

FROGSHEET

www.qldfrogs.asn.au | questions [at] qldfrogs.asn.au | [f/qldfrogsociety](https://www.facebook.com/qldfrogsociety) | [@qldfrogs](https://www.instagram.com/qldfrogs)

THAT TIME OF YEAR

The last few months of the year have been busy, with our AGM in October, two frog workshops in November and a wildlife habitat workshop we presented at just last weekend.

Our Annual General Meeting was well attended in October, which saw the bulk of the Management Committee re-elected to their former roles. We were then treated to two presentations; one by our Ric Nattrass Grant recipient, Alannah Filer who updated us on the interesting findings from her research into the interactions in calls and pond use between the acid-specialist Wallum Sedgefrog and widespread-occurring Eastern Sedgefrog; and the second by Harry Hines from QPWS who provided an update on the status of QLD's amphibians, particularly the Kroombit Tinkerfrog (*Taudactylus pleione*). Harry shared with us that a breeding program had begun at Currumbin Wildlife Sanctuary in an effort to prevent the continuing decline of this critically threatened species. The AGM also provided a great opportunity to catch up with our local members and scientific minds!

On the eve of National Frog Week in Australia, our President delivered a workshop at Mary Cairncross Scenic Reserve to a full room of people keen to learn about their local frog species. This was followed by a BBQ dinner and then the always-exciting frogging after dark. Despite the dry and at times windy conditions, five Great Barred Frogs (*Mixophyes fasciolatus*) were found out and about along the edge of the rainforest. A big thanks to Sunshine Coast Council for assisting in organising this event!

A week later another frog workshop was held in Kilcoy, in partnership with the Brisbane Valley-Kilcoy Landcare, Healthy Land and Water and Kilcoy Lions Club (who served a great BBQ dinner!).

This was also very well attended by people from the Somerset Region and adjoining areas. After the BBQ we visited Yowie Park and despite the dry conditions, still managed six frog species around the lake, pathways and at Kilcoy Creek. This was a fitting way to end National Frog Week for 2018! Thanks to Lee-Anne for attending both workshops to assist our President, Jono and so too thank you to Mike and Wendy with frog finding and other logistics on the night.

Our most recent outing was by an invitation from Native Plants Sunshine Coast, who held a Creating Habitat in your Garden workshop with several other not-for-profit wildlife organisations also presenting. This was a great event and very inspiring, as everyone learnt how easy it can be to create habitat in our backyards for our native animals.



Keen to learn at Kilcoy!

EXECUTIVE COMMITTEE

PATRON - Dr Glen Ingram

PRESIDENT - Jono Hooper

Mob: 0418 779 791

Email: president [at] qldfrogs.asn.au

VICE PRESIDENT - Dan Ferguson

Email: vicepresidents [at] qldfrogs.asn.au

SECRETARY - Jenny Holdway

Ph: 07 3366 1868

Email: secretary [at] qldfrogs.asn.au

TREASURER - Jennifer Singfield

Email: treasurer [at] qldfrogs.asn.au

MINUTES SECRETARY - Lee-Anne Longton

Email: thelongtons [at] bigpond.com

WELCOME NEW MEMBERS

Laura Grogan, Justin McMahon, Lisa Wieland, Simone Forman, Jasmine Connors, Elliot Bowerman, Nicholas McMullin, Michael Purcival, Caroline Gould, De-Anne Attard, Jeanette Winsor, Bruce Lord, Christine Hawerth, Keith Lesperance, Kerri Helsdon, Lunette Bright, Michelle Ledwith and Dianne Mansfield.

