

FROG AND TADPOLE STUDY GROUP NSW Inc. Email: fatsgroupnsw@hotmail.com PO Box 296 Rockdale NSW 2216 Frogwatch Helpline 0419 249 728 Website: www.fats.org.au ABN: 34 282 154 794

NEWSLETTER No. 113 June 2011

Photo by Jodi Rowley Bidoup-Nui Ba National Park, Vietnam. *Rhacophorus vampyrus* Vampire Flying Frog



DECCW amphibian licences must be sighted, to adopt frogs.

MEETING FORMAT Friday 3rd June 2011

6.30 pm Lost Perons frogs and a few others needing homes. Please bring your FATS membership card and \$\$ donation. **DECCW amphibian licence must be sighted on the night**. The frogs can never be released.

7.00 pm Welcome and announcements.

7..30 pm The main speaker is Robert Wall "The Barred Frogs of the Gloucester Valley"

Grant Webster "Driving along looking for Frogs" Joel Cassar "Toad catching scoop" Punia Jeffery "FATS at the Royal Easter Show"

9.30 pm Show us your frog images, tell us about your frogging trips or experiences, guessing competition, light refreshments and a chance to relax and chat with frog experts.

Arrive 6.30 pm for a 7pm start. **Friday 3rd June**

FATS meet at the Education Centre, Bicentennial Park

Easy walk from Concord West railway station and straight down Victoria Ave. If walking, take a strong 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. Or enter from Bennelong Road / Parkway. It's a short stretch of two way road. Park in p10f car park - the last car park before the exit gate. See map p12.

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Jodi Rowley at our April meeting

LAST FATS MEETING 1ST APRIL 2011

Punia Jeffery opened the meeting and greeted everyone and gave a special welcome to new members and attendees. She described our organisation as a group of people who love frogs, go on field trips, keep them as pets, study them at uni, environmental and biodiversity careers, you name it. Our next field trips happen in September so watch out for news in our August edition of Frogcall.

FATS have been asked to help at the Easter Show on the last day 27 April at the Reptile Expo. The people who run the Easter show may be considering whether to open up one of the pavilions just for frogs and reptiles for a few days each year, so this day is a bit of a trial to see how it goes. They are expecting 20 to 25, 000 people to visit the pavilion.

Punia mentioned the low key family day rally, to raise awareness of the impacts of Climate Change and the need for governments to take action now.

odi Rowley was our main speaker. She talked to J us about Vampire Flying Frogs, Rhacophorus *vampyrus* from the family Rhacophoridae, genus Rhacophorus. Jodi discovered it and named it after its tadpoles. The name has been given a lot of attention, landing on the front page of National Geographic news and other media sites. National Geographic had supported her on a previous amphibian trip. It was feature on Facebook. There has been a dodge ball team named after the frog. In March 2011, Jodi went along to watch their game at Five Dock, where they presented her with a free T Shirt. Her paper on the frog was one of the ten most accessed items on the scientific journal, downloaded 3,000 times, partly due to its really cool name unlike the tiny leaf litter frogs.



Vampire Flying frogs dodge ball team emblem

The high altitude, over 2,000 metres above sea level Vietnamese forests where Jodi worked, (despite her fear of heights and the dangers of large predatory mammals), were beautiful to photograph but cold, covered in cloud and wet.

The Vampire Flying Frogs have big toe pads and eyes, are adapted to living in trees but easily use their webbing to glide down to the ground using the fringing on the side of their arms. The tadpoles develop in the foam nests in tree holes, with very little water. This allows them to escape predation by fish and other invertebrates but there are a lot of tadpoles and potentially not a lot of food. These tadpoles have no opposing beak mouth parts but have two fangs on the bottom.



Photo Jodi Rowley *Leptobrachium leucops* White-eyed Eastern spadefoot toad

All images on the front page and this page are of species that Jodi Rowley and her colleagues, working with local students and scientists, have described from Bidoup-Nui Ba National Park in Vietnam.

