

FROG CALL

THE FROG AND TADPOLE STUDY GROUP NSW Inc.

Facebook: <https://www.facebook.com/groups/FATSNSW/>

Email: fatsgroupnsw@fats.org.au

PO Box 296 Rockdale NSW 2216

Frogwatch Helpline 0419 249 728

Website: www.fats.org.au

ABN: 34 282 154 794

NEWSLETTER No. 147 FEBRUARY 2017

Photo: FATS Facebook member CR Broadfield
Ulverstone Tasmania *Litoria ewingi*



*You are invited to attend
our next FATS meeting*

Arrive from 6.30 pm for a 7pm start.

Friday 3 February 2017

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

Easy walk from Concord West railway
station and straight down Victoria Ave.

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

turn off to the right and drive
through the park. It is a one way road.

Or enter from Bennelong Road / Parkway.

It is a short stretch of two way road.

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

CONTENTS PAGE

• Last meeting's main speakers Marion Anstis and Arthur White	2
• New species <i>Uperoleia mahonyi</i>	
• Tadbits and Frogpieces	3
• Marion Anstis' new book	
• Tadbits and Frogpieces	
• Chytrid research crowd funding	4
• Booyong Conservation, Pt Macquarie	
• Frog sex life	5
• Herpdigest	6, 7 and 11
• Save The Frogs, Ghana	8
• NSW land clearing laws gutted	9
• Stopping illegal wildlife trafficking online	
• Frog Friday on Instagram	10
• Tasmanian tadpole photos by Craig Broadfield on various pages	
• Committee contacts and FATS info.	11
• Field trips	12

FATS meeting format Friday 3 February 2017

6.30 pm Lost frogs needing adoption: 2 Green Tree Frogs *Litoria caerulea* and 1 *Litoria fallax*. First time frog adopters and children have priority. Please bring your FATS membership card and cash \$50 donation. Your current NSW NPWS amphibian licence must be sighted on the night. Rescued frogs can never be released. Sorry we have no EFTPOS

7.00pm Welcome and announcements

7.30 pm Main speaker: Arthur White Swimming in Sand The impact on frogs of sand mining in the Myall Lakes National Park 30 years of Wallingat and Taren Point outcome

Phillip Grimm presenting "Log that Frog" survey at www.inaturalist.org

9.30 pm Show us your frog images. Tell us about your frogging trips or experiences. Guessing competition, continue with frog adoptions, supper, relax and chat with frog experts.

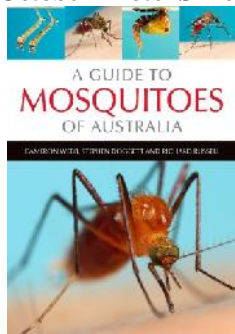
Happy New Year everyone. FATS hope 2017 started well for you and keeps on that way.



Australian Geographic Nature Photographer of the Year: Matthew McIntosh's orange-eye tree frog wins



Mosquito researcher Cameron Webb, our main speaker in October Photo Simone De Peak



NEWS ARTICLES FOR FROGCALL

FATS are seeking contributions for our newsletters especially the December 2017 edition. Maximum two pages of text and at least two high resolution photos or graphics. We would love FATS frog field trip reports or stories about your amphibian encounters, anywhere in the world. Please email monicawangmann@gmail.com if you would like to contribute. MW

LAST MEETING 2 DECEMBER 2016

Marion Anstis our main presenter, spoke about her photography trip to Svalbard. The winners of the FATS Frog-O-Graphic competition were announced. Congratulations everyone. The new species *Uperoleia mahonyi* was discussed. Arthur White talked about citizen science and Wallingat being declared a National Park due to it being a biological hot spot partly owing to the large number of threatened species there. Data has been collected there by FATS for 25 years. Congratulations FATS members Ryan Kershaw and Sarah Potter on your wedding.

NEW SPECIES UPEROLEIA MAHONYI


A



B



Uperoleia mahonyi Photographs S. Clulow

 Zootaxa 4184 (2): 285–315
<http://www.mcpres.com/jzt/>
Copyright © 2016 Magnolia Press

Article

ISSN 1175-5326 (print edition)
ZOOTAXA
ISSN 1175-5334 (online edition)

<http://doi.org/10.11646/zootaxa.4184.2.3>

<http://zoobank.org/urn:lsid:zoobank.org:pub.8A38E47C-5F24-4B2A-A7E8-7D99592252DD>

A new species of Australian frog (Myobatrachidae: *Uperoleia*) from the New South Wales mid-north coast sandplains

SIMON CLULOW^{1,5}, MARION ANSTIS¹, J. SCOTT KEOGH² & RENEE A. CATULLO^{2,3,4}

¹School of Environmental and Life Sciences, University of Newcastle, NSW 2308 Australia

²Evolution, Ecology & Genetics, Research School of Biology, The Australian National University, ACT 0200, Australia

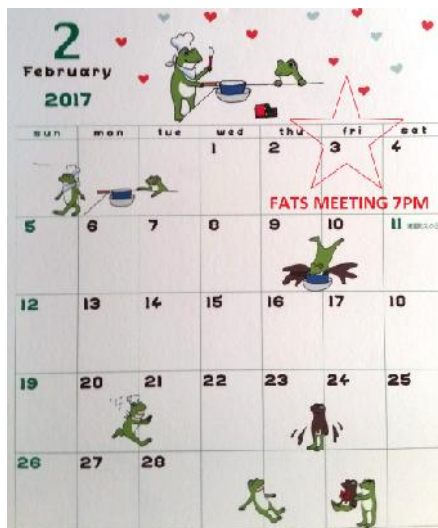
³Biological Sciences, Macquarie University, NSW 2109 Australia

⁴School of Science & Health, Western Sydney University, NSW 2751 Australia

⁵Corresponding author. E-mail: simon.clulow@newcastle.edu.au

Abstract The discovery of new vertebrate species in developed countries is still occurring at surprising rates for some taxonomic groups, especially the amphibians and reptiles. While this most often occurs in under-explored areas, it occasionally still happens in well-inhabited regions. We report such a case with the discovery and description of *U. mahonyi* sp. nov., a new species of frog from a highly populated region of New South Wales, Australia. We provide details of its morphology, calls, embryos and tadpoles, and phylogenetic relationships to other species of eastern *Uperoleia*. We also provide the results of targeted surveys to establish its distribution and provide observations of its habitat associations. As a consequence of these surveys, we comment on the likely restricted nature of the species' distribution and habitat, and place this in the context of a preliminary assessment of its putative conservation status, which should be assessed for listing under the IUCN's red list. We note this species, which is morphologically distinct, has gone unnoticed for many decades despite numerous eco-logical surveys for local development applications.