NEWSLETTER EDITOR & WEB ADMIN

Jono Hooper

Email: editor [at] qldfrogs.asn.au

FROGSHOP SALES

Jenny Holdway

Ph: 07 3366 1868

Email: frogshop [at] qldfrogs.asn.au

POSTAL ADDRESS

PO Box 7017 East Brisbane, QLD Australia 4169

SUPPORTERS



AREA COORDINATORS

ASHGROVE

Jenny Holdway – Ph: 3366 1868

Email: qldfrogs [at] bigpond.net.au

BTRIBIE ISLAND/CABOOLTURE

Pauline Fitzgibbon – Ph: **** *

Email: fitztho01 [at] tpg.com.au

BRISBANE CENTRAL

Stefan Durtschi – Ph: 3891 6853

Email: comlab [at] optusnet.com.au

BROOKFIELD

Phil Bird - Email: frogphil [at] gmail.com

BUNDABERG

David Flack - Email: litoria.chloris82 [at] gmail.com

CHERMSIDE

James Hansen – Mob: 0427 827 443

Email: jamna [at] powerup.com.au

ESK

Jason Richard – Ph: 5424 2373

Email: jason.richard [at] ecosm.com.au

GOLD COAST

Shane Ho – Ph: 5533 8125

IPSWICH

Brett Malcolm - Mob: 0407 673 458

MARY RIVER CATCHMENT

Eva Ford - Mob: 0408 749 162

Email: eva.ford [at] mrccc.org.au

NORTH BURNETT *NEW*

Nadia Cambell – Ph: 4166 2049

Email: admin [at] goondicumpastoralco.com.au

PINE RIVERS

Rod Pattison - Ph: 3264 6391

Email: rpattison [at] hotmail.com

REDLANDS

Steve Homewood – Ph: 3824 0522

Email: bhomewoo [at] bigpond.net.au

ROCKHAMPTON & CENTRAL QLD

POSITION VACANT

SOUTH BURNETT

Wendy Benfer - Email: raywendy.benfer [at] bigpond.com

SUNSHINE COAST

Brittany Elliott - Mob: 0421 341 853

Email: brittany_b_elliott [at] hotmail.com

ASHGROVE REPORT

As I am still out of action I haven't anything to report for this area. I have been busy though with new membership, renewals and end of financial forms.

I do wish all members and supporters a very Happy Christmas and may the New Year bring in some rain.

Jenny Holdway

BROOKFIELD REPORT

The Bowman Park Habitat Frog Group has been going since 1993, and the end of another year draws near. It has been a busy year with still two more working bees for 2018. The newly formed mid-week working group, held on the first Wednesday in the month met on Wednesday 5th December. This has been very successful with planting a number of plant species with four regular volunteers. Our Sunday morning working bee we hold on the first Sunday of each even month, and the final working bee was on the 9th December. Again regular volunteers have been coming

now for a number of years. We are fortunate having dedicated officers and support staff from Habitat Brisbane assisting our efforts.

This year we have continued to plant and weed in wet land and riparian areas in Bowman Park, where we provide refuges and breeding opportunities for a number of frog species. Recently Beeping Froglets (*Crinia parinsignifera*) were heard calling, making up to eight frog species recorded at the Park. We have held two working bees with Bardon Kindergarten, where parents of pre-school children come on a Sunday to plant in an area next to their Kindergarten. It's fun to watch the 5-year olds, watering the plants they have just planted by running around with tiny water cans. The newly formed SOWN roaming working group came with many hands to weed the creek line of a few nasty weeds such as *Dyschoriste depressa*. A group of students from QUT came to work at the Park as an immersion experience working with local community groups. We ran a number of activities such as surveying the ponds in the creek for fish and tadpoles. We found a number of purple spotted gudgeon (*Mogurnda adspersa*) in the pools.

UPCOMING EVENTS

January 2018 - Frog Camp near Monto. This will occur over a Friday-Sunday during the school holidays. Limited accommodation available. More details to follow via Facebook and E-news Emails. RSVP essential.

Keep updated via our E-News Emails and Facebook

ANSWERING EMAILS

We are seeking a proactive member with decent frog knowledge to regularly attend to our Questions email Inbox. Please contact us if you are interested.

FROG HABITAT WORKING BEES

Bowman Park, Bardon

First Wednesday and Sunday of each month, during the morning. Contact Phil for more info and/or visit

<https://www.facebook.com/bowmanparkfroghabitatgroup/>

RIC NATTRASS RESEARCH GRANT

The QFS Trust Fund was created with the purpose to help save QLD frogs through education and research by means of this Research Grant, and now stands at **\$5,563.42** (+ \$234.53 since Spring edition)

STAY IN THE LOOP

If you have a newer preferred email address, please contact us and let us know.

HELPING HAND

We are always in need of an extra pair of hands to assist at community event display stalls. Many hands make light work, even if you can spare 30 minutes to help unpack and pack up our display gear from and to a vehicle. Most of our displays are within the Brisbane area.

Please contact our Secretary if you can help us out.

We continue to plant Richmond birdwing vines (*Pararistolochia praevenosa*) and now have just over 40 vines planted with some planted back in 2000. These have since grown into the canopy and are now flowering and seeding. These have been recorded with the Richmond Birdwing Conservation Network and Bowman Park Group is part of a number of groups planting these vines to provide corridors for the rare and endangered richmond birdwing butterfly (*Ornithoptera richmondia*). We have been successful in obtaining help in the past by Community Conservation Assistance Grants. We are waiting for a grant in the current round of funding for contract help in managing the weeds, such as cat's claw creeper (*Dolichandra unguis-cati*). The yellow flowers seen in recent times up trees and fences in inner city Brisbane and when in bush settings is a canopy killer.