Leptolalax bidoupensis Bidoup Asian Leaf-litter toad Photo Jodi Rowley



You can check out Jodi's web site http://www.jodirowley.com and Facebook facebook.com/jodirowley

Jodi displayed many fine frog images such as the Orange-bellied Leaf Litter Frog and Horned Frogs, lush forest landscapes, campsites and steams. There were many questions from the floor at the end of her presentation such as about collecting specimens and identifying calls in the forest. Thank you Jodi for sharing your cool images of so many beautifully patterned frogs, frog call recordings, short videos, stories of travelling, camping, local customs, unique beverages such as local rice wine, field adventures and of amphibian species yet to be described. **MW**

THANK YOU MARION ANSTIS LOTHAR VOIGT AND ALICE VOIGT

If Marion Anstis hadn't helped me convert Frogcall into a digital publication, FATS would not have been in a position to transmit it via email to our members. Up until 2010 our production of Frogcall had been partly "cut and paste" with scissors and glue! A big thank you to Alice Voigt who has patiently converted Frogcall's twelve word documents into one condensed pdf file, ready to send electronically to you. If you would like to join the recipients' list please email me at wangmann@tig.com.au

We have about 132 people receiving Frogcall by email. FATS does not intend to stop the black and white posted version. We hope you enjoy the colour versions. I am preparing a list of members who only want their Frogcall by email/ digitally. Please let me know if you wish to receive Frogcall only by email.

Thank you to all the members of FATS for making a contribution in many different ways to "saving frogs" and thank you again Marion, Alice and Lothar for making our pdf colour version of Frogcall possible. **Monica Wangmann**



Arthur White, Jodi Rowley and Marion Anstis 4/2011

FATS MEETING 1 APRIL 2011 continued

A rthur White spoke about Darwin's Frog, (*Rhinoderma darwinii*). It was discovered by Charles Darwin on his trip with the English ship HMS Beagle in the South America's but was described by French Zoologist André Marie Constant Duméril and his assistant Gabriel Bibron. The scientists at that time had come to a gentleman's agreement, frog and reptile material was given to the French taxonomists to describe and mammals and birds given to the English naturalists in return. It is a poorly known frog with most research being done on captive bred species. There is only one genus (*Rhinoderma*), with just two species, of which the Chile Darwin's Frog (*R. rufum*) is highly endangered or may already be extinct. The better known Darwin's Frog (*R.. darwinii*) is now classified as vulnerable. Your best chance to see one alive, is go to the US reptile and frog fairs or visit commercial breeders, who regard it as a prized animal.



http://en.wikipedia.org/wiki/Rhinoderma

It's a strange looking little beast with a head appearing to be too small for its body. It's hard to see where the head finishes and the body begins. It is native to the cold forest streams of Argentina and Chile. They rely on body form and camouflage to protect them from predators. The most striking feature is the way the tadpoles are raised inside the vocal sac of the male. The males stand by the spawn which typically has about 30 eggs, laid on the forest floor, for about two weeks. After that the male appears to consume the young tadpoles with their large yoke sacs, into his large baggy vocal chamber. When the tadpoles metamorphose into frogs, he coughs them up and they hop off by themselves.

There is a possibility that captive bred frogs may be used to repopulate the wild habitats but this is unviable until scientists work out why they are dying. There is uncontrolled logging and mining. Maybe Darwin's Frog will have a future, now that Chileans have taken an interest.

In 1902 a second specimen was discovered in highland areas in Chile, above the alpine forest and tree line, in frozen bog country, known as tundra. It was seen again in 1950 and last seen in 1980. Unlike Darwin's Frog it is a rusty colour. There is no biological data available on this second species other than the collector's notes, indicating that the animals were sitting out in open bog. They have targeted searches in the last few years but none have been found. Arthur took many questions from the floor.

Peter Street showed us photos of Red-eyed Tree Frogs found locally, however their populations have declined possibly due to cats and other predators. The meeting ended earlier than usual with a raffle, a longer time to chat, enjoy a drink, share some home cooked nibbles and think of Fiorella. **MW**

HERPDIGEST

AUSTRALIAN ANIMALS FACE EXTINCTION

Dozens of rare species of wallaby, bandicoot and other Australian animals could become extinct within 20 years unless urgent action is taken, scientists have warned. Mammals, birds, lizards and other vertebrates in the remote north-western Kimberley region are at risk from feral cats and the destruction of their native habitat by wild donkeys, goats and fires, a study showed.

"We're in the midst of a massive extinction event in Australia and the north has really been the last stronghold for many species of birds and mammals and reptiles," said Tara Martin, a co-author of the report by the governmentfunded Commonwealth Scientific and Industrial Research Organisation. Nearly 30% of the endangered species identified in the study are unique to the Kimberley region, while others, like the golden bandicoot and golden-backed tree rat, have found the area to be their last refuge after being pushed into extinction elsewhere in the country.

