

FROG CALL

THE FROG AND TADPOLE STUDY GROUP NSW Inc.

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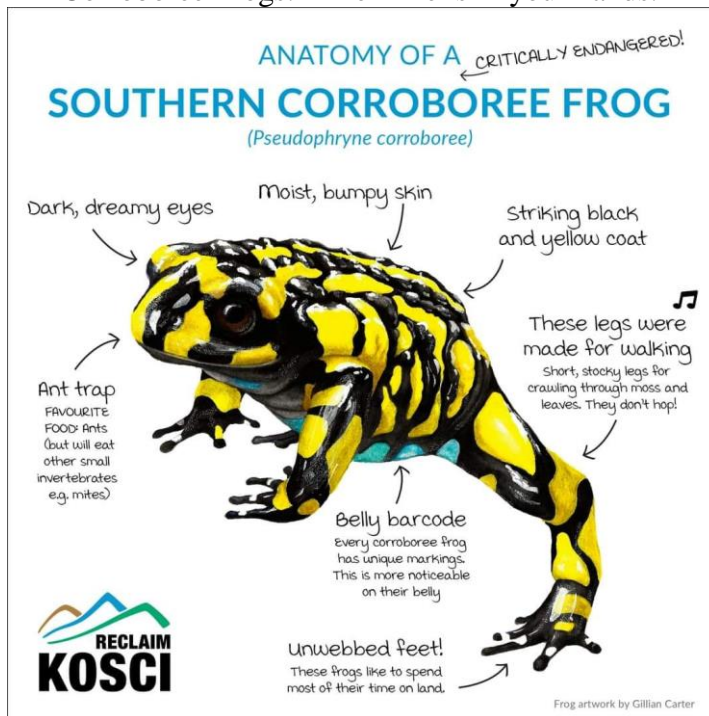
Frogwatch Helpline 0419 249 728

Website: www.fats.org.au

ABN: 34 282 154 794

NEWSLETTER No. 186 AUGUST 2023

Corroboree Frogs. Their life is in your hands.



You are invited to our FATS meeting. It's free. Everyone is welcome.

Arrive from 6.30 pm or a 7pm start.

Friday 4 August 2023

FATS meets at the Education Centre, Bicentennial Pk, Sydney Olympic Park

Easy walk from Concord West Railway Station and straight down Victoria Ave.

Take a torch in winter.

By car: Enter from Australia Ave at the Bicentennial Park main entrance,

turn off to the right and

drive through the park. It's a one way road.

Turn right into P10f car park.

Or enter from Bennelong Rd/Parkway. It's a short stretch of two way road. Turn left.

Park in P10f car park, the last car park before the Bennelong Rd. exit gate.

FATS fundraising: Frog tank and furniture for sale. See page 6.

FATS AGM & MEETING 7PM FRIDAY 4 AUGUST 2023

6.30 pm Lost frogs seeking forever homes: Please bring your membership card or join FATS on the night and \$50 donation. **CREDIT CARDS ACCEPTED** but bring cash for the raffle, unless you spend over \$10. Your NSW NPWS amphibian licence must be sighted on the night. Adopted frogs can never be released. Contact us before the night and FATS will confirm if any frogs are ready to rehome. Email Monica Wangmann (p11) if you wish to buy the frog tank or furniture at our meeting.

7.00 pm Welcome, short AGM and announcements.

8.00 pm Main speaker: Michael McFadden from Taronga Zoo
Recent conservation efforts to protect Threatened frogs.
Second speaker: Arthur White:
The Conservation of Native Frogs in Fiji.

9.30 pm Show us your frog images. Tell us about your frogging trips or experiences. Guessing competition **Credit cards can be used for raffle purchases over \$10, but we prefer cash**, frog adoptions continue, supper, relax and chat with frog friends and experts.

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See page 1. Ever wondered how to identify a Corroboree Frog? Look no further, we've prepared this handy identification chart for you.

From its dark dreamy eyes to its iconic black and yellow stripes and about the size of a 20 cent coin - there's a lot to love about this special frog which calls Kosciuszko National Park 'home'. With an estimate of only a couple hundred of these frogs left in the wild, this amphibian is one of Australia's most critically endangered species and needs protecting. What's your favourite frog feature?

[#threatenedthursday](#)

RECLAIM KOSCI



Marion Anstis with her book
Tadpoles and Frogs of Australia

It's not a common career path – music teacher to frog expert. But that is the path followed by Dr Marion Anstis, who wrote submission #27 to the Senate Inquiry, on behalf of the Frog and Tadpole Study Group of NSW (FATS). Her book *Tadpoles and Frogs of Australia*, an 847 page bible for anyone wanting to identify Australian frogs or their eggs and tadpoles, was written after she retired from a 31 career in teaching high school music. Perhaps a good ear for the musical calls of frogs was the common thread.

Mixed with her joy and enthusiasm for Australian frogs, like the intricately-coloured Crucifix Frog (pictured), is a deep sadness at the likely fate of the Southern, and closely related Northern, Corroboree Frogs. She has visited the site in Kosciuszko National Park where the very few last remaining individuals of this frog still hold on in the wild, and seen how vulnerable these frogs are.

Like many animals on the brink of extinction, Corroboree Frogs are threatened by many factors, including chytrid fungus and habitat destruction, such as can occur as a result of trampling by hard-hooved feral animals. The frogs' vulnerability is not simply physical – they also lack legislative protection. As the FATS submission points out, they need a stronger Environment Protection and Biodiversity Conservation Act. They need intervention at the highest level, to save our high altitude frogs. Dr Anstis is hoping the Senators get the message.