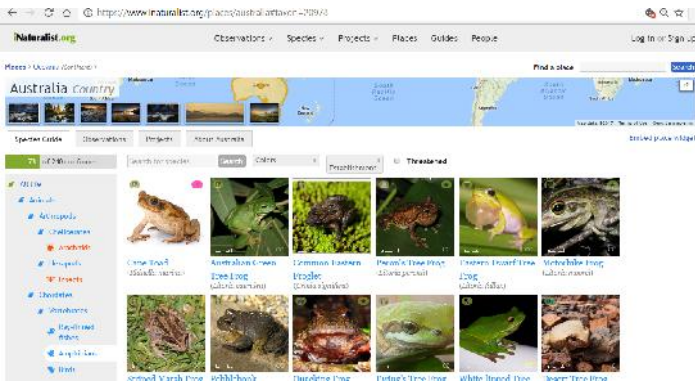
Below Karen and Arthur White at of December celebrations



TADBITS AND FROGPIECES

The FATS frog collection will be busy again this year travelling about to many exciting events in and around Sydney, so if you are in the neighbourhood drop by and say hello, or if you would like to help out contact **Kathy Potter** at kathy@the-pottery.org FATS will be present at a variety of events this year. Helpers needed. Please check our website www.fats.org.au for current information. We will be at Willoughby Fauna Fair 9:30-3pm 26th March, Currey Park, 10 Victor Street Chatswood. This was a really fun event last year with good speakers, including Arthur White, and lots of interesting people working on the other displays.

FATS donated \$300 to **Dr Nathan Emery** to support **The Great Cicada Blitz (Sydney, Australia)**. Phillip Grimm will speak at our February meeting about the “Log that Frog” project on iNaturalist. Questions? email log-that-frog@fats.org.au www.iNaturalist.org/projects/log-that-frog <https://www.inaturalist.org/places/australia>

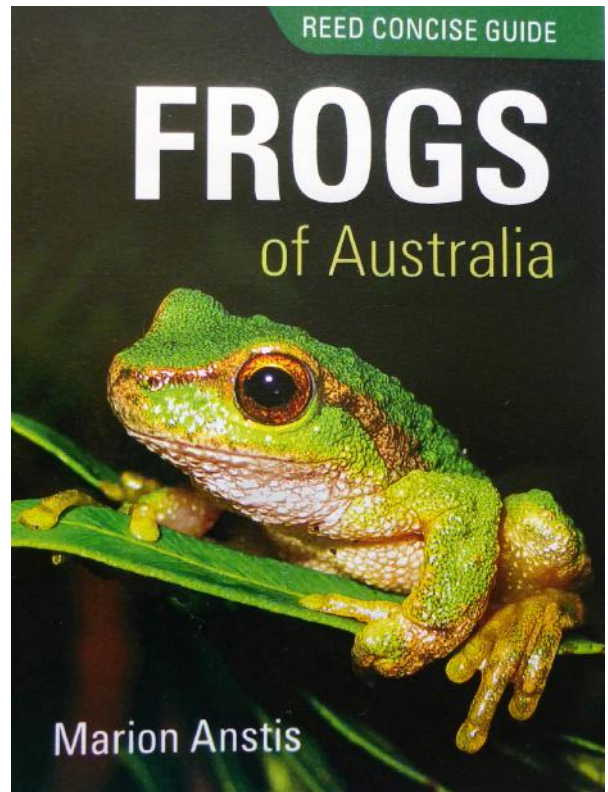


“A Photo Guide to the common cicada of the Greater Sydney Region” will be for sale at our FATS meetings.

World Wetlands Day <http://www.ramsar.org/activity/world-wetlands-day> **2 February**, marks the annual celebration of World Wetlands Day. The recently completed Destination Macquarie Marshes Action Plan will be launched as part of this celebration. The preparation of this Plan was funded by the Murray Darling Basin Energise Enterprise Fund and it provides a 'blueprint' for the relevant State government agencies, local governments, RiverSmart and other stakeholders moving forward together to build increased visitor opportunities, promotions etc for the Marshes. **Dr Bill Phillips CEO RiverSmart Australia Ltd**

Hawkesbury Herpetological Society Inc. **8th Reptile Expo 2017** will be held on Sunday 5th March, 2017 at Penrith Panther's Exhibition Marquee.

Amphibian Licence Returns are due in April. <http://www.environment.nsw.gov.au/licences-and-permits/wildlife-licences/native-animals-as-pets/native-animal-keeper-record-book>



Marion Anstis is preparing the 2nd edition of her book **Tadpoles and Frogs of Australia** with 16 additional pages. It may be available mid 2017.

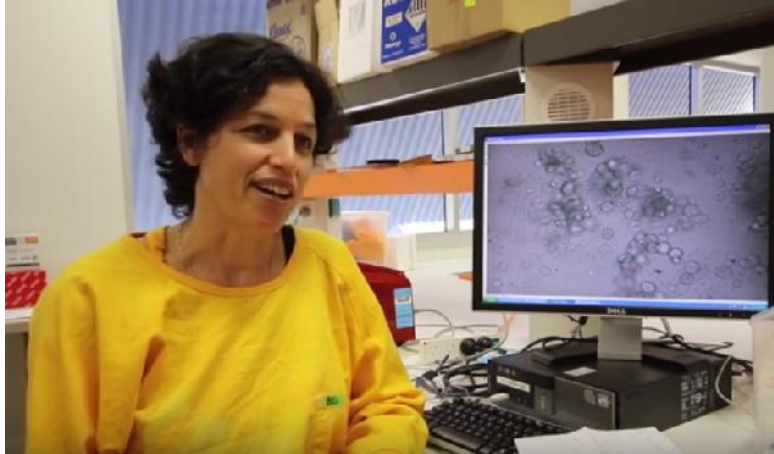
A new pocket book guide ‘Frogs of Australia’ by **Marion Anstis** has just been published, in the **Reed Concise Guide** series. It is a compact guide to 180 frog species in a handy pocket book size (12 x 9 cm) and retails for \$14.99. Available from general book stores soon. Marion will have a few copies to purchase at the next FATS meeting 3 February.

Latest Banana Box Frog rescue *Litoria gracilentia*



CROWD FUNDING FOR CHYTRID FUNGUS RESEARCH

Lee Berger Researcher James Cook University



<https://www.youtube.com/watch?v=HjiRTijNEfo&t=23s>
<https://www.youtube.com/watchv=HjiRTijNEfo&t=23s>

With increasing globalisation, infectious diseases of wildlife are spreading between countries and, similarly to weeds and feral pests, they can have a huge impact on biodiversity. Environmental agencies need methods to protect wildlife from new pathogens to which they have not evolved resistance.

As a result of the arrival of the chytrid fungus in Australia in the 1970's, frog populations have declined: six Australian species became extinct and another 6 are now critically endangered.

Since the fungus cannot be eradicated, the immunity of frogs needs to be increased to enable survival and produce self-sustaining populations.

Our group is studying immunity in endangered and model frog species to better understand how some species and individuals can persist with the fungus. We work with captive breeding programs at zoos with the aim of developing selective breeding to increase survival.

Please make a donation

<https://alumni.jcu.edu.au/ImmunityToFrogChytridFungusSavingAustralianFrogs>



BOOYONG CONSERVATION

My husband and I own a property near Port Macquarie and are very interested in the Native Flora and Fauna. See blog and photos below and bottom left of page.

[http://www.booyongconservation.com/perons-tree-frog-frog-in-a-log/Contact us](http://www.booyongconservation.com/perons-tree-frog-frog-in-a-log/Contactus)

Posted on September 14, 2016 Booyong Conservation

This amazing Peron's tree frog can camouflage from emerald green and brown frog in the darkness of a log, too a soft grey in the daytime. How incredible, we were amazed to discover these two pictures are of the same frog!

Nature continues to astound me!

The Frog in a log was spotted in a tree Branch some 10ft off the ground and the other by the side of the dam during the day.



Peron's Tree Frog *Litoria peroni*

Miraculously changes in response to the environment!

If you have a biologically healthy property you will have a strong habitat of frogs and this is certainly the case at Booyong. On our species list we have 27 frogs' that have been heard or sighted. Of an afternoon you can hear their calls and they sound fabulous!

The scientific name for this frog is the *Litoria peronii* and it is 50-65mm long. They live in both trees and on the ground and are found right across NSW in forests, wood and grasslands, resting in tree hollows during the day. It is a carnivorous animal and feeds on insects.

The male has a loud and rattling call which is said to sound like a coin coming to rest on a table when spun. It can be heard in Spring and Summer when they gather near water to attract females with their calls. The female lays its eggs in still water. The frog is a protected species in NSW.

Brett and Michelle Williams

<http://www.booyongconservation.com/perons-tree-frog-frog-in-a-log/> Facebook

https://www.facebook.com/booyongconservation/?hc_ref=PAGES_TIMELINE&fref=nf

SCIENTISTS HAVE DISCOVERED WAAAAAY TOO MUCH ABOUT THIS FROG'S SEX LIFE

YOU DEFINITELY NEED TO KNOW ALL ABOUT THIS FROG'S SEX LIFE

1 A graphical abstract
Discovery of a new mating position in the Bombay Night Frog

Based on how male embraces female, there are **six mating positions** among **6650 frog species worldwide**

The mating position of the Bombay night frog is **different**. It is identified as new-**Dorsal straddle**

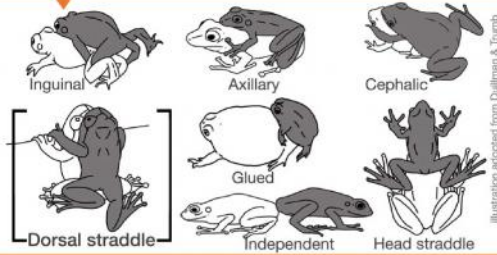
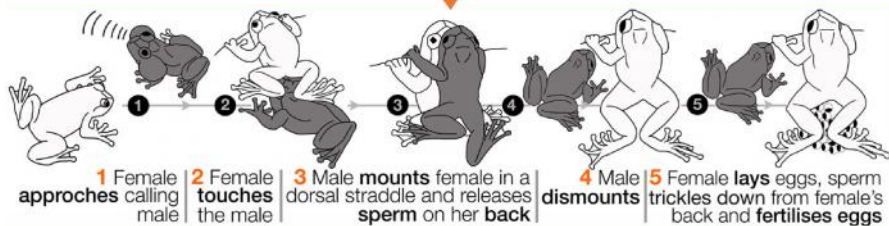


Illustration adapted from Dallman & Trumb

Researchers studying the Bombay night frog, a species native to forests in India, have found that ranine couples mate using a previously undescribed pose that they've termed the "dorsal straddle". Here (left) is the unedited, super graphic description of the dorsal straddle from the press release about the research (remember, this is *actual science*, which means it's not gross)

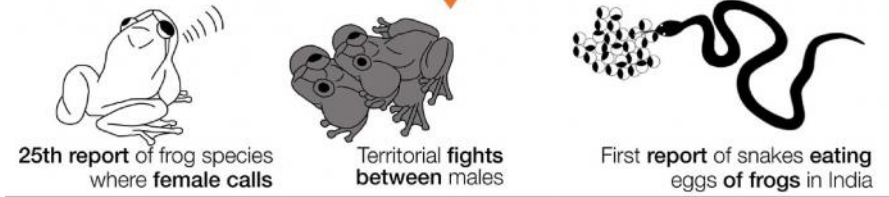
In Bombay night frogs, the male does not embrace the female but straddles over her back with his hands holding or resting on substrates such as a leaf, branch or tree trunk. At this moment, the male appears to release sperm over the female's back and then moves away. After that, the female lays her eggs, which are then fertilised by the sperm trickling down her back. Thus there is no contact between the sexes during egg laying and fertilisation. Gosh. Maybe not a position to try with your partner, then.

