NEWSLETTER No. 131 June 2014

Giant River Frog Limnonectes leporinus Borneo Photo by Ken Grifftins



Arrive 6.30 pm for a 7pm start.

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

Friday 6th June

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

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

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.

MEETING FORMAT Friday 6th June 2014

6.30 pm There are lost frogs (*Litoria caerulea*, *Lt. infrafrenata and Lt. gracilenta*) needing forever homes available to FATS financial members. Please bring your FATS membership card and cash \$40 - \$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 at meetings. Please contact Monica before the meeting to confirm your interest in adopting a rescued frog.

7.00pm Welcome and announcements.

7.45 pm Main speaker: Dr Robert Johnson "The metamorphosis of the amphibian vet".

Marion Anstis Galapagos and Amazon trips.

9.00 pm Show us your frog images, tell us about your frogging trips or experiences, guessing competition, continue with frog adoptions, supper & a chance to relax and chat with frog experts.

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The saltmarsh mosquito *Aedes vigilax* is one of the most common nuisance-biting mosquitoes in Australia. Although it is found in coastal estuarine wetlands, it can fly many kms from wetlands into nearby areas. Photo Dr Stephen Doggett

HOW CAN YOU TAKE THE BITE OUT OF FROGGING?

It doesn't matter if you're packing for the next FATS field trip or just heading out for an evening stroll, if you're outdoors in summer, chances are mozzies are too! There are about 300 different mosquitoes in Australia. Each species is closely associated with particular habitats, from coastal rock pools to alpine snow melt ponds and from backyard bird baths to inland floodplains. There is even a group of mosquitoes in Australia that forgo a blood meal from humans to feed on frogs! But for those that do have a taste for humans, how can you best avoid mosquitoes and the pathogens they may transmit?

Kooragang Island March 2014 These wetlands may look nice as the sun is setting but soon the mozzies will be out in force!



Why do mosquitoes bite? It is only the female mosquito that bites. She needs the nutritional hit in a blood meal to develop her eggs. Mosquitoes can survive on plant juices alone but most of them need blood to develop eggs. Mosquitoes can bite a wide range of animals, from frogs to birds, to kangaroos to people.

There is a complex processes that determines why one person is more likely to be bitten by a mosquito than another. The science behind mosquito biting preferences is slowly being unravelled but it is well known that carbon dioxide we exhale is the main attractant. Mosquito researchers actually use this to their advantage

and use the gas (often in the form of dry ice) in traps used for mosquito-borne disease surveillance.

Beyond the carbon dioxide we exhale, it is the chemical cocktail of compounds and microbes on our skin that determines where they bite. There are over 300 compounds on our skin purported to either attract or repel mosquitoes. Perhaps if these compounds could be isolated, identified and synthesised, we could develop better repellents or more effective chemical lures for traps.

Are mosquitoes really a health hazard?

Few would dispute that mozzies are a nuisance but they can do more than disrupt a backyard BBQ. There are around 5,000 cases of disease caused by Ross River virus or Barmah Forest virus every year across Australia. Yes, even Tasmania. The "flulike" illnesses these viruses cause typically include symptoms such as rash, fever, headache, fatigue and arthritic pain. The symptoms are variable in their severity. Sometimes mild but also potentially significant and result in many weeks or even months of illness.



Coastal swamp forests are home to many different nuisance-biting mosquitoes. It is ironic that the extracts from some of the plants found here, like tea-trees, are used as mosquito repellents.

Mosquitoes don't emerge from wetlands infected with these viruses, they must bite an animal first and become infected before they can spread the pathogen to humans. It isn't just any animal though. The most important hosts for these viruses are kangaroos and wallabies. This means that regardless of how many mosquitoes are about, unless you've got macropods in the local area too, the risks of mosquito-borne disease are low. If you're out chasing frogs in wetlands around urban areas, the risks may be low but as soon as you're out of the city, be aware that the risks increase.

How do we best prevent mosquito bites? There are a number of ways you can prevent mosquito bites. Use of insect repellents/insecticides (e.g. topical repellents, mosquito coils), behavioural practices (e.g. avoiding areas of times of the day when mosquitoes are most active) and physical barriers (e.g. bed nets, wearing long sleeved shirts) will all prevent, or at least assist in preventing

mosquito bites. For most people, the first line of defence against mosquitoes is a topical insect repellent. Do you know how to choose and use repellents correctly?



All products purporting to repel mosquitoes must be approved by the Australian Pesticides and Veterinary Medicines Authority (APVMA) who make an assessment on the effectiveness and safety of the products. The most effective repellents widely available in Australia are DEET and picaridin. These chemicals are found in most of the insect repellents you'll find in the local supermarket, pharmacy or camping store.

There is often a misconception regarding the safety of these products. However, despite the millions of people across the world who use these repellent, very few adverse health impacts are reported if the products are used as recommended. Most problems occur if you get repellent in your eyes, you swallow it or use them excessively on young children.

It is important to note what the "strength" of the repellent means for mosquito bite prevention. Taking DEET as an example, increases in the concentration of DEET increases the duration of protection, not the amount of mosquitoes kept at bay. This means than for only an hour or so, a "low dose" repellent (approximately 10% DEET) will provide the same level of protection as a "tropical strength" repellent (perhaps up to 80% DEET). However, these "tropical strength" repellents may last for many hours.



Cup and Saucer Wetland

Plant based repellents, such as those containing *Melaleuca*, *Eucalyptus* or other essential oils, will provide protection but only for a relatively short period of time.

If you have a preference for these formulations, it is important to remember that they must be reapplied more frequently to provide the same level of protection.

Whether you're using a "chemical" or plant-based repellent, it is important to remember that to get the best protection; they should be applied like sunscreen, not perfume! An even thin covering of all areas of exposed skin is recommended. For this reason, I prefer lotions or "pump sprays" and always ensure I apply the product to my hands first and then rub into skin. There is not much point to spraying products onto clothing, that alone won't stop many bites.

If you are planning your next field trip, I hope you keep a couple of these things in mind and pack some suitable insect repellents. Better to come home with some great memories and photos than a dose of Ross River fever!



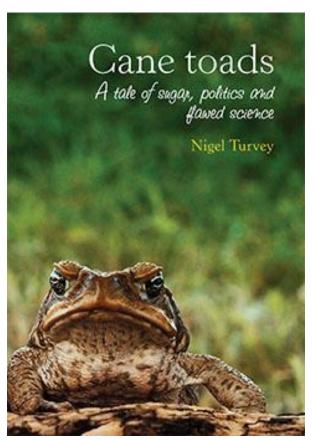
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LAST FATS MEETING 4 APRIL 2014

Athy Potter spoke about upcoming FATS events and the recent public events we have attended. Punia Jeffery welcomed attendees. