary, Noosa and Burrum River catchments and coastal areas from Peregrine to Burrum Heads, including Fraser Island.

This is the second year that Tewantin State School has taken part in FFF, and this will be an ongoing project that the school will take part in for several years. Most of the children that participated in the frog survey attended a few educational sessions during some of the play breaks in the weeks prior to the survey. In these sessions we went through facts about frogs, how to identify different frogs by their call and their appearance, the differences between toads and frogs, how to use the data collection sheets, and the safety requirements for the event.

The group of children, their parents, myself and Eva Ford from the Mary River Catchment Coordinating Committee arrived at Heritage Park at approximately 6:30 pm with high hopes we would

see several frogs as it had rained on and off in the days prior and we had showers that day. Unfortunately for us, there was a heavy downpour just before we started the survey. We hoped this short heavy downpour may bring out the frogs for us, but it wasn't to be.

The frog survey took place within Heritage Park and we followed the designated paths, walked around the edge of the open grassed areas of the park as well as walking along the tracks and bridges within the park. We didn't walk into the bush within the park itself so we caused as little disruption to the park as possible and for the safety of all involved.

Due to there being so little rain for the summer months this year, the park itself was extremely dry, even though there was some rain in the days prior. Due to this, the species of frogs seen and heard were limited and the quantities of these frog species were very low. We only located two Striped Marsh Frogs for the whole survey. We also heard a Tusked Frog in the park, which was great to hear, as they are endangered or locally extinct in many areas around Australia. We were not able to see the Tusked Frog due to it being in a place we couldn't access and the area being covered in thick debris. We heard several

Continued on next page...

Eastern Sedge Frogs calling as well. There were also numerous toads present in this location, but their numbers were down massively compared to last year, which can also be attributed to the drier weather. The survey concluded at 8:30 pm.

On our walk we found a very large possum, lots of different species of spiders, heaps of other insects, numerous millipedes and many native giant snails were also spotted. The species and the numbers of the frogs and mammals that were recorded by the group on the night have since been uploaded onto a worldwide data base and this information can be used by a variety of groups to help protect the species located within the park as well as the park itself. The data that was collected will be able to be used to monitor the changes in the species and the

size of the populations at this park over the coming years. Even though we didn't see many frogs, it was still valuable data that we collected.

I must commend the students that attended on the night for their behaviour and enthusiasm. They did the school proud and helped make a difference to protect the environment and the species that reside in it. It was great seeing the kids and the parents enjoying being outside conducting a survey like this. We look forward to our end-of-year survey in October or November. Congratulations to all involved and thank you for the great feedback from the families that participated!

Ashley Keune



Students from Tewantin State School and other volunteers who took part in the Heritage Park frog search for 'Find a Frog in February'. Photo courtesy of Ashley Keune.

Send us your frogging photos and stories!

Don't forget that we love to see pictures and hear stories of the frogs that you find in your area, so get in touch and tell us all about your frogging adventures!

Dr Ed Meyer receives honorary life member award

ED IS THE LATEST RECIPIENT of the honorary life member award. He has been involved with the QLD Frog Society since the 90's and has volunteered countless hours with the Society over the years. The success of the Kroombit Tinkerfrog breeding program at Currumbin Wildlife Sanctuary is in large part thanks to his ongoing commitment to frog conservation, and likewise, the achievements of the Kroombit Frogsearch project could not have been possible without the tireless work he put in to make it happen.



Ed Meyer receives his award. Congratulations, Ed!

DATES FOR YOUR DIARY ...

Display at the QLD Garden Expo
7-9 July, Nambour Showgrounds



A warm welcome to new QFS members!

Clare Doherty, Natalia Lucano, Melanie Marriott, Soraya Cilento, Sabine Wildman, Lesa Fazey, Felicity Lewis, Alice Curruthers, April Gunning-Davis, Sharon Roberts, James Fountain, Claudia Amouzandeh, Kate Beskeen, Emily Rush, Chloe Harris, Roy Farman, Lorenzo Bertola, Jordy Groffen, Kristie Green, Susanne Lind-Rutter, Linda Mc Mahon, Raylee Croft, Clare Hawse, Michael Muhleck, Sandra Oakley, Robin Villiers-Brown, Wendy Lamp, Bruce Meers.

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