2 No physical contact between sexes during egg laying. The mating sequence is.....



And here it is laid out in an impressively explicit infographic (left). "This is a remarkable frog with an unprecedented reproductive behaviour, which is unique for a number of reasons. This discovery is fundamental for understanding the evolutionary ecology and behavior in anuran amphibians," said the University of Delhi's Professor SD Biju, who led the study. (Important note: "anuran" sounds like a rude frog body part, but it's just a word describing the biological order that frogs are filed under. *Phew.*)

3 Other unique observations on Bombay Night Frog



A unique mating strategy without physical contact during fertilization in Bombay Night Frogs (*Nyctibatrachus humayuni*) with the description of a new form of amplexus and female call
PeerJ 4:e2117; DOI 10.7717/peerj.2117.
<https://peerj.com/articles/2117/>
Systematics Lab SD Biju

Are you ready to learn way too much how frogs have sex? **Great! Let's go.** So apparently biologists have long known that the world's 6650-or-so species of frogs and toads Do It in only six mating positions, known scientifically as "amplexus modes" (amplexus is Latin for "embrace" — we are all learning a *lot* today.)

But in thrilling frog news, a *seventh* amplexus mode has now been discovered.



The Bombay night frog also has a few other (thankfully less obscene) remarkable characteristics: the females call out to males during breeding season, which is pretty unusual for lady frogs; the males fight each other for territory; and snakes feast on the frogs' eggs — the first time such behaviour has been documented in India.

So scientists — and the rest of us — now know an impressive amount about how one species of frog makes more little frogs. Meanwhile, no one has yet discovered why your Wi-Fi craps out every time it rains. You have messed up priorities, humanity.

15/6/2016 by Sam Downing Read more at <http://pickle.nine.com.au/2016/06/15/12/34/ev-erything-you-always-wanted-to-know-about-frog-sex-but-were-afraid-to-ask#SrhFgCuDDRobsXCB.99>

**<http://pickle.nine.com.au/2016/06/15/12/34/ev-erything-you-always-wanted-to-know-about-frog-sex-but-were-afraid-to-ask>
Forwarded to FATS by Stephen Weir**

HERPDIGEST (extracts)

HOW TRAFFIC NOISE AFFECTS TREE FROGS

Constant exposure to the sounds of a busy road can impact a male European tree frog's stress levels, immune system, and vocal sac coloration, scientists show.

If you've ever lived near a busy road, you're familiar with the noise of cars whooshing by and ear-piercing honks. Traffic noise is a well-known source of stress in humans. Now, a team of researchers has found that it can cause increased stress levels in frogs too. And aside from a spike in stress, traffic noise can have other negative effects on the European tree frog (*Hyla arborea*), such as suppressed immunity and a dulling of males' vocal sacs. The team's results were published last week (January 11) in *Conservation Biology*.

To study the effects of road noise on frogs, Thierry Lengagne of the University of Lyon and the French National Center for Scientific Research (CNRS) and colleagues first recorded noise from a nearby high-traffic road. The scientists then played back the recording to 20 male frogs in the lab. After 10 days of 24/7 exposure to traffic noise at 76 decibels, the frogs showed signs of increased stress.

To quantify the amphibians' stress, Lengagne's team measured levels of the hormone corticosterone in frog saliva samples. Corticosterone levels increased from an average of 3.2 picogram (pg) per milligram (mg) of saliva at the start of the experiment to 5.06 pg per mg at the end of it—an increase of 58 percent.

Weakened immunity was another consequence of traffic noise exposure. Lengagne and colleagues carried out the phytohaemagglutinin swelling test for immunity on frogs and estimated that the immune responses of noise-exposed frogs were weaker than those of control animals by about 19 percent.

Suppressed immunity makes frogs more susceptible to disease, said Lengagne. "And disease is one of the main causes of the disappearance of amphibians."

A third effect of traffic noise was altered coloration of the vocal sac, which male frogs inflate when making advertisement calls to potential mates. The vocal sacs of noise-exposed males turned paler toward the end of the experiment, the researchers reported. Moreover, this loss of color was more prominent for higher-quality males that initially had the most colorful sacs.

Lengagne said that this could impact sexual communication among European tree frogs, as females tend to choose males that have colorful vocal sacs over males with duller coloration. But in noisy habitats, he added, the vocal sac color of an otherwise higher-quality male may appear similar to that of a poor-quality male, thus interfering with the ability of a female to differentiate between the two.

"Several studies have examined the effects of road noise on male calling behavior, [but] this study suggests a new mode by which road noise can have reproductive consequences," Tracy Langkilde, a professor of biology at Pennsylvania State University who was not involved with the work, wrote in an email. "It also suggests a host of unexplored effects of road noise mediated through color change. Beyond mate choice, color can be important for other forms of social communication like territory defense or competition over other resources."

"This is an intriguing study showing that the effects of urban noise on frogs extend well beyond interference with their acoustic communication," agreed ecologist Kirsten Parris of the University of Melbourne, who also was not involved in the study. She added that the observed effects might be extended to studies on other animal groups that use visual signals to attract mates, such as reptiles and birds. **By Richa Malhotra, The Scientist. 18/1/2017 REF: M. Troianowski et al., "Effects of traffic noise on tree frog stress levels, immunity and color signaling," *Conservation Biology*, doi:10.1111/cobi.12893, 2017.**

**HERPDIGEST - VOL. 19 ISSUE 5 27/1/2017
FREE ELECTRONIC NEWSLETTER
COVERING THE LATEST NEWS ON
REPTILES AND AMPHIBIANS HERPDIGEST
IS A NON-PROFIT CORPORATION- Supported
by your donations and sales of herpetology books
& magazines**

INT'L TEAM IDENTIFIES SMALLEST SALAMANDER SPECIES

An international team of researchers has identified three new species of the world's smallest salamander and warned that the rare creatures are in danger of dying out. The species, from the enigmatic genus *Thorius*, the adults of which are smaller than a matchstick, are the smallest four-legged tailed organism on Earth, and their miniaturized bodies are highly unusual for vertebrates.

Once extremely abundant and now rarely found in nature, populations of *Thorius* have declined precipitously over the last 30 to 35 years. The latest findings were made in remote mountains of Oaxaca, Mexico, and published on Tuesday in the journal *PeerJ*. "Salamanders of the highlands of Mexico are closer to extinction than any other on Earth," said David Wake, a University of California, Berkeley, professor in the Department of Integrative Biology and a co-author of the paper. "The main factors are habitat conversion and new infectious diseases."

First discovered in the 19th century, *Thorius* were believed to be a single species for the next 75 years. Nine additional species were discovered between 1940 and 1960, but the adults are so small that the species were hard to tell apart.

A breakthrough came in the 1970s, when biologists discovered that many species, while anatomically similar, could be told apart by using molecular techniques. Since then, more species have been discovered and the three newly found species bring the current total to 29.

The new species were discovered in southern Mexico by the team of researchers from the United States, Mexico and Spain through decades of fieldwork and using a combination of sophisticated molecular analyses, including deoxyribonucleic acid (DNA) sequencing; digital imaging, such as X-ray computed tomography; and statistical analysis of external and

internal anatomy.....For at least the last 30 years, the number of valid named amphibian species worldwide has increased at a rate of about 3 percent per year. Whereas in 1985, biologists thought there were around 4,000 species of amphibians, today they recognize more than 7,700. More new ones are being discovered almost daily.

However, the discovery and documentation of amphibian diversity coincides with the precipitous decline of amphibians globally. Many once-abundant species have gone extinct in the last 50 years, and others are likely doomed to a similar fate barring effective steps to save them. Of the nearly 30 species of *Thorius* now recognized, almost all are regarded as endangered or critically endangered by the International Union for the Conservation of Nature. Indeed, the researchers said, *Thorius* may be the world's most endangered genus of amphibians.

SAN FRANCISCO, 16 Nov. 16 (Xinhua)

WESTERN GHATS UNVEIL ITS AMPHIBIAN DIVERSITY

Reinforcing the importance of the Western Ghats as a valuable reservoir of amphibian diversity, researchers from the University of Delhi have reported two new species of leaping frogs from Kerala and Karnataka. The new species - *Indirana paramakri* and *Indirana bhadrai* - have been reported in the latest issue of PLOS One, an open access scientific journal published by the Public Library of Science.

Sonali Garg and S.D. Biju, conducted DNA barcoding of over 200 samples to provide new estimates of the species diversity and distribution of *Indirana* frogs, an ancient genus endemic to the Western Ghats biodiversity hotspot. The specimens of *Indirana paramakri* were collected from wet rocks near streams and under leaf litter in disturbed forest areas in Settukunu and Sugandhagiri, north of the Palakkad Gap in Wayanad district.

The species epithet is derived from the Malayalam words 'para' meaning rock and 'makri' for frog, referring to the occurrence of the species on rocky terrain. Reddish brown with a black band extending from the nostril to the sides, the species is distinguished by its small snout-vent size and unique toe webbing. Named after its habitat, *Indirana bhadrai* is currently known only from the Muthodi forest in the Bhadra Wildlife Sanctuary, located north of the Palakkad Gap in Karnataka. The frogs were found on leaf litter in a secondary forest.

Distinguished by a pointed snout and toe webbing, *I. bhadra* is light brown with irregular dark brown blotches along the dorsal skin folds and a dark greyish-brown band between the eyes.....

The researchers have outlined a distribution trend suggesting genetic isolation between populations of the amphibians found north and south of the Palakad Gap, indicating the role of elevational discontinuities in distribution. They have proposed a reassessment of the IUCN categorisation of all species for effective conservation of these relic frogs. **The Hindu 11/17/16 by T. Nandakumart**

ALIEN INVADERS: THE ILLEGAL REPTILE TRADE IS SERIOUS THREAT TO AUSTRALIA

Australians are banned from keeping non-native reptiles as pets, but there is a nevertheless a thriving illegal trade in these often highly prized animals. We have documented the threat that these species – many of them

venomous or potentially carrying exotic diseases – pose to people and wildlife in Australia. In a study published in Conservation Letters, we estimate that of 28 alien reptile species illegally traded in Victoria between 1999 and 2012, 5 of them (18%) would have the potential to establish themselves in the wild if they escape or are released. Our findings also indicate that smaller alien reptiles are more likely to establish in the wild in Australia.

Worryingly, more than a third of these illegal reptile species are highly venomous snakes (10 out of the 28 species). The presence of 10 alien venomous snakes represents a serious human health hazard, even in Australia which is already home to some of the most venomous snakes in the world.

Previous research has focused on the overharvesting of wild populations to meet the demand for illegal wildlife products such as traditional medicine ingredients and other commodities, as well as live animals themselves. But the trade in illegal wildlife poses a risk not just to the species being trafficked, but also to the people and ecosystems potentially exposed to new hazardous alien species as a result. Unfortunately, these risks are often overlooked or underestimated by wildlife agencies.

Effective biosecurity measures are crucial for tackling these threats. Are Australia's biosecurity activities as good as they are made out to be in popular television shows about customs officers policing our borders?

Let's look at the example of ranaviruses, an emerging disease that kills huge numbers of amphibians around the world. The introduction of these viruses to Australia could be catastrophic for native frogs. Alien frogs transported as unintentional stowaways can carry ranavirus, so intercepting those alien frogs will also prevent the spread of these pathogens.

In an earlier study, we examined the effectiveness of Australian biosecurity activities for stopping the introduction of dangerous alien ranaviruses. Our main conclusion was that existing biosecurity measures have significantly reduced the likelihood of introduction of alien ranaviruses.

Moreover, biosecurity activities do not need to intercept every single incoming alien frog in order to reduce significantly the likelihood that new diseases will be introduced. This is particularly good news for threatened native frogs. Unfortunately, many other countries seem to have inadequate systems for keeping unwanted species out, despite the many social, economic and ecological impacts that alien species cause across the world.

This situation paints a bleak picture for the future of biodiversity, with alien species increasingly wreaking havoc across all environments. But we believe there is hope and a way forward – as long as countries are willing to work much harder to combat the threats posed by alien species. **Continued on P11**

SAVE THE FROGS – GHANA

The Sui Amphibian Conservation Amphibian Education Centre, opened last year at the base of the Sui rainforest - home of the critically endangered [Giant Squeaker Frogs](#). Less than thirty individuals are known to exist. The education center requires funding to maintain, fill with educational materials and staff. The community has donated a school building to SAVE THE FROGS! Ghana to house the center.



At the brand new Sui Amphibian Conservation Education Centre

SAVE THE FROGS! Ghana, is the world's first international branch of SAVE THE FROGS!, and undoubtedly the most successful amphibian conservation group in Africa, as well as a model for all frog conservation groups worldwide.

Gilbert Adum is an inspiration to all he meets. He grew up in a hunting community in a remote village in northern Ghana. Gilbert speaks four languages; has raised over \$200,000 for amphibian conservation; has discovered new amphibian species; re-discovered missing amphibian species; built a massive movement of environmental conservationists here in Ghana - all while raising three kids and working on his Ph.D. degree. We are extremely fortunate to have him leading Africa's environmental revolution.

The Sui Amphibian Conservation Amphibian Education Centre is at the base of the Sui River Forest Reserve. The reserve is home to one of the world's most endangered amphibian species, the Giant Squeaker Frog (*Arthroleptis krokosua*), which Gilbert and his team have been working to protect since the inception of SAVE THE FROGS! Ghana.



STF! Ghana Co-Founder Gilbert Adum & STF!

SAVE THE FROGS! Ghana Expedition was \$8,947 short of our fundraising goal. Few environmental efforts anywhere in the world have so thoroughly involved the local community. STF's have never found a place anywhere on the planet with more need for environmental assistance or with more potential to benefit both frogs and humans as our projects here in Ghana.

*International Campaigns Coordinator Michael Starkey surveyed the illegal farming that has displaced Giant Squeaker Frogs. After a recent fire, villagers cleared the forest by chopping down the burnt trees and they planted yams and plantains, which prevents the native forest from re-growing. Our team has planted nearly 10,000 seedlings in this destruction zone so that the Giant Squeaker Frogs can return to the site. These frogs are not known to exist anywhere on the planet other than the Sui forest. Will the rainforest remain in ten years? With your help it will, and so will the Giant Squeaker Frogs. Your donation will also help put a smile back on everyone's faces as we know we can turn your donation into frogs saved! **The Giant Squeaker Frogs appreciate your support! And so do I. Kerry Kriger, Ph.D. Co-Founder, SAVE THE FROGS! Ghana Incoming Honorary Environmental Chief, Yawkrom, Western Region, Ghana P.S. SAVE THE FROGS! Ghana is the only environmental group working to save the Giant Squeaker Frogs and the Sui rainforest. [Your donation](#) today is critical.***



With STF! Ghana's Gilbert Adum and Sandra Owusu-Gyamfi, two of Africa's most talented conservationists, as well as some of the hundreds of children who benefit from our efforts here in Ghana.

SAVE THE FROGS! is the world's leading amphibian conservation organization. We work in California, across the USA, and around the world to prevent the extinction of amphibians, and to create a better planet for humans and wildlife. Since 2008, SAVE THE FROGS! has organized over 1,800 educational events in 62 countries to raise awareness for endangered amphibians. PO Box 78758, Los Angeles, CA 90016 USA <http://savethefrogs.com/>

NSW LAND CLEARING LAWS GUTTED

Late last year the NSW State Government gutted the land-clearing laws that have been saving the lives of thousands of native animals like frogs, reptiles, koalas, pygmy possums and squirrel gliders every year. After several fiery hours of debate, it took just a few minutes for the final vote to seal the fate for our endangered wildlife. It's a decision that will weigh heavily in the hearts of everyone who values our incredible wildlife, bushland and sustainable farming.

Your efforts haven't been in vain. I know the laws would have been so much worse if you hadn't taken a stand. I know that because together we have:

1. **Put the NSW State Government on notice** that their attacks on the things we value will be catapulted into the media spotlight and will damage the Liberal government's reputation;
2. **Impacted the laws** by securing important improvements such as excluding some areas like high conservation value grasslands, and critically endangered ecological communities; and ensuring that the Office of Environment and Heritage will be responsible for enforcing the law – not the Department of Primary Industries;
3. **Encouraged the Labor Party to commit to scrapping former Premier Mike Baird's disastrous laws** when they are next in government and replace them with strong protections for bushland and wildlife; and
4. **Supported thousands of people like you to stand up for what we believe in**, growing the number of wildlife defenders who will continue to be a voice for nature.

- The plan -

With new laws due to take effect from July 2017, our work is far from over. Over the coming months we will be:

- **Calling for an investigation into the alleged illegal land clearing** exposed by ABC's Lateline program to undermine the credibility of this new legislation.
- **Keeping an eye on the fine print** - The devil will be in the detail and yet so much of how these laws will work hasn't even been written. Early next year we are expecting the maps which underpin the legislation to be released, showing what land is able to be cleared without approval. We'll be there every step of the way to make sure nothing slips through the cracks.
- **Exposing the damage** - Once the trees start falling, we'll shift gears and make sure that the damage caused by the laws is exposed in the media, to decision-makers and to law enforcement. We and the State Government can't turn away from the land clearing caused by these laws.
- And with you by our side we'll **lobby decision makers** to see the light of day and build the case for why these laws simply can't stand. Stay tuned for a Sydney rally in the coming weeks.

Don't let The current NSW State Government get away with it.
<https://www.facebook.com/natureNSW/videos/1353771944634341/>
The outcome is disappointing, but we will not sit idle. Tomorrow, we hold the NSW State government to account. **For nature, Kate Smolski CEO Nature Conservation Council**