"The Kimberley area is really their last chance on Earth," Ms Martin said. The report says immediate funding of £59 million is needed to start a range of conservation programmes and that annual funding to protect the region's native animals should be doubled. It says the most effective ways of combating the threat of extinction are to reduce the number of wild donkeys and goats that are competing with native species for scarce food and water, and to do more to combat wildfires that scorch the landscape. It says attacks by feral cats should also be reduced by educating the community about the threat pets pose to small native animals, building fences, and by ending the poisoning of dingoes in the region. Ms Martin said some benefits from the proposed conservation efforts would be seen relatively quickly, while others would take several generations to show. UKPA 3/23/11 V 11 Issue # 14 3/24/11

FIRST RECORD OF TADPOLES HATCHING AND FEEDING ON TREE BARK

Unusual frog behaviour discovered in India's Western Ghats April 2011.In July of last year we were working on an amphibian ecology study at the Agumbe Rainforest Research Station (ARRS) in Karnataka, India http://www.agumberainforest.com/ We found several egg clutches and tadpoles of the brown leaping frog (*Indirana semipalmata*). The 11 species of the genus Indirana are all endemic to the Western Ghats of India. It has been documented by several authors that the tadpoles of Indirana frogs breed on rock faces surrounding splashing water and that tadpoles are semi terrestrial. We were surprised one night when we heard a frog vocalisation we had not heard before.

After a short search we located a single *Indirana semipalmata* sitting by a clutch of eggs laid on the bark of a tree. These eggs later hatched and we found tadpoles from a previous clutch feeding on the bark of the same tree. In total we found three *Indirana semipalmata* egg clutches all of which were at least 3m away from any standing water. To our knowledge this is the first recorded case of tadpoles feeding on a bark substrate and subsequently metamorphosing on the bark of a tree. This may be a localised phenomenon as Agumbe has the second highest annual rainfall in India and therefore these semi terrestrial tadpoles do not desiccate. Living in Agumbe during the monsoon was literally like living in a cloud. **3/29/11 Wildlife Extra.com Written by Ben Tapley. This work was funded by the Gerry Martin project http://www.gerrymartin.in/**

AUSTRALIA'S 'RAMBO' TOADS HEAD WEST

Super-tough toads have calloused feet from travelling April 2011: The battle to halt the damaging spread of cane toads in Australia is proving tougher than originally thought. In 2005 when Kimberley Toad Buster (KTB) volunteers first began the fight to slow down the movement of cane toads making their way from the Northern Territories towards the border with Western Australia.

'When we initially started toad busting we had been told by scientists and toad experts that toads were only travelling about 25 to 30 km per year, did not swim well in fast flowing water, had low tolerance to saline conditions, that there was a less than five to ten per cent survival breeding rate, that the lungworm parasite was 20 years behind the front and so on. The list was endless,' said Sharon McLachlan, KTB secretary.

Their resilience is frightening 'It did not take us long to realise that much of the information we had received might have applied to the Queensland toads but not to those that were hell bent on reaching Western Australia.' Not only were these frontline toads moving an average of 80 km a year, they were larger, extraordinarily resilient to the saline conditions of some of the rivers they were crossing and that the breeding survival rate appeared to be more in the vicinity of 75 to 85 per cent. KTB volunteer Del Collins said: 'I timed one female toad that stayed underwater for 1.2 hours. These guys are super-Rambo toads. Said Sharon: 'Their resilience is frightening. These toads, irrespective of injuries are determined to keep travelling west and I have no doubt they will reach Perth eventually.'

'Explorer' toads march ahead to find breeding grounds KTB volunteers also established that there was a clear pattern emerging in the behaviour and characteristics of frontline toads making their way into WA. Leading the cane toad pack are the predominantly male explorer toads accompanied by the odd, very large female. 'These toads are huge,' stated Ben Scott-Virtue, field co-ordinator. 'The females are often, on average, as large as 17.5 cm from snout to tail bone and the males around 14 to 15cm. Their back legs are between 2cm to 4cm longer than their bodies and the pads of their feet are blackened and calloused from constant travelling. They can often be up to 30 km in front of the main breeding colonising front,' he added.