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

The government's own scientific advisors have said it: ***“feral horses may be the crucial factor that causes final extinction”***¹. Threatened Species Scientific Committee, Submission No 19 to Senate Standing Committees on Environment and Communications, *Impacts and management of feral horses in the Australian Alps*, April 2023 Our corroboree frogs, the Kosciuszko galaxias and three more critically endangered animals **cannot cope with the relentless pounding** of thousands upon thousands of hard hooves. Day in and day out, across the fragile Australian Alps. This evidence comes from the current senate inquiry into feral horses in the Alps. And it shows **the government must act now on feral horses to achieve its zero extinctions target**. What's frustrating about all of this, is that feral horses are one of the easiest threats for us to deal with!

Park rangers have been stalked, abused and their office threatened with fire bombs by feral horse advocates. Why? For implementing the feral horse management plan in Kosciuszko National Park. There's no doubt our opponents will use this senate inquiry to try and shut down our voice and push for national protections for feral horses. **Each day our politicians delay on rapid feral horse management, the threat to nature escalates.** Our Alpine National Parks belong to all Australians. But a major threat to their survival, and the survival of six critically endangered species, is feral horses.



Northern corroboree frog (*Pseudophryne pengillyei*). A rare photo showing the frog with eggs in its nest in sphagnum moss. Image by Marion Anstis.

FROG AND TADPOLE STUDY GROUP, NSW INC. (FATS) SUBMISSION TO SENATE INQUIRY RE FERAL HORSES.

I write to you on behalf of the committee for the Frog and Tadpole Study Group, NSW inc. (FATS). Firstly, we are grateful to the Federal Environment Minister, Tanya Plibersek for initiating this Senate inquiry.

Our FATS group is well known for its support of amphibian research, frog conservation and environmental rehabilitation of frog habitats, in particular endangered species. We have been a source of information to the NSW Threatened Species Unit when consulted and are in regular consultation with the community over issues concerning frogs. We are well aware of the drastic state of the remaining single locality in the high plains country of Kosciuszko National Park for the critically endangered Southern Corroboree Frog, *Pseudophryne corroboree* and also of the very limited remaining habitat for the Northern Corroboree Frog, *Pseudophryne pengilleyi*. These frogs will not survive the continued onslaught of habitat destruction, especially in combination with infection from chytrid fungus.

The last remaining habitat of the Southern Corroboree Frog, including its sphagnum bogs and small creeks, is in danger of being disturbed by the hooves of the feral horses which roam everywhere in this world heritage park, as some natural bogs which the frogs once used to inhabit have been damaged by the horses. The Amphibian Research Centre and Taronga Zoo have been instrumental in trying to create a population of released captive-raised frogs in segregated contained areas, but the fencing around these enclosures and critical habitat nearby could easily be damaged by the horses.

We recognise it is not the horses' fault, it is just that they are foreign to such delicate habitats within this special National Park. The combination of subsoil drainage, unpolluted creek water and survival of thick sphagnum bogs all need to be in such a delicate and critical balance to provide the specialised habitats these frogs need. The habitat and the frogs have never evolved in the presence of heavy hoofed animals and their frequent manure deposits. To say nothing of the resultant soil compaction, wetland destruction, soil erosion and overgrazing the horses continue to do.

Although we write mainly from a frog conservation perspective, we are very mindful of the great detrimental impact these horses have had on alpine skinks, small native mammals and specialised native plants, all so reliant on undisturbed habitat.

We are concerned that the Australian Government needs to meet its obligations to protect the Heritage values of the Australian Alps.

The NSW government has not yet been effective in reducing the number of feral horses in the Alps region. The legislation protects feral horses over native wildlife,

and the current management plan seeks to permanently retain feral horses in 30% of Kosciuszko National Park. The target to reduce numbers to 3000 by 2027 is not possible using current methods, given there has been a 30% increase in horse numbers during the past two years to now over 18,500.

Victoria, too, has over 5,000 (2019 survey) of feral horses in Victorian Alps, showing an increase from 2,300 in 2014. Their present low culling rate is very unlikely to produce successful conservation outcomes. And given there are approximately 1 million feral deer now roaming across Victoria (as of 2022), and great increases in numbers in NSW national parks and bushland, Australia really has a problem with feral, hoofed, heavy animals.

As regards the current primary concern of feral horses, the RSPCA has confirmed that ground and aerial shooting are the most humane and effective methods for population reduction with better animal welfare outcomes overall.

We ask that the Federal Environment Minister, Tanya Plibersek, aim to use powers in the Environment Protection and Biodiversity Conservation (EPBC) Act to require states and territories to effectively and urgently remove feral horses from the Australian Alps National Parks, Reserves and National Heritage Places.

In addition, Australia's national environmental law needs to be reformed to allow the Australian government to intervene where areas of national and international environmental significance are not being protected or managed effectively.

The Australian Government should develop a National Feral Horse Threat Abatement Plan so that our current laws can be amended to incorporate a science-based process and increase federal and state powers to stop future uncontrolled populations of feral horses continuing to occur in National and World heritage places. It is obvious that feral horse management needs to be combined with investment in ecosystem monitoring and restoration.

None of these things will happen without the conviction and passion from the Federal Minister and legislators. The essential ingredient behind it all will undoubtedly be financial investment both at a Federal and State level.