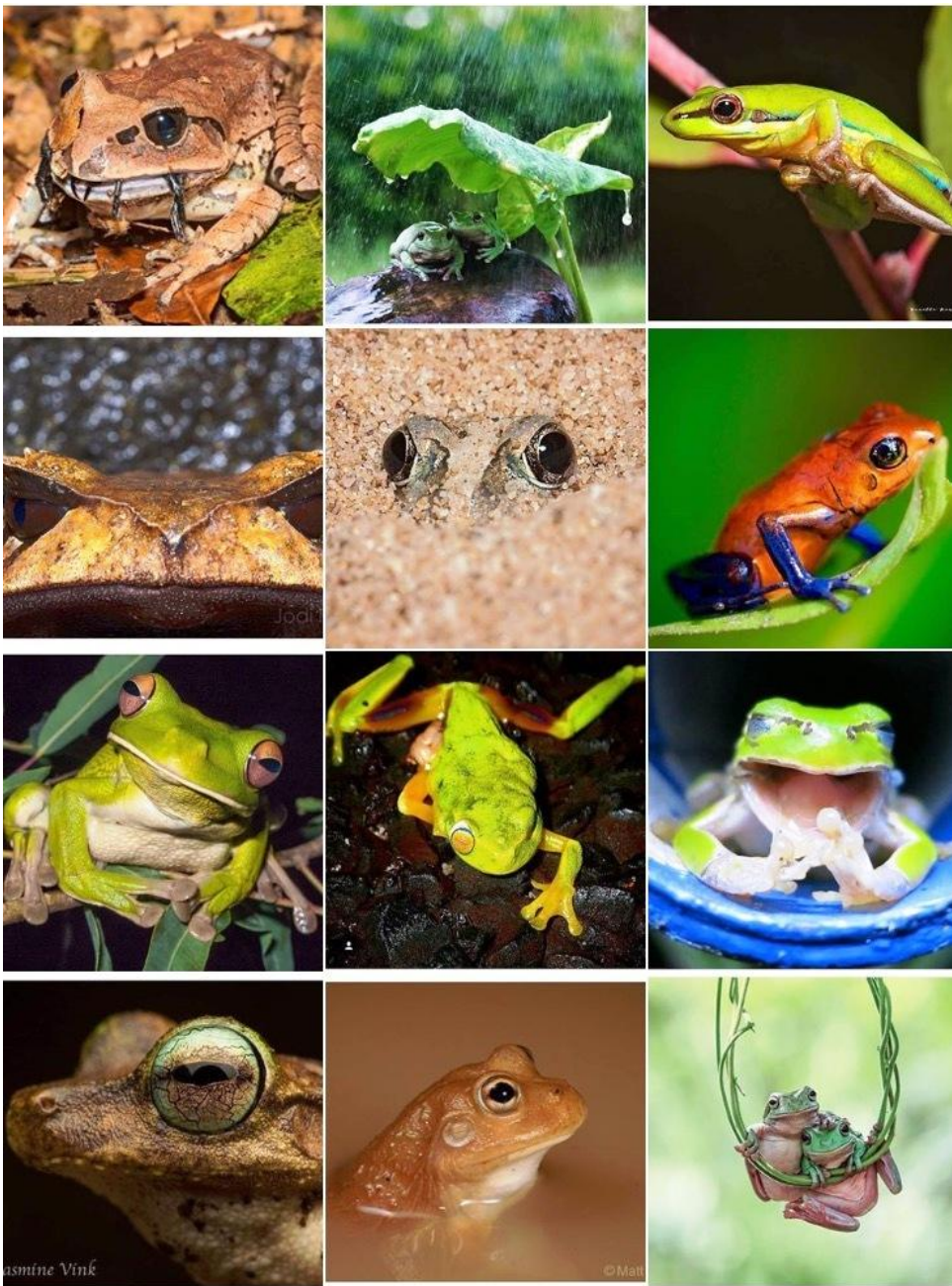
TECH INDUSTRY LEADERS JOIN FORCES AGAINST ILLEGAL WILDLIFE TRAFFICKING ONLINE

On World Elephant Day, online companies unite against wildlife cybercriminals by adopting measures to fight illegal wildlife trade. Leading e-commerce and social media companies are implementing critical steps to stop the sale of illegal wildlife products online across the globe. Seven companies, including eBay, Etsy, Gumtree, Microsoft (see their blog here), Pinterest, Tencent and Yahoo! have adopted a global, standardized wildlife policy framework in collaboration with World Wildlife Fund (WWF), TRAFFIC and International Fund for Animal Welfare (IFAW). This comprehensive policy will simplify shopping guidelines for consumers, identify prohibited products and eliminate the loopholes that make it easy for criminals to traffic wildlife online. This united front by the tech industry minimizes the whack-a-mole effect where criminals move from site to site to avoid detection. These companies are working together to protect wildlife.

In a recent three-year period, approximately 100,000 elephants were killed for their ivory; rhino poaching increased by 9300% in South Africa from 2007-2014; tiger populations have plummeted by 97 percent in the last century, leaving only approximately 3,900 left in the wild; and more than 1 million pangolins have been poached from the wild in the last decade alone.

The power and reach of these companies joining forces with the conservation community is groundbreaking, and will help protect threatened species from online trade. The problem doesn't end here, but this is a crucial first step in removing the internet as a channel for wildlife traffickers." "We have seen the 'whack-a-mole effect,' where one online company hits back hard by tightening up its policy and efforts to close loopholes, then traffickers pop up on other sites to trade unimpeded," said Crawford Allan, Senior Director Wildlife Crime, TRAFFIC. "With a united front, the mainstream global companies adopting a shared policy and approach will shrink the potential market access for wildlife criminals and protect consumers from being unwitting drivers of the poaching crisis."

Peter LaFontaine, Campaigns Manager for the International Fund for Animal Welfare said "It is tremendously encouraging to see that leading online marketplaces and social media platforms are fighting back against wildlife cybercriminals to stamp out the illegal sale of endangered wildlife from their sites. **Washington, D.C., USA Traffic Newsletter, HERPDIGEST - VOLUME 18 ISSUE 19 20/8/16**



FROG FRIDAY

As we mentioned to you in the FATS December FrogCall edition, every Friday, the Instagram community uses the (hashtag) #FrogFriday to upload frog photos and flood the internet with all things froggy.

To raise awareness of amphibian conservation worldwide, **FATS member Josie Stokes curates the @frogfriday Instagram account** and features 2 fabulous frog photos each Friday.

To be featured: Follow @frogfriday on Instagram

Tag @frogfriday in your post, and,

Most importantly include the #FrogFriday somewhere on your post.

Those 2016 Frog-O-Graphic entrants with an Instagram account have the opportunity to be featured on the @frogfriday gallery.

Search the #FrogFriday now to see some of the stunning froggy pics that have been recently featured.



Photo Scott Martin Smiths Lake



Tasmania *Litoria ewingi* CB Broadfield

FATS MEETINGS commence at 7 pm, (arrive from 6.30 pm) and end about 10 pm, at the Education Centre, Bicentennial Park, Sydney Olympic Park, Homebush Bay. They are usually held on the **first Friday of every EVEN month** February, April, June, August, October and December but not Easter (Good) Friday. 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 stalls at local events, produce the newsletter FROGCALL and FROGFACTS information sheets. FATS attend many community fairs and events. Please contact Kathy Potter if you can assist as a frog explainer, even for an hour. No experience required. Please 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 Frog and Tadpole Study Group Committee, unless expressly so stated.

COPYRIGHT: Material from FROGCALL MAY NOT BE REPRODUCED without the prior consent of the writer, photographer, editor or president of FATS. Permission from FATS and/or author/s must be obtained prior to any commercial use of material. The author/s and sources must be always fully acknowledged.