Once these colonisers have found an ideal breeding area they begin to call in the closest wave of the breeding population numbers travelling behind them.

WHAT'S AT THE BOTTOM OF YOUR GARDEN?

Once the breeding population has been established and the very large females have dropped their eggs the explorer toads move on. It is time for some serious re-thinking. In dry landscapes these explorers use cattle trails and moist cow dung to move between water holes. When confronted by really dry conditions, the toads simply use the deepest and dampest burrow or other ground hollow to hibernate in, often sacrificing the uppermost layer of toads to ensure that some survive.

'We have dug up to 30 toads out of a deep burrow months after the area has dried out and it is obvious they are simply waiting for the next rain,' said Lee Scott-Virtue KTB president and founder. 'All previous cane toad invasion predictions have been wrong and anyone seriously thinking that the Great Sandy Desert is going to stop these invading Rambos has got to do some serious rethinking.'31/03/2011 HerpDigest.org: The Only Free Weekly Electronic Newsletter That Reports on the Latest News on Herpetological Conservation, Husbandry and Science (A Not-for-Profit Publication) Publisher/Editor- Allen Salzberg



Limnodynastes dumerilii Banjo Frog These frogs are quite common on Lake Curlew, which is a part of the Lake Cargelligo Wetland & Lake system. As you can imagine, frogs are prevalent in our area, particularly when the lakes and wetlands are full, and there are so many species. Please excuse the state of our frog, we didn't want to disturb it more than necessary, **Jenny.**

SOME SHORT VIDEOS

Big tadpole:

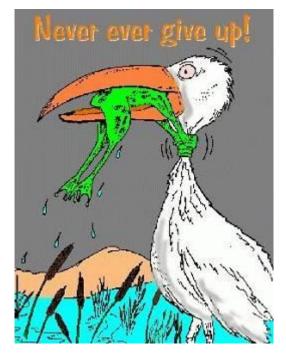
http://www.youtube.com/watch?v=okDqmefbR40&pla ynext=1&list=PL82FB7EB0B6E104DF

Ipad game with tadpole, for cats:

http://www.youtube.com/watch?v=36Jb3VhwK00 and http://www.youtube.com/watch?v=XK2dwTVi-aQ



Photo George Madani Notaden weigeli Kimberley Spadefoot



NEVER GIVE UP

Threatened species, Green and Golden Bell Frogs Litoria aurea and local residents watched bulldozers and tree grinders at Worrigee, near Nowra, replacing frog habitat with community housing. But this little guy (below) has found temporary shelter in a back yard across the road. On a normal night, let alone a wet night my daughter can hear the various frogs calling. Local residents are saddened by the greenbelt loss and wonder whether the promised compensatory pond will ensure the GGBF colony's survival. I am glad I live at Lochiel on my own piece of land with all my resident frogs. My daughter will let me know if these Worrigee endangered frogs continue to visit her and whether the Council, other government bodies and developer implement and maintain conservation plans. There is potential for an education strategy to share "ownership" of the GGBF's future with the locals. I wonder how this might be achieved. Peter



Endangered Litoria aurea GGBF END OF DAYS?

WHAT'S AT THE BOTTOM OF YOUR GARDEN?



Ironic, Green Tree Frog hitching a ride from a sworn enemy! Forwarded to Frogcall by Lindsay Manton and Giselle and Grant Howard

Queensland floods photo Armin Gerlach, computer technician was visiting friends in the flood-hit town of Dalby, located in the state's south-east, when he spotted the unlikely pair. "I felt amazement, I just couldn't believe it," Mr Gerlach told ninemsn. A friend who had been affected by many floods told him animals often helped each other out during disasters. "It's quite common when you have animals in floods or fires or disasters, they actually get together and don't do anything," he said. "My friend has seen foxes and rabbits forget their hunting instincts during natural disasters," he said. Mr Gelach said he and his friends were inspecting flood damage on the property, where waters had risen to about 47cm.



Litoria peronii Peron's Tree Frog on wall at home Photo by Jono Herrman



But wait there's more Photo Andrew Nelson Perons Tree Frogs



Striped Marsh Frog Limnodynastes peronii Photo above and three below by Lenore from Wurtulla Qld Northern Banjo Frog, Litoria terrareginae







Verreaux's Tree Frog *Litoria verreauxi*. photo by Jonathan Garner

The lovely wee frog literally landed on my foot as it was transiting through an open shed in a 70 acre property in East Kangaloon. The property has remnant basalt tall open forest, temperate rainforest and a significant dam with wetlands. The shed is located 100metres away from the wetlands. **Jonathan Garner MAIH NSW Councillor Australian Institute of Horticulture**.

It is normally shades of brown but in the highlands frogs, green will appear on them. There is an alpine version of this frog that also has green on it but I don't think that that is what you have here. Verreaux's frog with lots of green on it also occurs around the Picton area (razorback) and further south, towards Goulburn. All the Best Arthur White see

http://frogs.org.au/frogs/species/Litoria/verreauxi/









Marbled Marsh Frog, *Limnodynastes convexiusculus* In Kim and Robin's Darwin garden



Photo by Jase Painted desert frogs *Neobatrachus pictus* We had 60ml of rain in just a few hours the other day, after having almost no rain for months. It was that night that they surfaced for the first time. The past few nights we have had a lot of small frogs under our carport. Their bodies are about 4cm from mouth to rear and the larger one about 9 cms. I live in the eastern Fleurieu Peninsula in South Australia, in a farmland in a town called Finniss (SA) Jase They are not often seen as they spend a lot of time below ground in shallow burrows. They have a pleasant musical call when they are out. Most records of them breeding and calling have been made in autumn and winter (after winter rains). Jase was lucky to come across these frogs. Cheers Arthur White

FATS AGM NOTICE 5[™] AUGUST 2011 The FATS AGM will be held 7pm 5thAugust 2011 at the Education Centre, Bicentennial Park, Sydney Olympic Park. See map p12. If you would like to ask questions about joining the FATS committee, please give any of us a call. Contact our secretary for further information or a nomination form. There are a diversity of roles within the committee to accommodate your interests, skills and available time. You only need to devote whatever time you can spare. New committee members help develop fresh ideas and keep our organization interesting and fun. No previous experience or qualifications are required. Please contact our secretary Wendy Grimm or myself for further information or a nomination form. Arthur White

FROG-O-GRAPHIC COMPETITION

In 2008 FATS conducted the first Frog-o-graphic competition. This proved very successful as we have many creative people in the group who take marvelous photo, do incredible drawings and art works, can sculpt, potter or create frog do-dahs from just about anything. Here is your chance to show off your skills.

There are several categories in this competition: Best Frog Image (Adult), Best Frog Image (Junior), Most Interesting Frog Image (Adult), Most Interesting Frog Image (Junior), Best Frog Artwork (Adult), Best Frog Artwork (Junior) and the People's Choice Award. The first six awards will be selected by a specifically hand-picked panel of judges while the People's Choice will be decided by the audience at the October 2011 FATS meeting. Maximum six entries per person. Please include name and age if under 18 and contact number. Is there a Prize? Fabulous prizes will be awarded for each division winner. No correspondence will be entered into the judge's decision. Please note: the entries must be original and your work. The winning entries will also be featured in a colour supplement in FrogCall. Entry Date: Entries may be submitted until the 1st of September 2011. So start painting, drawing, photographing or whatever you do to capture the essence of a frog. We look forward to see your entries. Winners will be announced at the October 2011 meeting and may appear in the December 16 page colour edition of Frogcall. Arthur White

ESCAPE DEVICES FOR ANIMALS IN POOLS

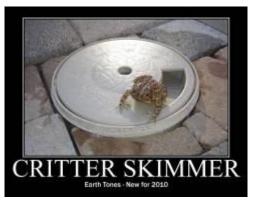
FATS regularly receive calls about frogs trapped in the pool and skimming boxes. A quick search of the internet finds a variety of commercial products that might be of assistance, some adds copied below. Or you can make your own....

See http://britishwildlifehelpline.com/First_Aid_for_ Amphibians.html and very cute Youtube frog rescue: http://www.youtube.com/watch?v=TO1V0U-xShk

Wooden cigarette box forms basis of home made ramp



A home made escape ramp, to rescue small animals that have fallen in your pool can be made by building a light weight wooden ramp similar to an open, old fashioned wooden cigarette box with the inside facing downwards and the central hinge allowing the ramp to move up and down. The wood has a less slippery surface that animals can cling to whilst climbing out. One arm of the box is placed and weighed down with a large rock or sandbag, on the pool edge near the skimmer box. The other arm hangs over the water with an empty sealed 2 litre plastic soft drink bottle attached underneath to keep it afloat. The lid over the water will rise and fall as the water level in the pool changes, similar to how some harbour ramps and pontoons move up and down.



Dr. Kerry Kriger Save The Frogs - Founder, Executive Director, Ecologist www.savethefrogs.com http://www.savethefrogs.com/gifts/critterskimmer/index.html



Frog Log Protects Native Wildlife

Each year millions of small animals die in swimming pools. Help save native animals and reduce those unpleasant surprises in your skimmer basket. Minimize unhealthy bacteria from animals and their wastes. The FrogLog allows small animals to escape your pool quickly and keeps the water clean and safe. The Froglog is a swimming pool escape ramp for frogs, toads, lizards, mice, chipmunks, squirrels, ducklings, turtles, bugs or insects, and other small animals up to one pound. Use several Frog Logs for large pools or ponds. The Froglog saves native wildlife, keeps swimming pool water clean, and reduces time spent on pool maintenance. The Froglog can also be used in other water features including backyard ponds or water features.

Simply place the Froglog floating platform in the water and place the sandbag on the pool deck (Sand or Gravel not included). An optimal location is upstream from the flow of water moving toward the skimmer. For multiple Froglogs, space them evenly.



Dear Rich, I sent the FrogLog to my dad for father's day and he is very happy with it-hasn't seen any froggies or mice in the skimmer since he put it in. Usually when I go home, I spend lots of time saving frogs from the horror of the skimmer and walking them down to the pond- I know longer need to worry.... Thanks you for making products that help humans and animals live in harmony.

Amanda F. Philmont, NY Once a frog, mouse, or other animal falls into a pool, they instinctively swim toward the pool wall trying to escape. The animal will bump into the Frog log, climb up the platform, climb the mesh ramp, and exit the pool. Osprey LLC 1431 Hoppa Rd Crownsville, MD 21032 410-923-9979 froglog79@gmail.com

Skamper Ramp

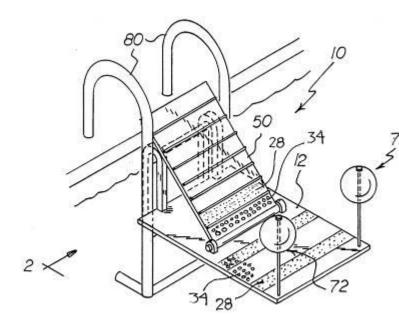


This simple device will save pets and little critters' lives. It's possible that your Skamper-Ramp will never be called upon to save your dog, or neighborhood cats. It is reassuring though, to have it "ready" just in case. All sorts of creatures can find their way into your pool. Most of these episodes happen while everyone is sleeping. You won't be having any more of those "morning surprises" in you pool or skimmer basket. It offers animals, which have had the misfortune of accidentally falling into your pool, a way out before they have succumbed to drowning by sheer exhaustion. It provides an exit route for animals up to approximately 30 lbs or larger animals up to 70lbs the Super Skamper Ramp is available.

The New SKR3 is blow-molded polyethylene Like polypropylene, it is UV- and chemical-resistant and lightweight. Because it is blow-molded it is even more robust--can hold pets over 100 kgs--and is perfect for any size animal even with frequent use. The new ramp snaps together no more screwing nylon nuts, bolts or wing strips. The rope, 2 nylon washers and 2 D-ring clips for installation remain the same. Boxed weight is 6 lbs; assembled ramp weight is 5.75 lbs measuring 42" long (or 25" if used without the optional extension). See video.

http://www.poolcenter.com/pet_pool_safety_pet_boat_safety. htm POOLCENTER.com 7101 Wimsatt Road Springfield, VA 22151







Lily Pad

This ingenious "lily pad" (below) gives frogs just the leg up they need to prevent them from drowning in swimming pools. Snapped onto the pool ladder or attached to the wall, the Frog Saver helps frogs, lizards, and other small animals. Toad-ally awesome! http://www.petacatalog.com/ products/Frog_Saver_Lily_Pad-118-0.html



Painter caught on the hop



Mosman Daily 3/2/2011 Sent to Frogcall by Lindsay Manton

FROGS USE BLADDER TO EXPEL FOREIGN OBJECTS

Frogs can hide unexpected things in their bladders (Charles Darwin University) Australia's desert frogs are famously able to store up large amounts of water in their bladder to last them through the drought. But now researchers from Charles Darwin University in the Northern Territory have found that frog bladders can hold another, even more bizarre surprise.

Dr Chris Tracy and colleagues report in the Royal Society journal Biology Letters that frogs have a unique way of dealing with foreign objects that become lodged in their bodies - they store and even expel them from the bladder. After finding that frogs implanted with radio transmitters in the field became mysteriously separated from the devices, the researchers implanted small beads into the body cavities of tree frogs and cane toads to see what would happen. Within nine days, all the tree frogs had expelled the beads completely from the body via their bladder, while the beads in the cane toads had migrated to the bladder and stayed there.

"The bladder of frogs appears to be a unique pathway of expulsion of foreign objects from the body," Dr Tracy said. Animals such as fish and snakes - and even humans - are known to expel objects out of the body through the skin or the intestine. But, says Dr Tracy, they were surprised to find that a two-centimetre-long transmitter implanted in the body cavity of an eight-centimetre-long frogs could migrate to the bladder.

"When we first started finding transmitters in bladders, we thought wow that's really bad surgery we did. But when we started seeing them over and over again, we realised, 'Hey, this really is something different." **Storing from harm's way** The researchers wanted to know how the bead came to be in the bladder, so they dissected implanted cane toads over a number of days to see where it went. Dr Tracy says tissue grows out from the bladder and wraps around the bead, eventually enveloping it and drawing the bead into the bladder. "It's pretty remarkable that these amphibians can safely and relatively quickly get rid of potentially dangerous things in the body cavity," he said.

So why would frogs have such a special adaptation? Dr Tracy speculates that because frogs eat live insects, some of the sharp insect body parts could break off and become lodged in their body. "The other thing about frogs is their jumping - they aren't very coordinated and they tend to crash land. They have relatively thin skins, so it's easy to imagine a frog landing on something spiny that could poke into their body that way," he said. "If you have something roaming around inside the body, it's usually a bad thing. It could poke through a vital organ, so it's a good idea to get rid of them."

Dr Tracy says his findings are a cautionary note for other researchers implanting transmitters into animals. "Finding that your study animal has become separated from your transmitter may not mean it has been eaten by a predator. It might have just expelled the object." By Abbie Thomas ABC Science Online 8/12/2010 Sent to FATS by Arthur White.

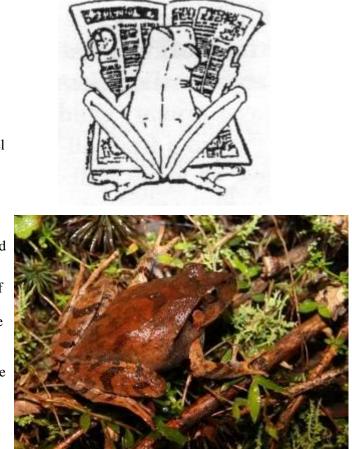


Photo by George Madani Lechriodus fletcheri

Eastern Snapping Frog



Photo George Madani Cyclorana novahollandiae



Photo George Madani Cyclorana platycephala Water Holding Frog

Thank you to the many Frogeall supporters. Your articles, photos, media clippings, webpage uploads, Membership administration, mail-out inserts and envelope preparation is greatly appreciated. Special thanks to regular newsletter contributors, including

Lothar Voigt, Robert Wall, George Madani, Karen & Arthur White, Wendy & Phillip Grimm, Grant Webster, Marion Anstis, Andrew & David Nelson, Al MacDougall and Bill Wangmann.



Photo George Madani Geocrinia leai - Ticking Frog

FROGWATCH HELPLINE



Photo George Madani Heleioporus inornatus

0419 249 728

FATS CO	NTACTS	phone	email
Arthur White	President	ph/fax (02) 9599 1161 h	larthur@tpg.com.au
Marion Anstis	Vice President	(02) 9456 1698 h	frogpole@tpg.com.au
Wendy Grimm	Secretary	(02) 9144 5600 h	wagrimm@tpg.com.au
Punia Jeffery	Chairperson	(02) 9969 1932 h	puniajeffery@yahoo.com.au
Karen White	Treasurer	ph/fax (02) 9599 1161 h	1arthur@tpg.com.au
Andrew Nelson	Membership Officer	(02) 9411 6068 h	awnelson@optushome.com.au
Robert Wall	Field Trips Coordinator	(02) 9681 5308 h	rjw2008@live.com.au
Brad McCaffery	Field trip assistant	(02) 9876-1976 h	froggydarb@exemail.com.au
Matthew McCaffery	Field trip assistant	(02) 9876-1976 h	
Grant Webster	Field trip assistant	(02) 9876 5807 h mob. 0411 74	1 869 tnarg_w@hotmail.com
vacant	Publicity / Exhibition Office	r and assistant	
Alistair MacDougall	Web Master	0411 277 070 mob.	al@alphoto.com.au
David Nelson	Assistant Web Master	(02) 9411 6068 h	davidavid@optushome.com.au
Phillip Grimm	Committee Member	(02) 9144 5600 h	phigrimm@tpg.com.au
Lothar Voigt	Committee Member	(02) 9371 9129 h	lothar@virginbroadband.com.au
Andre Rank	Committee Member		wylee_ec@hotmail.com
Sheila Briffa	Committee Member	0411 344 231	<u>sheila99@tpg.com.au</u>
Vicki Deluca	Committee Member	0408 231 447	delucax6@optusnet.com.au
Monica Wangmann	Editor	(02) 9797 6543 h mob 0418 992	2 766 <u>wangmann@tig.com.au</u>
	Please send articles for the FrogCall newsletter to 38 Albert Pde Ashfield NSW 2131		



Photo Ben Brown Litoria aurea Green & Golden Bell Frog

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FATS MEETINGS commence at 7 pm, end about 10pm at the Education Centre Bicentennial Park, Sydney Olympic Park, Homebush Bay and are usually held on the <u>first Friday of every EVEN month</u> February, April, June, August, October and December (but not Good Friday). Call, check our web site or email us for further directions. Easy walk from Concord West railway station and straight down Victoria Ave. Take a strong torch in winter. By car: Enter from Australia Ave at the Bicentennial Park entrance and drive through the park (one way road) turn off to the right if entering from the main entrance or enter from Bennelong Rd/Parkway. It's a short stretch of 2 way road and park in p10f car park (the last car park before the exit gate). See map We hold 6 informative, informal, topical and practical free meetings each year. Visitors are welcome. We are actively involved in monitoring frog populations, other field studies; produce the newsletter FROGCALL and FROGFACTS information sheets. All expressions of opinion and information 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. 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.



Field Trips. Autumn/Winter Recess. No fieldtrips scheduled. The Spring/Summer Fieldtrips Programme re-commences in September.

WATAGANS FIELDTRIP REPORT 12 JANUARY 2011

A fter a long, dry and very hot spell, the rain fell all day Saturday. While this promised to be good news for frogging, it did raise concerns about being on the roads in fairly miserable driving conditions. What promised to be a wet night out turned into a delightful night's frogging as the rain held off in the evening and we enjoyed very balmy conditions. Driving past a fire dam we could hear the distinctive calls of *Mixophyes iteratus*, *Litoria dentata*, *Litoria revelata and Litoria verreauxi*. Brad and Matt soon had lovely specimens to show the group.

Moving on to Boarding House Dam, Brad picked up a formidable-looking *iteratus* almost immediately – and he wasn't even out of the carpark yet! The *iteratus* were in good numbers, but this was almost overshadowed by the presence of a large number of *Mixophyes balbus*, these two species occurring side-by-side, and another first for a FATS fieldtrip. *Litoria phyllochroa* were also calling in good numbers. Matt came across a very nice Water Dragon that was very happy to be photographed at close quarters. Our last stop on the way out from the Watagans proved fruitful for the very ancient species of *Lechriodus fletcheri*, the sandpaper frog, and a lovely *Pseudophryne coriacea*. A small-eyed snake was found enjoying the warm conditions on the road.

The Watagans fieldtrip is certainly a major challenge in terms of distance and time, (your fieldtrips officer didn't get to bed until after 2-00a.m.!), but I would urge everyone to make the effort at least once. While we can't always deliver the near-perfect conditions as on Saturday, expert leaders like Brad & Matt McCaffery always ensure we have some interesting species to look at. Many thanks to Brad and Matt for taking the time to point out the many diagnostic features of various frogs, and also for their expert discussions on the ecology of various species. Thanks also to Kim McCaffery for his assistance not only on the night, but also for his invaluable help in organizing the fieldtrip while I was temporarily out of Sydney on business. **Robert Wall**