

FR G CALL

THE FROG AND TADPOLE STUDY GROUP NSW Inc.

NEWSLETTER no. 106 April 2010

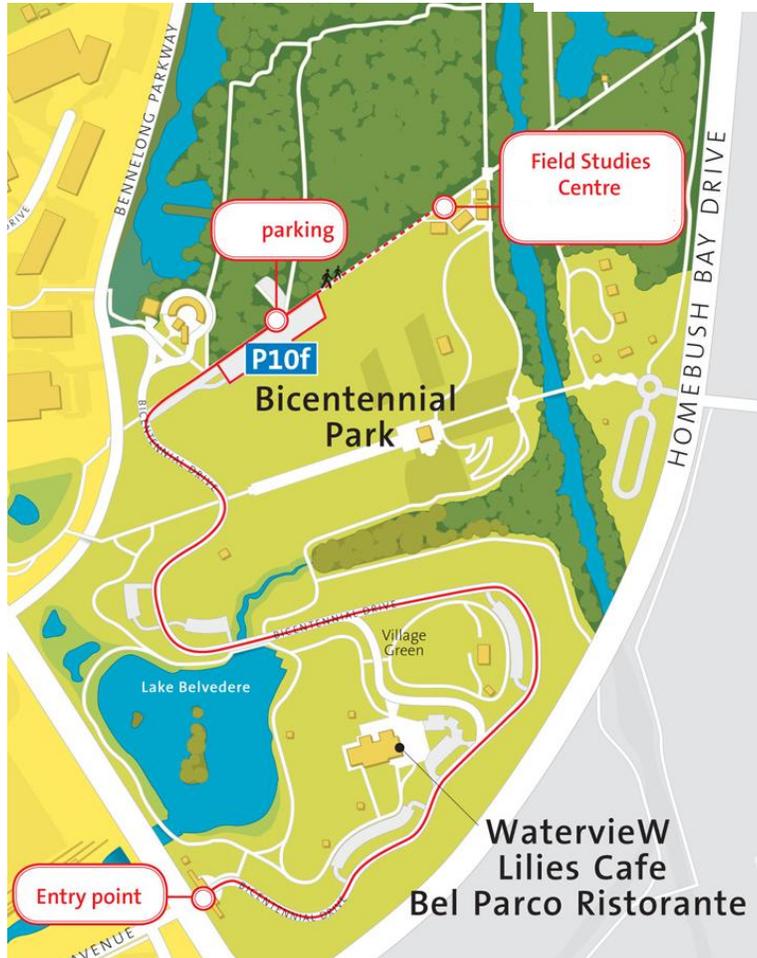
NSW Frog licences must be sighted if you would like to adopt a frog.

Email: fatsgroupnsw@hotmail.com

PO Box 296 Rockdale NSW 2216

Website: www.fats.org.au

ABN: 34 282 154 794



Arrive 6.30 pm for a 7 Pm start.

*****Friday 9th April 2010*****

*****NOT GOOD FRIDAY*****

Meeting to be held at a **NEW VENUE**
Field Studies Centre (Education Centre)

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

By car: Enter from Australia Ave at the Bicentennial Park entrance and drive through the park (one way road) or enter from Bennelong Rd. It's a short stretch of 2 way road and park in p10f car park (the last car park before the exit gate). Turn off to the right if entering from the main entrance. See maps on page 6 & 7.

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MEETING FORMAT Friday 9th April 2010

- 6.30 pm** Lots of lost frogs needing homes. Please bring your FATS membership card, \$\$ donation and **NSW NPWS licence**
- 7.00 pm** Welcome and announcements
- 7.45 pm** The main speaker, Rowena Hamer (UNSW) "Scents of danger: risk-sensitive use of scent communication by Great Barred Frogs"
- 8.30 pm** Field trip reports, show us your frog images, tell us about your frogging trips or experiences, guessing competition, light refreshments and a chance to chat with frog experts.

LAST FATS MEETING 5th FEBRUARY 2010

Punia Jeffery opened the meeting and spoke about future field trips. FATS calendars are still available. The Australian Museum still has the photographic exhibition on show.

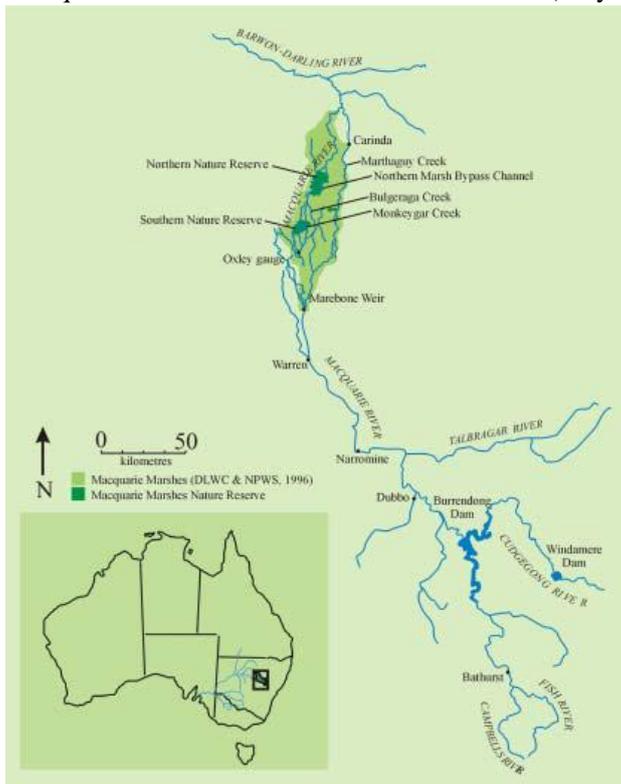


Lauren Harrison spoke about her honours project, modelling the distribution of frogs in the Central West Catchment, focusing on the NSW Macquarie Marshes. It was the first study of frogs by the Australian Wetlands and Rivers Centre.

http://www.wettrivers.unsw.edu.au/docs/rp_mm_modelling.html



A healthy river redgum *Eucalyptus camaldulensis* forest in the Macquarie Marshes Northern Nature Reserve (May 2006).



Map showing the location of the Macquarie River catchment, major tributary rivers, distributary creeks, large dams, Macquarie Marshes floodplain (including the Nature Reserve) and some towns on the river downstream of storages in New South Wales, Australia. The river flows northwest.

This ecologically important study links to evidence of worldwide declines, food web functioning and bio-indicators of environmental change. Surveys were restricted to breeding ponds.

The comprehensive study considered 6,000 river regulation structures, seasonal patterns, the identification of 30,000 wetlands in the Murray Darling Basin, 9 major dams, irrigation practices, floodplain shrinkage and pulse events, fish and bird decline and climate.

Frogs adapt well to life in arid regions, with a boom and bust ecology.

The study aims included producing frog distribution maps and determining environmental variables. The Striped Marsh Frog *Limnodynastes peronii* was the most common of the 31 species of frogs identified in the catchment, followed by Barking Marsh Frogs. Priority habitats are to be predicted. Lauren generated a great deal of debate and was asked lots of questions at the end of the presentation - including that no chytrid had been identified. Thank you Lauren for a most interesting talk and best wishes on a very ambitious project.

Arthur introduced, congratulated and acknowledged Ben Brown who has discovered Giant Burrowing Frogs at Lane Cove National Park, despite the area being so heavily stomped over for years. Well done Ben.

George Madani travelled during recent rains over the Christmas period, to the North West slopes starting at Dubbo, Narrabri, Walgett and Coonamble. He displayed a large number of excellent frog images photographed by himself and many by Mark Semeniuk and James Schlinke (sp?) as well as recounting events on the trip. Some of the more common species seen were Green Tree Frogs, Perons Tree Frogs and Desert Tree Frogs. Another coastal species which happen to make their way out west is the Broad Palmed Rocket Frog. Some other frogs seen were the Ornate Burrowing Frogs, *Lt fletcheri*, *Uperoleia rugosa* and Northern Pobblebonk (Banjo Frogs) between Dubbo and Gilgandra, pretty close to the southern limit of their distribution. They can get pretty big. From Narrabri they went to Baradine, where most of the rain had fallen. Photographed a Red Triangle Slug, in its pink form, only found in a small area. The Namoi River was flooded. They saw some of their target species and had a rewarding trip.

Judy Harrington, our SOPA park ranger, spoke about our FATS meeting move to a new home, from heritage building 22 at RANAD, SOPA, to the Field Studies Centre (to be known in future as the Education Centre), at Bicentennial Park. See page 3 for further details.

Arthur spoke of the Goliath Frogs who currently face an grim future. In addition to being eaten for food they are found in poor countries and are being exported as part of the pet trade. They tend not to fair well in captivity and their tadpoles have such specialised food needs that they too are hard to raise successfully in captive breeding. Raffle, light supper, tea coffee and a chat followed our presentations. **MW**

**GOODBYE BUILDING 22 SOP
HELLO BICENTENNIAL PARK FIELD STUDIES CENTRE**



**Judy Harrington & Arthur White, Feb 2010 Farewell building 22
Photo Phillip Grimm**

Our next FATS meetings will be held at Bicentennial Park's Field Studies Centre (Education Centre) from April 2010 onwards. It will be better. It is warmer Winter and protected in Summer. It is easier to get to, particularly by public transport. There will be no need for a security person. There is plenty of parking. see

http://www.sydneyolympicpark.com.au/__data/assets/pdf_file/0016/6424/bicentennial_park_map.pdf

By car - enter from Australia Ave at the Bicentennial Park entrance and drive through the park (one way road) or enter from Bennelong Rd - short stretch of 2 way road Park in p10f car park - the last car park before the exit gate - turn off to the right if entering from the main entrance. People can easily walk from Concord West station straight down Victoria Ave

**My species no longer survives
in the wild**



**But don't cry for me...
Just donate to
SAVE THE FROGS!**

Dr. Kerry M. Kriger Save The Frogs
Founder, Executive Director & Ecologist
703-376-7945 kerry@savethefrogs.com



**AN IMPORTANT MESSAGE TO ALL PERSONS WHO HOLD A LICENCE TO KEEP
NATIVE ANIMALS**

2010 Animal Keepers' Record Books

Must be received by the Department before **30 April 2010**

- All fauna record books must be returned
- No statements will be accepted as in past years
- FRBs are only accepted by post to the postal address below
- A \$5.00 book replacement fee (payable by credit card only) applies to licensees who have lost or cannot find their book and need a replacement in time to submit by 30 April 2010

If your book is not received before 30 April 2010 you will be penalised. The penalties include:

- An automatic exclusion from licence upgrades for all of 2010
- A non compliance flag placed on your licence that may affect future licence activity, eg import/export licence applications
- Exclusion from the 2010 fauna ballot system, whether a DECCW ballot or fauna society "wishlist."

Wildlife Licensing and Management Unit PO Box 1967 Hurstville NSW 1481

Tel: (02) 9585 6406 Fax: (02) 9585 6401 **Email: wildlife.licensing@environment.nsw.gov.au**



**Environment,
Climate Change
& Water**

WHAT'S AT THE BOTTOM OF YOUR GARDEN?



THE BLISS OF HAVING GARDEN FROGS

Greetings from Kempsey:



These photos were taken by Max and Melessa Wheatley in their enviable garden in West Kempsey. We can see an Eastern Dwarf Tree Frog (*Litoria fallax*) in its bronze colour phase. They have a resident Great Barred Frog (*Mixophyes fasciolatus*) – I wish I had those in my garden! And there is a Green Tree Snake swallowing a Peron's Tree Frog while contemplating an Unusual Object. (I don't have those at home either.)



Amplexing at Schofields:

Anthony Stimson took this great rude shot in his back garden. They call it 'amplexing' out there, but nobody thinks anything of it. Because it's happening all around. Then next week when I went over, his pond was as full of baby taddies as it could get.



This is the self-same Anthony Stimson who runs the annual Frog and Reptile Show. This year it's at the Showground, in a few weeks! Details are elsewhere in this issue.

Goo-filled Leura Frog:

Karen and Ross Gibbs live in Leura in the Blue Mountains and have sent us this amazing photo. By their front pond lives a wonderful creature, a Striped Marsh Frog that is about 60 mm long and almost just as high. He seems happy enough and has called most nights all summer long. We showed the picture to Mike Tyler, who replied:

"This frog is suffering from gross subcutaneous lymphatic oedema. This happens when the lymph hearts fail and become clogged with proteinaceous material. It can be released by draining with a needle but will simply refill again."



Now that we know what's in it, do we really want to pop it? Karen and Ross are happy to let it bob in their pond just as it is. LV

TV Dinner:



TV is the polite term for toad vomit, if you pardon the gag. These two were amongst those apprehended at Taren Point, puffed up and about to spew. Just as well I held them at arm's length for the photo opportunity. What they revealed when slurried up was mostly plant matter, together with a small sharp rock, some gravel, insect legs, beetle carapace, a long hair – and a coffee bean. So next time you find toad spew, would you like to sit down for a brew? **L.V.**



THE 2010 FROG AND REPTILE SHOW

The Wild Australia Expo and the 2010 Australian Frog & Reptile Show are now combined.

New Venue: Sydney Showground, Sydney Olympic Park. Friday 30th April to Sunday 2nd May, 2010, 10am to 4pm. All details on www.wildexpo.com.au
<http://www.youtube.com/user/WildExpos>

Few things capture the imagination quite like the great Australian bush and its incredible marsupials, birds, bugs and ... FROGS & REPTILES. At the Wild Australia Expo, these unique attractions will be showcased through incredible "up-close" live animal displays and presentations.

Some of the new highlights to the show this year are Super Croc, a life size recreation of the largest crocodile ever to inhabit the earth, a Muttabuttsaurus robot, giant slide for the kids, and a schedule of interesting and informative WORKSHOPS. The success of our Friday night dinner with guest speakers has prompted us to follow the same format again in 2010. Go to our DINNER page to find out who the exciting guest speakers will be this year.

With new categories, more entry space, and increased chances of a prize, this will be our biggest and best Best in Show competition yet. Reserve the weekend now.

THE GREAT GLOSSODIA FROG NIGHT

Glossodia is greater than it looks on the map, somewhere in the woods between Windsor and the Colo. In area it must be bigger than some cities. But try to find someone to point you the community hall, and you find nobody.

It turned out they were all at the community hall. The Hawkesbury WIRES branch had swelled the hall last month to see and hear about the FATS frogs. Talking to WIRES is always easy. They're just like us. They like frogs. I did not need to convince them that the frogs like them too. The frogs did that by themselves. **L.V.**



- Key**
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| Information | Accommodation | Boat Ramp | Dog on leash only | Mountain biking | Ponoon | Ticketek |
| Train Station | ATM | Boules | Dog off leash area | No Cycling | Public Art | Toilets/Accessible |
| Bus Stop | Barbecue | Café | Drinking Fountain | No dogs | Restaurant | Walking |
| Ferry Service | Basketball | Cauldron | Heritage Significance | Performance Area | Shipwreck | Waterplay |
| Taxi Rank | Bicycle Rack | Chess | Information | Picnic Shelters | Shop | Telephone |
| Parking | Bird Hide | Cycling | Lookout | Playground | | |

For Olympic tours, bike hire or information contact
Sydney Olympic Park Visitor Centre

Cnr Showground Road & Murray Rose Avenue
 Tel 02 9714 7888

www.sydneyolympicpark.com.au



Key

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Field Studies Centre

Bicentennial Park
Sydney Olympic Park

www.sydneyolympicpark.com.au

NATIVE FROG OR CANE TOAD?



One of the easiest ways to recognise a Cane Toad is by the very large poison glands on the shoulders, the dry, leathery skin and the thick ridge on the eyelids.



You can be sure you have a native frog if it has what seems like small round knobs or sucker discs on its fingers and toes for climbing.

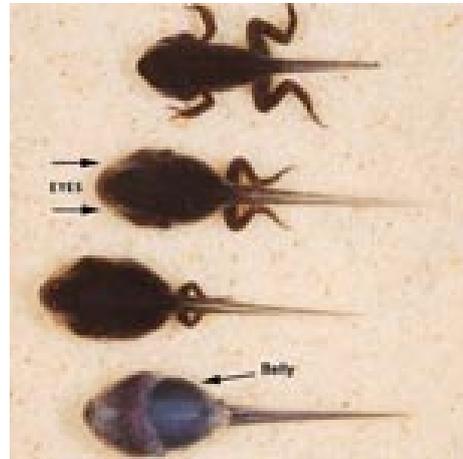
Australia has no native true toads, even though some might be called 'toads' because they look a bit like them. Cane toads can grow to 17cm or more, but are generally between 9-13cm in length. They are not strong jumpers and tend to do several short hops as they travel, rather than a long jump.

There is an estimated 27 species of frogs that live in the Dry Tropic region of north Qld and a number of these native frogs may easily be confused with cane toads. There are, however, a number of factors that will determine whether you may come across all of these species or only a few. Where you live is perhaps the most influential. If you live in a built up area the number of native frog species that you may confuse with a cane toad is minimal but as you move further away from the city into rural areas the number of native frog species that can be confused with cane toads increases. Many of these native frogs are only seen during the wet season or during their breeding season and perhaps the only time

you may come across them is when you are driving on roads on a rainy night.

Cane toad tadpoles - what they look like

- Cane toad tadpoles are small and grow to lengths of approximately 3cm
- Body is uniformly black and only about 1.2 cm in length
- Eyes are in from side of head
- Belly (underneath) is dark bluish-black
- Tail short, not much longer than body
- Tail muscle black
- Fins clear, tail tip rounded
- Cane toad tadpoles are often seen swimming in very large swarms of small black tadpoles.



Some Differences Between Tadpoles of Native Frogs and Tadpoles of Cane Toads

The eyes of many native tadpoles are at the sides of head or just inside edge of head, whilst those of cane toad tadpoles are a bit more towards the middle of the head.

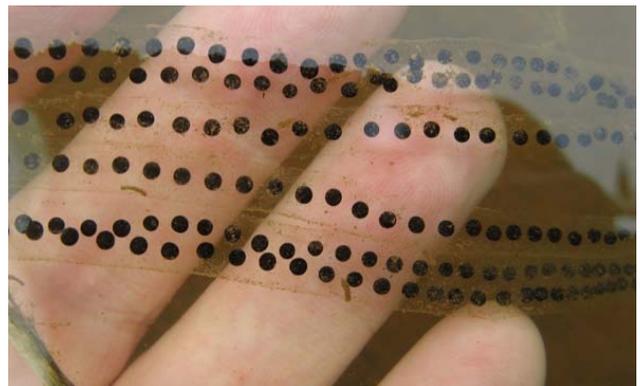
The belly of many native tadpoles is often opaque silver or copper, while that of the cane toad tadpole is dark bluish-black. There are some exceptions around Sydney, but these tadpoles grow much larger.



A typical native tree frog tadpole with deep fins and long fine tail tip. Note the copper belly and eyes on side of head.

CANE TOAD EGGS

Cane toad eggs are very easy to recognise because unlike native frog tadpoles, they are laid in very long chains of pairs of black and white eggs.



Native frog eggs are usually brown or black, but are laid in a variety of other ways, including clumps... like this:



Ornate Burrowing Frog Tadpole *Platyplectrum ornatus* – similar shape to Cane Toad tadpole...

Eyes well in from side of head similar to cane toad but this tadpole has a silvery-copper belly, brown back often with broad patches and can grow larger than cane toad tadpoles (sometimes up to about 4.8cm). Unlike the cane toad tadpole, it is never black above or on the tail.



Acknowledgment: Thanks to Marion Antsis for images and text. See also <http://www.frogsnotcanetoads.com.au/>

'ALIEN SCENE' OF TADPOLES' FEAST

"Alien-like" scenes of tadpoles feasting on eggs emerging from their mother have been caught on camera. The footage marks the success of a captive breeding programme for the critically endangered mountain chicken frog, one of the world's largest frogs.

In April, 50 of the amphibian giants were airlifted from Montserrat after a deadly fungus swept through the island, devastating the population.

Now several breeding programmes are under way to save the frogs.

Once numbers have been boosted in captivity, researchers hope to reintroduce the frogs back into the wild within the next two years.

Bizarre sight

The remarkable footage was recorded at the Durrell Wildlife Conservation Trust, in Jersey, which took in 12 of the rescued frogs. Twenty-six others went to Parken Zoo in Sweden, and 12 are now housed in ZSL London Zoo.

So far, four pairs of mountain chicken frogs have started to breed - which could result in hundreds of frogs. And this has given researchers an insight into the way that these unusual amphibians care for their offspring.

Professor John Fa, director of Durrell, said: "Mountain chickens have very peculiar breeding habits because they form foam nests in burrows in the ground."

The females lay their eggs in these nests, which eventually hatch into tadpoles. But as the nests are underground, food is scarce - so the frogs need to find a way to provide nutrition for their young.

Professor Fa explained: "In the case of mountain chickens, we have discovered that the female comes into the nest and starts laying a string of infertile eggs.

"We thought that the eggs would come out and drop to the bottom of the nest and then the tadpoles would start eating them. But the footage shows about 40 tadpoles congregating around the female and eating the eggs as they come out of the female's body.

"Every now and again, the female uses her back legs to push the tadpoles away from her body so another set can come up and eat as much as they can."

He added: "It is really weird - it is an alien scene. This is the first time we have caught this on film."

Frog killer

The mountain chicken frog (*Leptodactylus fallax*) is one of the world's most threatened frogs. The frog is so called because its meat tastes like chicken.

It was once found on seven Caribbean Islands, but thanks to hunting and environmental pressures it is currently found only on Montserrat and Dominica.

Now, however, the deadly chytrid fungus, which has devastated amphibian populations around the globe, has also ravaged Dominica's mountain chickens.

The fungus was first detected on the island in 2002, and within 15 months, 80% of the mountain chicken population had been obliterated.

Conservationists were extremely concerned when they found that the chytrid fungus had spread to Montserrat earlier this year, and was sweeping quickly through the last mountain chicken population.

The team made a decision to airlift some of the last healthy frogs and bring them into captivity in a bid to save the creatures from extinction.

Professor Fa said: "Things are not going terribly well in Montserrat because chytrid has now infected the safe population - or at least the one we thought was safe."

The breeding success has offered scientists a ray of hope in an otherwise bleak situation, and they are now concentrating on increasing the frogs' numbers.

They hope to eventually release the captive mountain chickens back to their native home of Montserrat, and are currently looking for sites that are free of the deadly fungus.

But Professor Fa said: "If that doesn't work, if the area is infected, we will have to think again, and it could be that we take the animals to another island.

"Within a year or two we have to get these animals back to the wild. The longer you keep them in captivity, the more difficult it is for them to enjoy a life in the wild again."

<http://news.bbc.co.uk/2/hi/science/nature/8185838.stm>
By Rebecca Morelle Science reporter, BBC News
Sent to Frogcall by Andrew Nelson



Tadpoles feast on unfertilised eggs.





Litoria infrafrenata

FIELD TRIPS

Photos by Miguel Jones Diaz



Please book your place on field-trips; due to strong demand, numbers are limited (ph. 9681-5308). Be sure to leave a contact number. Regardless of prevailing weather conditions, we will continue to schedule and advertise all monthly field-trips as planned. It is **YOUR** responsibility to re-confirm, in the final days, whether the field-trip is proceeding or has been cancelled. Phone Robert on ph. 9681-5308.

Our fieldtrips programme is in its Autumn/Winter recess. We have, however, scheduled a ‘winter-breeders’ fieldtrip to take place at our popular Smiths Lake venue. See below.

16th - 18th April.

Smiths Lake Camp-Out.

Leaders: Arthur & Karen White.

Research shows that “....all roads, even minor service trails, have a disproportionate and negative impact upon aquatic environments and adjoining bushland”. Problems of silting, re-routing of water-flows, increased access for both native and feral predators and the inadvertent introduction of pollutants, weeds and disease all become evident. Roads can be responsible for the significant fragmentation of habitat. Subtle changes in the micro-climate may also occur. Often, frogs are amongst the first to suffer. While incidences of roadkill are generally more obvious to the public, tonight we will consider some of the more insidious and far-reaching impacts of roads upon our bushland and wetland environments. Arthur spends much of his professional life recommending ways in which man-made environmental damage may be mitigated. He has an intimate knowledge of the impact these sorts of disturbances have on our bushland. He and Karen have a wonderful working knowledge of the Smiths Lake area and always make this an enjoyable week-end. A **non-refundable** fee of \$14 p.p per night applies. Dormitory-style cabins or campsites available. There is a commercial kitchen and all crockery and cutlery supplied. Phone Arthur and Karen directly on 9599-1161 for bookings and further details.

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 ! Children must be accompanied by an adult. 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 field trips are strictly for members only - newcomers are however, welcome to take out membership before the commencement of the field-trip. All participants accept that there is some inherent risk associated with outdoor fieldtrips & by attending agree to; a release of all claims, a waiver of liability, & an assumption of risk.

FROGWATCH HELPLINE

0419 249 728

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