FATS ON FACEBOOK: FATS has over 1,860 Facebook members from almost every continent. Posts vary from husbandry and frog identification enquiries to photos and posts about pets, gardens, wild frogs, research, new discoveries and habitats from all over the world. The page includes dozens of information files.

<https://www.facebook.com/groups/FATSNSW/>

RESCUED FROGS are seeking forever homes are at our meetings. Please contact us in advance if you wish to adopt a frog. Cash donation required to cover care costs. FATS must sight your current amphibian licence. Licences can be obtained from NSW National Parks and Wildlife Service, Office of Environment and Heritage. We request you join FATS before adopting a frog. This can be done on the meeting night. Sorry we have no EFTPOS.

<http://www.environment.nsw.gov.au/wildlifelicences/GettingAnAmphibianKeepersLicence.htm>



Thank you to the committee members, FrogCall supporters, meeting speakers, Frog-O-Graphic competition entrants, events participants and organisers David, Kathy, Sarah and Harriet Potter and Ryan Kershaw for an enjoyable year. The FrogCall articles, photos, media and webpage links, membership administration and envelope preparation is greatly appreciated. Special thanks to newsletter contributors, Robert Wall, George Madani, Jilli Streit, Karen & Arthur White, Andrew Nelson, Stephen Weir, Wendy & Phillip Grimm, Henry Cook and Marion Anstis.



FROGWATCH HELPLINE 0419 249 728

FATS COMMITTEE CONTACTS

FATS MAILING ADDRESS: P O Box 296 Rockdale NSW 2216

Arthur White	President	ph/fax (02) 9599 1161	1 arthur@tpg.com.au
Marion Anstis	Vice President and chairperson	(02) 9456 1698	frogpole@tpg.com.au
Wendy Grimm	Secretary	(02) 9144 5600	wagrimm@tpg.com.au
Karen White	Treasurer	ph/fax (02) 9599 1161	1 arthur@tpg.com.au
Phillip Grimm	Memberships, Website & Facebook Manager	(02) 9144 5600	phigrimm@gmail.com
Kathy Potter	Events Coordinator	0403 919 668	kathy@the-pottery.org
Robert Wall	Field Trips Convenor	(02) 9681 5308	rjw2008@live.com.au
David Potter	Frog Helpline Coordinator	0413 210 789	david@the-pottery.org
Monica Wangmann	Editor	0418 992 766 / (02) 9797 6543	monicawangmann@gmail.com
General Committee members	Andre Rank, Jilli Streit, Punia Jeffery and Vicki Deluca		

Continued from P7 Foremost, we need to improve our understanding of the importance and drivers of transport pathways through which alien species travel. Armed with that knowledge, we can plan more effective management – although a lack of data is no excuse for delay in the meantime. Prevention is always better than cure, so our number one goal should be to prevent the introduction of alien species, rather than simply tackling the problems they cause. Some important lessons emerge

from our research. The illegal wildlife trade and the transport of stowaways are global issues. Therefore no country, however effective its biosecurity, can solve its problems on its own. Multilateral biosecurity agreements will be necessary to manage both stowaways and the illegal wildlife trade.

In Australia, we need to raise public awareness about alien species. We have to enlist the public in reporting suspicious activities and the presence of alien species at large. Meanwhile, supporting biosecurity

activities is a no-brainer. Biosecurity is a responsibility shared by all Australians, and the general public have a role to support biosecurity activities, even if that means a few more minutes to clear biosecurity ports and airports. Be on the lookout for potential alien species, and if you spot anything unusual, report it to the Department of Agriculture and Water Resources. **The Conversation HERPDIGEST VOL 18 ISSUE 33 17/11/16**



Limnodynastes dumerilii Eastern Banjo Frog photos CR Broadfield

It's interesting to watch them develop, day by day. Yesterday this one (left) had 2 hind legs. Tonight it has a fore-leg and the second is bulging under the skin ready to emerge in the next day or so. Such an amazing process!

Craig Broadfield Ulverstone Tas

FIELD TRIPS

17 – 19 March Smiths Lake Camp-out Leaders: Karen and Arthur White

Smiths Lake has become such a popular field trip destination that changes are needed to ensure that everyone gets a chance to go. Up until now, it has been first in goes to the head of the list, but this approach has meant that the same people often get to go and newcomers miss out. In addition, we have had people cancel late and so their place goes unfilled. To overcome both of these problems we have changed the booking arrangements, which will include **a non-refundable** pre-payment for the booking:

1. For the next field trip, you must email Karen White white.kazzie@gmail.com by the 3rd of March and indicate that you (and others) want to attend. You must list the names of all of those who are in your group and the day that you intend to arrive. This email will put your names on a list- if you attended the previous Smiths Lake field trip you automatically will go on the Reserve (B) List.
2. Karen will send you a reply email to let you know which list you are on. If you are on the A List, you must pay for your accommodation by the 3rd of March to confirm your booking. If you do not pay by this date you will be removed from the A list. You can pay electronically to the FATS acct: BSB 082 342 Account No. 285 766 885 Account name: Frog and Tadpole Study Group Cost is \$17.50 per person, per night.
3. Karen will send you confirmation when your payment has been received.
4. Karen will email people on the B list 2 weeks before the field trip dates (ie. on 4 March). You will be told if there are spaces available for you or not. If you are able to go, you now need to forward your payment to guarantee your place. Payment must be received by the 10th of March. If not you will be removed from the list and your place given to the next person on the list. We think that this will be the fairest way to ensure that everyone gets a chance to go to Smiths Lake. **AW**

In the event of uncertain frogging conditions e.g. prolonged/severe drought, hazardous and/or torrential rain, bushfires etc., please phone 9681-5308. Remember! Rain is generally ideal for frogging! An adult must accompany children. Bring enclosed shoes that can get wet (gumboots are preferable), torch, warm clothing and raincoat. Please be judicious with the use of insect repellent – frogs are very sensitive to chemicals! Please observe all directions that the leader may give. Children are welcome, however please remember that young children especially can become very excited and boisterous at their first frogging experience – parents are asked to help ensure that the leader is able to conduct the trip to everyone's satisfaction. All fieldtrips are strictly for members only – newcomers are however, welcome to take out membership before the commencement of the fieldtrip. All participants accept that there is some inherent risk associated with outdoor fieldtrips and by attending agree to: a release of all claims, a waiver of liability, and an assumption of risk.