We hope you will consider the vital need for current action in any way possible, and the equally important future reform of our Environmental laws, for the sake of our precious and dwindling amphibian fauna, and remaining endangered animal and plant life so reliant on these alpine habitats.

Sincerely, Dr Marion Anstis (Vice President, FATS, NSW Inc.) PhD in Biological Science, Newcastle University
See <https://www.facebook.com/ReclaimKosci>

HOW DO POISONOUS ANIMALS GET THEIR WARNING COLOURS?

How did prey species survive long enough to evolve warning coloration whilst living amongst predators who can better see them but have not yet learned to avoid them?



Ranitomeya amazonica is a poison dart frog

Some of the world's most spectacularly colourful animals are amphibians — especially frogs and salamanders. Many of these colourful animals are toxic or have developed some sort of chemical defense, and they rely on their brilliant colours to warn would-be predators to stay away. This form of advertising by an animal to warn its predators that it is not edible is a phenomenon known as aposematism. But *how* these animals become so colourful has inspired and mystified scientists for many decades. “If you're the first conspicuous individual in a chemically defended lineage, it will be very difficult for that mutation to take hold in the population, because predators have no way of knowing your coloration is associated with chemical defense”, said the co-lead author of the study, behavioural ecologist Changku Kang, an assistant professor at [Seoul National University](#), in a statement. Professor Kang's research is focused on understanding the evolution of animal coloration as an adaptive trait.

In an effort to solve this age-old riddle, Professor Kang collaborated with Karl Loeffler-Henry, a postdoctoral fellow at [Carleton University](#), and his supervisor, Thomas Sherratt. Dr Loeffler-Henry uses a variety of tools including computer-based simulations to investigate how natural selection influences animal coloration.

To study how colours evolved in amphibians and the evolutionary transitions between these colours states, the research team ranked more than 1,100 species of frogs, salamanders and newts into one of five groups (Figure 1): Animals with bright colours, such as reds, yellows and blues, that make them easily visible were classified as conspicuous (“Con”). Animals at the opposite end of the coloration scale, those that are well camouflaged, were classified as cryptic (“Cry”). The middle three classifications comprise fully conspicuous (“FV”) animals that have cryptic upperparts and bright colours on their entire underbellies,

such as fire-bellied toads (genus, *Bombina*); partially conspicuous (“PV”) animals with somewhat hidden colours in its limbs and other body areas, as seen in the taxonomic family, Hylidae. Often, these PV and FV species have defensive behaviours intended to fully display their conspicuous colouring to potential predators. The fifth group consisted of amphibian species with a conspicuous form and a cryptic form (“Poly”).

The use of five categories makes this study strikingly different from other studies of the evolution of animal coloration because in those studies, animals are placed in one of two categories — either conspicuous or camouflaged — which prevents us from understanding of the evolutionary complexities of animal coloration, according to Dr Loeffler-Henry.

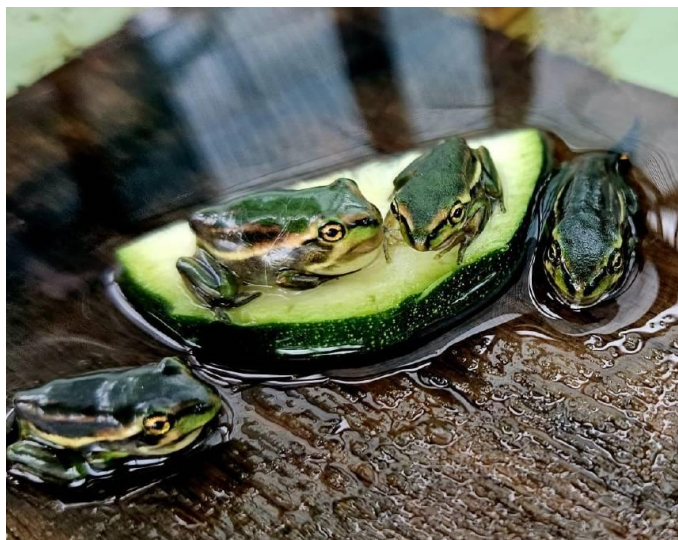
Professor Kang and Dr Loeffler-Henry tested nine different models to reconstruct the potential evolutionary trajectories the various amphibians might have followed on their route to aposematism. These models included when each species first developed coloration as well as toxicity as their defense strategy.

Professor Kang and Dr Loeffler-Henry found that developing aposematism is not a random event: it follows a particular evolutionary pathway. Importantly, they found that instead of evolving directly from a camouflaged state, the path to developing the brilliant colours of aposematism goes through an important transitional state (Figure 2). This transitional state is where a cryptic animal conceals its bright coloration in body parts such as the limbs or the underbelly. Threats from predators trigger a behavioural response from these animals so they would intentionally display their hidden bright colours as a visual warning signal of trouble to come. Next, the animal develops a chemical deterrent, such as warts that taste bad or a toxin that kills. Then these animals develop even brighter colours over more of their bodies.

“Aposematism has evolved independently many times in separate lineages of amphibians”, Dr Loeffler-Henry explained in a statement. “Hidden signals give an answer to how this is happening and unravel a fascinating story of how the evolutionary process took place.”

This study demonstrates the value of testing alternative and overlooked evolutionary strategies, which can advance our understanding of diverse antipredator defense strategies in the natural world. Additionally, these findings demonstrate how the cost of a trait, like being extremely colourful, may be circumvented through the evolution of intermediary phenotypes. **Source: Karl Loeffler-Henry, Changku Kang and Thomas N. Sherratt (2023). Evolutionary transitions from camouflage to aposematism: Hidden signals play a pivotal role, *Science* 379(6637):1136-1140 | doi:[10.1126/science.ade5156](https://doi.org/10.1126/science.ade5156) Forwarded to FATS by Punia Jeffery [GrrlScientist](#) 20/3/2023 <https://www.forbes.com/sites/grrlscientist/2023/03/20/how-do-poisonous-animals-get-their-warning-colors/amp/> by [GrrlScientist](#) | hosted by [Forbes](#)**

BREEDING PROGRAM FOR THREATENED GREEN AND GOLD BELL FROGS STARTS ON DESALINATION PLANT SITE



Green and Golden Bell frogs have been reintroduced to the Kurnell peninsula.

Green and golden bell frogs have been reintroduced to the Kurnell peninsula 28 years after they were last seen in the area. The species was first encountered in the area by Lieutenant James Cook's party in 1770.

More than 1000 tadpoles have been released on the desalination plant site, which includes a 15-hectare Conservation Area connection to Kamay Botany Bay National Park. The tadpoles were produced as part of a breed-to-release program, based on scientific advice from Dr Arthur White. The program is being carried out by Sydney Desalination Plant (SDP) in partnership with Symbio Wildlife Park at Helensburgh and Veolia, which operates the plant.

Symbio Wildlife Park managing director Matt Radnidge said the Green and Golden Bell Frog (*Litoria aurea*) was the first species ever listed as threatened in NSW. "Ironically, it was also the first frog encountered in 1770 by Cook's party on their arrival in Botany Bay," he said.

"When they first landed and went in search of water, they discovered a vivid green and gold coloured frog - what we now know as the green and golden bell frog. "They have a rich history that is intrinsically linked to our region, and that's why it's crucial that we partner with organisations like the Sydney Desalination Plant to safeguard the future of this iconic Australian species. "We look forward to seeing first-hand the positive impact this program will have on the local ecosystem."

Veolia and Symbio will be responsible for the day-to-day care of the tadpoles and young frogs, which are being monitored to help assess the re-created habitat and will provide regular reports on the frogs to the NSW Government Local Land Services, which has provided a grant to assist with the program. Veolia staff built special tadpole 'nurseries' that include tanks filled with freshwater and saltwater. The freshwater tanks allow the tadpoles to grow in their infancy, while the saltwater tanks are designed to protect adolescent frogs by reducing the risk of disease.

Once the tadpoles mature into frogs, it is intended that they will use the plant's 15-hectare Conservation Area to establish a breeding colony and help repopulate the peninsula. SDP's Chief Executive Philip Narezzi said, "We believe that this collaboration will not only make a meaningful contribution to the conservation of the green and golden bell frog, but also raise awareness about this species and the importance of preserving our natural habitats".

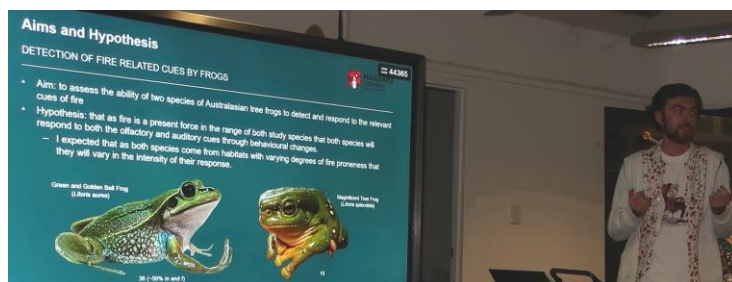
The tadpole breeding program comes a year after 800 native eucalypt trees were planted on the desalination plant site to help feed a colony of koalas at Symbio Wildlife Park. **By Murray Trembath 12 June 2023**

https://www.theleader.com.au/story/8212671/green-and-golden-bell-frogs-back-on-kurnell-peninsula-after-nearly-three-decades/?fbclid=IwAR0ZUAuJNn10nYmPUiKvA5Ipm1V8-ZBJFL3X_tDMoYng1EjOv3ChXld29V8

LAST FATS MEETING JUNE 2023



Arthur White (left). Levi Brown spoke about the Detection of fire-related cues by frogs. Photos by Phillip Grimm

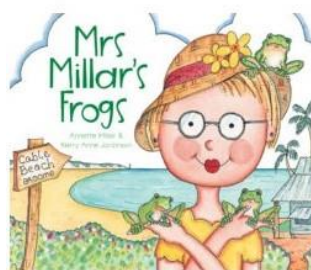


FROG BOOK FOR YOUR LITTLE ONES.

Forwarded to FATS by Martyn Robinson.

Mrs Millar's Frogs

Annette Millar and Kerry Anne Jordinson



"Frogs! I love frogs, frogs in Broome. They live in my house in every room."

So begins the story of Mrs Millar and her much-loved frogs.

Follow the adventures of these little characters as they hop and hide in Mrs Millar's house.

This is a new edition of an old favourite, which has never lost its appeal for young readers.