We will meet again in February, 2019 and planning a survey of the skinks that are found in the Park. There are eastern water skinks (*Eulamprus quoyii*) and smaller ones which we would like to know their identity.

So, anyone who would like to come along is very welcome. After a few hours morning work we stop and enjoy a cuppa and a shared plate for morning tea.

Phil Bird



Graceful Treefrog

program targets the whole community through wide-spread media items, displays, meetings, workshops and school notifications.

This year's FFF efforts resulted in the following:

- 142 Frog Finders submitting frog records (plus 137 workshop survey participants).
- Surveys carried out by participants = 218
- Survey sites x 128
- 2362 frog records submitted (23 species, threatened species x 4 (*Adelotus brevis* (Tusked frog), *Litoria pearsoniana* (Cascade treefrog), *Crinia tinnula*

MARY RIVER REPORT

2018 was the second year for the MRCCC's (Mary River Catchment Coordinating Committee) Find a Frog in February (FFF) citizen science program that collects frog records from the community during the month of February. It is delivered to the community of the Mary River catchment as well as the Noosa and Burrum River and coastal catchment in between. This area is administered by four local Councils; Sunshine Coast, Noosa, Gympie and Fraser Coast. The



A team effort.

(Wallum froglet) and *Mixophyes iteratus* (Giant barred frog) , the latter of which was deat the long-term monitoring sites surveyed each year by the MRCCC).

The MRCCC has collected approximately 15,000 frog records since starting frog surveys in 2003. The increase of over 2,300 records is a significant contribution to our knowledge of frog fauna of the area.



Keen froggers getting down low.

As our attention is turned to 2019's FFF event, we'll be seeking more records from lesser surveyed areas including the Sunshine Coast region, western sub-catchment and coastal catchment areas

Eva Ford.

SOUTH BURNETT REPORT: FROG POND BREEDS FROG POND

Inspired by Jono's frog pond article in the last *Frogsheet*, we decided to make the effort to set up a small 30-year-old fibre-

As a comparison, the number of frog records submitted in 2017 was 438 from 79 Frog Finders. This shows a marked increase in participation and records submitted in 2018, largely due to increased mainstream media coverage and social media activity, the workshops and school talks (nil conducted in 2017) and the favourable weather conditions. February 2017 was the hottest and driest on record whereas February 2018 had good rainfall at the start and end of the month with nearly all of the program area receiving rainfall at some time.



How many juvenile Green Treefrogs can you count?

glass pond, that has been used previously in several different locations and needed a new purpose. For use as a frog pond, it is on the small size but, as we have other frog breeding sites on Our property in the creek, dam, bathtubs and another pond, we decided that it would still be a useful habitat area. A couple of days after setting it up, the pond attracted a Striped Marsh Frog but, the most exciting thing has been regular visits by a Buff-banded Rail. As the veg-





Rocks and logs around ponds provide important shelter for frogs and other animals.

etation grows, the area will be more inviting.

Being members of Native Plants Queensland as well as the QFS, we chose a variety of native plants, many of them locals, which we had available and were needing a home. To enable us to grow some bog plants outside the pond, we made use of a large, unglazed ceramic pot, buried in the ground. Filled with home-made



The pond. Not a bad piece of real estate!

potting mix, it retains water for long periods and is excellent for growing *Eleocharis equisetina* and *Mazus pumilio*. We did similar things with some of the other bog plants. Rocks were relocated from other parts of the garden and most of them have lovely mosses and lichens. One even has a Robber Fern, *Pyrrosia confluens*.

This will be an ongoing project and one that will enhance our entry. Hopefully we will have the bonus of seeing frogs, birds, butterflies and other native wildlife on a regular basis.

Ray and Wendy Benfer

[Ed. Below is a list of suitable plants of various sizes for planting around and in frog ponds, provided by Ray and Wendy Benfer.]

SMALL TREES & SHRUBS

- *Acacia fimbriata* Fringed Wattle
- *Acmena smithii* cultivar Minipilly
- *Eugenia reinwardtiana* Coastal Cherry
- *Graptophyllum* sp 'Emu Creek'

HERBACIOUS PLANTS & GROUND COVERS

- *Alpinia caerulea* Native Ginger cultivar
- *Alternanthera denticulata* Joyweed
- *Alocasia brisbanensis* Cunjevoi
- *Artanema fimbriatum* Koala Bells
- *Bacopa monnieri* Bacopa
- *Calotis cuneifolia* Burr Daisy
- *Calotis lappulacea* Yellow Burr Daisy
- *Centratherum riparian* A Native Daisy
- *Commelina diffusa* Native Wandering Jew
- *Dichondra repens* Kidney Weed
- *Geranium homeanum* Native Geranium
- *Hybanthus stellaroides* Spade Flower
- *Mazus pumilio* Mazus
- *Myriophyllum crispatum* Water Milfoil
- *Proiphys cunninghamii* Brisbane Lily
- *Ranunculus inundates* River Buttercup
- *Tetragonia tetragonioides* Warrigal Greens
- *Viola betonicifolia* Arrow-leaved Violet

GRASSES, RUSHES, SEDGES and STRAPPY PLANTS

- *Crinum* sp Swamp Lily
- *Cyperus gracilis* Slender Flat-sedge
- *Dianella brevipedunculata* Blue Flax Lily
- *Eleocharis equisetina* Spike Rush
- *Juncus prismatocarpus* Branching Rush
- *Juncus usitatus* Common Rush

- *Lomandra cultivar*
- *Oplismenus aemulus* Creeping Beard grass
- *Xyris complanata* Feathered Yellow-eye Hatpin

VINES

- *Cayratia clematidea* Slender Grape
- *Hoya australis* Waxflower

FERNS AND OTHERS THAT REPRODUCE BY SPORES

- *Adiantum hispidulum* Rough Maidenhair Fern
- *Azolla pinnata* Water Fern (this will

cover the pond so some needs to be removed

occasionally – it makes excellent mulch for other plants)

- *Pyrrosia confluens* Robber Fern and
- Lichens and Mosses

FROGS GET STRESSED OUT BY TRAFFIC, TOO



Photo by Jim Rathert Mo Dept. of Conservation/UPI

21 November 2018 | Brooks Hays | United Press International

Frogs from quiet ponds get stressed when exposed to traffic noise, but frogs from noisy ponds are used to the racket.

Sonic stress can disrupt the health of amphibians, according to a new study. But the research suggests animals can adapt to tolerate loud noises.

New analysis of frogs from noisy and quiet ponds revealed two different stress and immune profiles. Researchers described the differences in a new paper

published Wednesday in the journal *Proceedings of the Royal Society B: Biological Sciences*.

When scientists exposed frogs from quiet ponds to the noises of a busy highway, the amphibians became stressed. In addition to producing more of the stress hormone corticosterone, the frogs also experienced changes to their immune profile.

Frogs from quiet ponds exposed to traffic noise made more white blood cells called monocytes. The change

resulted in a diminished production of antimicrobial peptides.

“Antimicrobial peptides are components of the immune defense system that provide important protection against pathogens like bacteria and fungi,” Louise Rollins-Smith, professor of pathology, microbiology, and immunology at the Vanderbilt University School of Medicine, said in a news release. “Brevinin-family peptides in particular strongly inhibit the fungal pathogen that causes the infectious disease chytridiomycosis, or chytrid, which is responsible for widespread mortality of amphibians around the world.”

Frogs living in ponds next to busy highways aren’t helpless. Researchers found frogs collected from noisy ponds had adapted by lowering their stress response, thus reducing the negative impacts on their immune systems.

When frog eggs collected from noisy ponds were raised in the lab and exposed to traffic noise, the frogs failed to increase their corticosterone production.

“We’re not sure if the frogs from noisy sites have a suppressed stress response to noise specifically or if they have a suppressed stress response overall,” said Tracy Langkilde, professor and head of biology at Penn State. “Both offer the benefit of avoiding stress-related costs of noise, but having a dampened stress response in general could have other negative effects, for example not being able to properly mount a behavioral response to predators.”

Frogs from noisy ponds exposed to ambient noise, quieter background noises, actually increased their production of monocyte counts. Scientists think frogs from noisy ponds interpreted the oddly silent environs as unfamiliar -- and worthy of a stress response.

In follow-up studies, researchers hope to further explore how exactly frogs adapt to noise increases. ■

ENDANGERED NORTHERN CORROBOREE FROG GETS INCREASED SEX APPEAL WITH IVF-STYLE HORMONE TREATMENT

6 December 2018 | Gavin Coote and Melinda James
| ABC Illawarra

Australian researchers say a world-first method to get an endangered frog species “in the mood to mate” could be a vital way of saving endangered amphibians across the world.