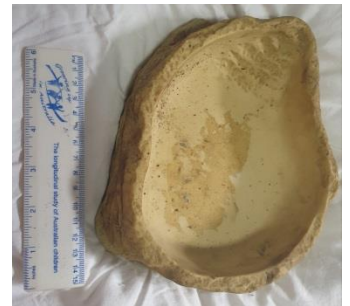
FATS FUNDRAISING

DONATED FROG TANK FOR SALE

Make an offer

Joe Dimech has kindly donated a frog enclosure, tank furniture, water bowls and heat rock. They are all in good condition. The tank is 30.5cm wide, 30.5cm deep and 47cm high. Make us an offer. Valued at over \$200. Proceeds from the sale will go to current FATS frog projects eg the Strathfield Green and Golden Bell Frog habitat restoration. Items can be sold individually or the lot. The enclosure has a little soil inside and needs a hose out but is otherwise in perfect condition. Door lock works perfectly. Items can be collected from Ashfield NSW or at our meetings. Cash only.

Email Monica Wangmann See page 11



FROG SAFE, INC. *updated June 2023*
RESCUE AND REHAB COURSE

Day one: What is the current status of frog rehab in Australia?

Briefing: the concepts and benefits of frog rehab Background of the frog hospital activity Setup and disinfection- arrangements at home (separation, lighting, septic considerations) supplies and services needed enclosures medications / drugs / surgeries - a vet! access to a microscope feeding - bugs (cleaning, breeding, lifespan) housing the patients (tree frogs, ground frogs, size choices) disinfection procedures Collection and first aid packaging and transport pain relief Obtaining patient backgrounds information known for the patient overall situation where found what does the frog's body and behaviour tell you? Upon arrival: pain relief can be critical when to use / NOT use betadine baths what you can see on arrival and what appears later Methods of administering treatments antibiotic options (bath, oral, topical, injections) other treatments (benz, aquarium products, praz, panadeine) oral only (doxy, nystatin, force feeding, when to use liquid diets

Day two: Alternative medicine approaches and detoxing herbal approach to chytrid golden seal, colloidal silver, manuka, aloe, frankincense activated charcoal Types of injuries and their procedures attack by other animals (dogs, cats, snakes and birds) car impacts crushed in doors and windows burns (sunburn, heat, scalding, chemical) poisoning crushing injuries and amputations damaged eyes, collapsed eyes prolapsed vent (determining time)

When is automatic euth. warranted? broken jaw prolapsed vent infection broken spine loss of vision in both eyes dislocated pelvis severe lacerations causing wide exposure to abdominal cavity compilation of too many fixable problems minor issues if your state prohibits rehoming Special considerations for some species cat attacks on ground frogs stress levels on stream and ground species enclosure setups for stream dwellers when the smallest enclosures are best

How to recognise diseases and which are treatable bacterial infection (topical, systemic, septicaemic) range of ulcer types including on feet (bacterial, fungal, parasitic, chemical) types of bloating/fluid retention and causes (calcium deficiency, infection, parasites, bruising, gut pain) Aeromonas and gram neg infections gram pos infections Chytrid other fungal problems parasites (spirometra, batrachomya, rhabdias, protozoa) problems with droppings (smears, green) skin degenerative conditions viruses (adenovirus, ranavirus, oncogenic)

Day three: Cancer and malformations neoplasias (6+ types so far) malformations sharing info Considerations for post-recovery release - sat helps does your state allow rehoming? amputation above elbow/knee loss of one eye where to release when

source location is a threat

Long distance consults and case communication information and photos needed when seeking our advice methods to communicate.

Participating in disease surveillance when cases should go to the experts procedures for handling and information needed

Death and the lab how to preserve a dead frog for a lab who to contact

Gaps and questions review of any frog matters covered during the three days frog subjects of interest not covered

Founding President of Frog Safe, Inc. is Deborah Pergolotti. developed the course. She has been rehabbing frogs since August 1998 and has received over 3,500 adult/subadult frogs in that time. She has also been awarded five times for this work. While not a vet, Deborah has extensive experience.

Frog Safe was forced to take a house in an urban setting as there was nowhere else available in our price range. The rent here is still \$35/wk higher than we were paying previously.) The house will fit the stuff we have and the location will be more convenient but it is a small block in a very urban setting (not even a garden in the tiny yard). At least it is a roof over our heads for now and it allows us to continue our rescue/rehab/disease work. The only thing that has changed so far is our phone number. The new number is (07) 4006-3784.

If you are in contact with any wildlife or WIRES members please let them know of this course. Ph (07) 4006-3784 mail: POB 1554, Innisfail Q 4860 email: admin@frogsafe.org.au Deborah Frog Safe, Inc Our website is all flash and redesigned. It was generously paid for by our sponsor Endeavour Tools Victoria.

We have also signed up to both Containers for Change (as the frog hospital) and Re-collect (as Frog Safe) so if you are inclined to collect those bottles and donate your coins, we certainly need them! Our rent has just gone up as well as moving costs and car repair!

We have changed banks so if you are someone who has done an EFT in the past and want to do one in the future, you will need to contact us for the new account.

We want to say a kind hello and thank you to our newest business sponsor - our first for Innisfail, too - Innisfail Brakes in Mourilyan. We wish to say thank you to everyone who helped put out the word, did postings, put up fliers, helped shift our stuff. **Thanks for your support and kindness. cheers, Deborah Frog Safe, Inc.**

A frog rehab training class is being organised for early to mid Sept. If anyone is interested to know more and wants to receive a course outline, they can email Deborah at admin@frogsafe.org.au

THESE FROGS MELT WHEN MATING SEASON STARTS

PHOTOGRAPH BY JOEL SARTORE

DURING WINTERS IN NORTH AMERICA, many amphibians dive or burrow deep to avoid freezing—but not the wood frog. These fig-size croakers stay put aboveground as the water between their cells freezes, and they spend the season in a kind of cryosleep.

When spring arrives, most wood frogs awaken from their icy slumber with one thing on their mind: sex. Males find a pond or temporary vernal pool and call to females with sounds “almost like a quacking duck,” says Dartmouth College’s Ryan Calsbeek, a biology professor who studies amphibians’ sex lives. As more males join in, the cacophony of croaks can be heard throughout the forest.

Hearing the come-ons from the ponds around them, females hop toward the croaks they find most seductive. In a recent study using an advanced acoustic camera (see QR code at right), Calsbeek determined that female wood frogs, like many humans, can’t resist deep, husky voices. Such croaks tend to come from large frogs—but once a female is lured to a pond, she’s fair game for all its male frogs, including small sopranos. The victor is the male that grasps and mounts the female, wrapping his forelimbs around her torso, a position known as amplexus. He squeezes until she deposits her eggs into the water; he then releases sperm, fertilizing the eggs.

It’s female wood frogs’ fate to have several breeding opportunities during their two-to-three-year life span. So odds are good that they’ll find at least one big baritone daddy. —ANNIE ROTH

RANGE/HABITAT

Lithobates sylvaticus are the only amphibians found north of the Arctic Circle. In Canada, as well as Alaska and other parts of the United States, they live in tundra, grassland, and forest habitats.

OTHER FACTS

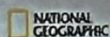
Wood frogs’ bodies produce a sort of natural antifreeze that prevents their cells from bursting as they ice over during the winter.

The thumbs of males swell during breeding to help them hold on to females.



Scan this code with your smartphone to see and hear an acoustic camera video of male frogs croaking to court females.

This wood frog was photographed at the National Aquarium in Baltimore.



PHOTOARK
JOEL SARTORE



NEW SPECIES OF FROG DISCOVERED IN NSW ALREADY FEARED ENDANGERED



Mixophyes australis at Watagans Central Coast Range.
Credit: Stephen Mahony

A new paper published today in *Zootaxa* reveals a new species of forest frog has been identified in New South Wales, and concerningly it warrants listing as endangered. The newly discovered species—*Mixophyes australis*—is a cousin of the existing species *Mixophyes balbus* (stuttering frog). The frogs have a striking resemblance and very similar mating call likened to a stutter. However, genome testing revealed the frogs are two different species: the *Mixophyes balbus* (found in the North) and the newly identified *Mixophyes australis* (found in the South from Central NSW to East Gippsland in Victoria).

The new species known as the southern stuttering frog (*Mixophyes australis*) is one of NSW's larger frogs growing up to 7.5 centimeters. It has large eyes, golden above with a blue crescent. Its back is a rich coppery-bronze color with darker barring on the legs. It breeds in small streams in wet forests. Lead researcher from the University of Newcastle, Honorary

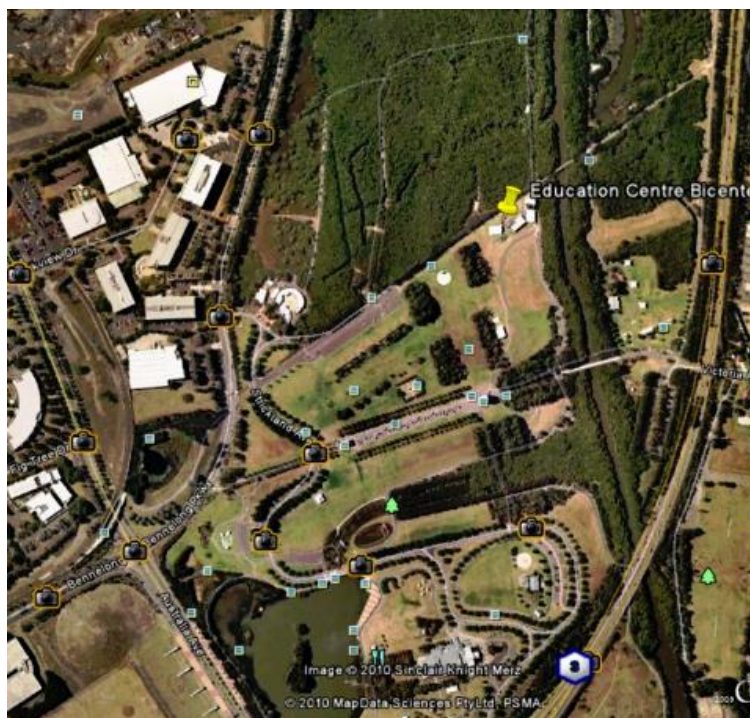
Professor Michael Mahony said while it is exciting that a new species of frog has been identified, it is challenging to address the conservation of this frog because it has disappearances from over two thirds of its distribution. By applying the international conservation threat assessment methods, Professor Mahony found that the southern stuttering frog warrants listing as Endangered.

More information: Michael J Mahony et al, A new species of barred frog, *Mixophyes* (Anura: Myobatrachidae) from south-eastern Australia identified by molecular genetic analyses, *Zootaxa* (2023). DOI: [10.11646/zootaxa.5297.3.1](https://doi.org/10.11646/zootaxa.5297.3.1) <https://mapress.com/zt/article/view/zootaxa.5297.3.1/51007?fbclid=IwAR2QAFaNixNa7ATYd8G0TktePtFCTHZKTUhdztkv1OFC2KZosHBpcX0vCqM> by Newcastle University



Image by George Madani
Mixophyes balbus Stuttering Frog

FATS MEETING LOCATION





Nangkita December 2003
Photos by Peter Matejcic

Limnodynastes dumerilii Eastern Banjo Frog was part of the talk by Peter Matejcic at June's monthly RAF meeting

FIELD NATURALISTS SOCIETY OF SOUTH AUSTRALIA REPTILE AND FROG GROUP, FNSSA RAF

In July 2022 the South Australia Herpetological Group SAHG joined the Field Naturalists Society of South Australia (FNSSA) and formed the Field Naturalists Society of South Australia Reptile and Frog Group (RAFG). To become a Member of FNSSA please complete a Membership Form or visit the FNSSA Website <https://www.fnssa.org.au/>

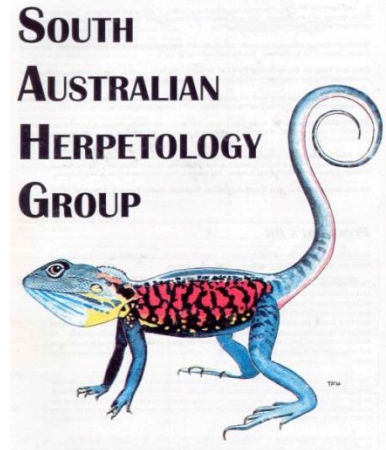
The FNSSA RAF Group generally have 2 or 3 multi-day field survey trips each year (Easter, Labour Day (October) long weekend and sometimes Adelaide Cup long weekend (March). They try to organise a few afternoon / evening walks on Sunday afternoons in the warmer months. In addition to the monthly FNSSA meetings they try to host 4-5 RAFG evening meetings with a guest speaker on amphibians and reptiles over the winter months. They are currently two years into a three year survey project and plan to publish results in the SA Naturalist once the projects have been completed and written up.



FNSSA Meetings are held monthly at the Royal Society Rooms, at the South Australian Museum, located behind the State Library of South Australian.

Facebook page South Australian Herpetology Group Inc. <https://www.facebook.com/saherpetologygroup/about>

RAF, Reptile and Frog Group meetings are held at the Box Factory Community Centre, 59 Regent Street (South), Adelaide (entry off Halifax Street). Email saherpetologygroup@gmail.com The next meeting is at 7.30pm Thursday 17th August For further information see <https://www.saherpetologygroup.org/>



Sydney city sculpture

MACARTHUR HERPETOLOGICAL SOCIETY



The Macarthur Herpetological Society MHS meets every third Friday each month (eg 18 August 2023), except January. Doors open at 7pm at the Scouts Hall 48 Broughton Street, Campbelltown, NSW for a 7:30pm start. Website <https://macarthurreptiles.com.au/>

Email president@macarthurreptiles.com.au Facebook <https://www.facebook.com/profile.php?id=100064370722234>

The FATS meeting commences at 7 pm, (arrive from 6.30 pm) and ends about 10 pm, at the Education Centre, Bicentennial Park, Sydney Olympic Park, Homebush Bay. FATS meetings are usually held on the **first Friday of every EVEN month** February, April (except Easter Friday), June, August, October and December. **If the FATS meeting falls on Easter Friday, then the meeting will probably be one week earlier.** Call, check our web site, Facebook page or email us for further directions. We hold 6 informative, informal, topical, practical and free meetings each year. Visitors are welcome. We are actively involved in monitoring frog populations, field studies and trips, have displays at local events, produce the newsletter FROGCALL and FROGFACTS information sheets. FATS exhibit at many community fairs and shows. Please contact Events Coordinator Kathy Potter if you can assist as a frog explainer, even for an hour. No experience required. Encourage your frog friends to join or donate to FATS. Donations help with the costs of frog rescue, student grants, research and advocacy. All expressions of opinion and information in FrogCall are published on the basis that they are not to be regarded as an official opinion of the FATS Committee, unless expressly so stated.

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FATS ON FACEBOOK: FATS has over 4,580 Facebook members and visitors worldwide. Posts vary from husbandry, disease and frog identification enquiries, to photos and posts about pets, gardens, wild frogs, research, new discoveries, jokes, cartoons, events and habitats from all over the world. The page was created 11 years ago and includes dozens of information files – just keep scrolling to see them all. <https://www.facebook.com/groups/FATSNSW/>

RESCUED FROGS are at our meetings. Contact us if you wish to adopt a frog. A cash donation of \$50 is appreciated to cover care and feeding costs. Sorry we have no EFTPOS. FATS must sight your current amphibian licence. NSW pet frog licences, can be obtained from the NSW Department of Planning, Industry and Environment (link below). Please join FATS before adopting a frog. This can be done at the meeting. Most rescued frogs have not had a vet visit unless obviously sick. Please take you new, formerly wild pet to an experienced herpetological vet for an annual check-up and possible worming and/or antibiotics after adoption. Some vets offer discounts for pets that were rescued wildlife.

<https://www.environment.nsw.gov.au/licences-and-permits/wildlife-licences/native-animals-as-pets/frog-keeper-licences>

FATS has student memberships for \$20 annually with electronic FrogCall (but no hard copy mail outs). <https://www.fats.org.au/membership-form>



Thank you to the committee members, FrogCall supporters, talented meeting speakers, Frog-O-Graphic competition entrants, event participants and organisers David, Kathy and Harriet Potter, Sarah and Ryan Kershaw. The FrogCall articles, photos, media and webpage links, membership administration and envelope preparation are greatly appreciated. Special thanks to regular newsletter contributors: Robert Wall, Karen & Arthur White, Andrew Nelson, Wendy & Phillip Grimm, Marion Anstis, George Madani and Punia Jeffery.



FROGWATCH HELPLINE 0419 249 728

FATS COMMITTEE CONTACTS

FATS MAILING ADDRESS: P O Box 296 Rockdale NSW 2216

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Robert Wall	Field Trips Coordinator	(02) 9681 5308	rjw2008@live.com.au
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Monica Wangmann	Editor		monicawangmann@gmail.com
Andre Rank and Luc Streit	General Committee members		

FATS 2023 FROG-O-GRAPHIC COMPETITION

The FATS members' Frog-O-Graphic competition closes on the 31 August 2023. There is a new category this year. Best "wild" tadpole/s or frog/s video. Maximum duration 30 sec, max file size 80MB maximum resolution 1080P. Format MP4. Wild frogs only with no people visible ie frogs that are free to come and go including in back yards. No pet frog videos please. Send the link for file to be downloaded in an email to photos@fats.org.au

Best Frog Image,
Best Pet Frog Image,

5 CATEGORIES: Best short "wild" frog video
Most Interesting Image and
People's Choice.

Winners are decided by a panel of judges.
People's Choice is voted for by everyone present
at the October FATS meeting.

All entries are by email to photos@fats.org.au
In the submission please state:

- * your name,
- * confirm that you are a financial member,
- * identify the frog species preferably by scientific name (in the file name) and location, if known,
- * whether the image is a pet frog and
- * your contact phone number

Max 6 entries per person
Max image attachment size 6 MB

Fabulous prizes awarded. Entries must be original and your own work. They don't have to be recent images. The entries may appear in FrogCall, FATS Facebook, our web site and other FATS publications. **Arthur White**

FATS AGM NOTICE

FRIDAY 4 AUGUST 2023

The FATS AGM will be held at 7pm Friday 4/8/2023.

FATS meets at the Education Centre, Bicentennial Park, Sydney Olympic Park. See map page 9. If you would like to ask any questions about joining the FATS committee, please give us a call. Contact our President, Arthur White at least two weeks before the meeting for further information or to submit items. We appreciate fresh ideas and new members on our committee. No experience required. The committee meets 6 times a year. No tasks, commitments or time expected of committee members, other than what you are able to spare.

See contacts details on page 11.

Arthur White

NEW PROFILE FEATURES ON THE FROGID WEBSITE FROGID RECORDS SPAN OVER ONE-THIRD OF AUSTRALIA

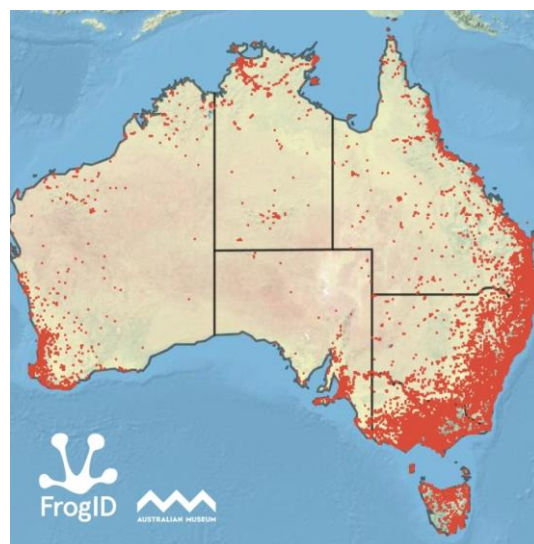
Thanks to over 30,000 people using the FrogID app, 33% of the total map grid cells across Australia contain at least one FrogID record! This is an incredible achievement for frog research and conservation. There are still many parts of Australia where we don't have any scientific records of frogs, so please use the FrogID app on your travels.

https://www.frogid.net.au/science?utm_source=wordfly&utm_medium=email&utm_campaign=FrogIDeNewsSeptALL&utm_content=version_B&promo=790

MORE THAN 900,000 FROG RECORDS ON FROGID

In less than six years since its launch, FrogID has achieved an incredible milestone of 900,000 scientific records of frogs this month. Thank you, Marianne Gully, for your FrogID recording of the Brown Tree Frog (*Litoria ewingii*) and Common Eastern Froglet (*Crinia signifera*) that contributed to this achievement. Together, let's continue making a significant impact and strive towards our next goal of 1 million frog records. Every call counts!

Our team also recently released FrogID dataset 4.0, comprising an impressive collection of nearly half a million frog records! This dataset surpasses the combined total of all other frog records gathered since the inception of FrogID in 2017, and it represents almost two-thirds of all frog records in the country according to the Atlas of Living Australia. The magnitude of this dataset is remarkable, as it was contributed by over 23,000 FrogID participants and encompasses diverse landscapes across the entire continent, from lush rainforests to arid deserts.



The data collected through FrogID has played a crucial role in publications that aim to uncover the true diversity of frog species in Australia and in conducting conservation assessments to prioritise necessary conservation efforts. This achievement highlights the dedication and contribution of our FrogID community in advancing our understanding of frog populations and their habitats across Australia. Thank you for all your valuable contributions!