The northern corroboree frog, found in cold, highly-elevated parts surrounding Canberra, are under threat from feral pigs and horses, fire, drought and forestry operations.

An added challenge for boosting numbers of the frog is a strong mating bias in captivity, which has meant less than a third of males have success in mating.



**Northern Corroboree Frog.
Image by University of Wollongong**

Far from the romantic cues of dimming the lighting or putting on sensual music, this project has involved putting hormones onto the bellies of frogs to boost desire.

As part of a four-year trial, University of Wollongong (UOW) and Taronga Zoo experts administered the hormone topically on the frogs as they were paired for breeding.

So far, more than 800 offspring at different developmental stages — as eggs, tadpoles and young frogs — have been released in the Brindabella Ranges on the NSW/ACT border.

UOW reproductive biologist Dr Aimee Silla said getting

frogs in a frisky state was a challenge when breeding them in captivity as they needed “a little bit of a nudge”.

“They are so finely-tuned into environmental stimuli to actually get their hormones going and basically get them in the mood to reproduce,” Dr Silla said.

“All animals need the right cues, whether that’s environmental cues, so temperature, rainfall or humidity. Reproduction is a lot more complex than it might appear to be.”

Dr Silla said while the breeding program was only possible in captivity, it would help boost the number of offspring and their potential to adapt to threats.

“It’s about putting as many offspring into the wild as possible and with as much genetic diversity as possible so that we can try and recover the species in the wild,” she said.

“They can hopefully then do their thing unassisted and once there’s enough of them breeding again in the wild then we can kind of take a step back and hopefully we won’t have to intervene in the future.”

Potential for expansion into developing world

The synthetic gonadotrophin-releasing hormone is the same used in IVF and is traditionally applied as an injection through the skin.

But Dr Silla, who worked alongside Dr Phillip Byrne said putting the hormone straight on the stomach eliminated the need for an injection and was more easily absorbed.

“The really great thing about this protocol is that it’s easy, it’s user-friendly, cost-effective,” she said.

“And we’re really hoping that not just for the northern corroboree frogs, but for threatened species globally, this protocol can be taken onboard.

“Particularly in developing countries where they might not have as much access to the training required to inject animals safely.” ■

#qldfrogs

Each newsletter will feature a selection of photos by our keen Instagram followers who tag their QLD frog photos with #qldfrogs! Tag yours to be featured here.



Blotchy blue Southern Orange-eyed Treefrog (*Litoria chloris*) by Mike Donovan, Reptiles in Focus



Waterfall Frog (*Litoria nannotis*) by Justin McMahon, Justin's FNQ



Holy Cross Frog (*Notaden bennettii*) by Ben Revell

PRESIDENT'S REPORT

I started out my last report by saying the last few months have been rather busy - though *these* last few months have been even busier, both within the QFS and personally.

I was very happy with the turnout and feedback from both the Mary Cairncross and Klicoy frog workshops as these had been a little while in the planning, but more so that we could put on several workshops for our members and the wider community's benefit. As mentioned, despite the dry conditions, we found a total of 7 species over both workshops which was great!

I was fortunate to get some time off of my full-time work in October and November, which allowed me to do some frogging! I visited south-west Western Australia in October with a good friend and fellow frogger



where I found 15 new species I had not previously seen, including

the alien/marshmellow looking Turtle Frog (*Myobatrachus gouldii*) and the remarkable Northern Sandhill Frog (*Arenophryne rotunda*) (pictured), the latter living in the seemingly parched and arid sand dunes at Shark Bay - Australia's most western point. This frog buries itself below the sand to escape the hot dry sun and winds, before emerging at night to eat ants. These frogs leave very distinct tracks in the sand, some of which I followed for a good 100m before finding the frog.

In November, I joined two good mates and fellow froggers in the search for several mountain frog species and other frogs in northern NSW, some of which have a very small QLD distribution. The wet weather during October made for perfect frogging conditions, resulting in us finding all eight target species. We found ourselves feeling a deep sense of appreciation and respect for each of these species, and ensured we followed the amphibian hygiene protocols when moving between sites to prevent the introduction of disease.

Finally, I would like to wish all our members and my fellow committee members a very blessed Christmas and safe New Year!

Cheers,

NEXT EDITION

Thankyou to those of you who contributed to this newsletter.

**Deadline for Autumn *Frogsheet* contributions is
15 February 2018**

If undelivered, please return to
QLD Frog Society Inc
PO Box 7017
East Brisbane, QLD 4169

SURFACE MAIL



Frogsheet - Summer 2018-19
Print Post Approved
PP424022/00619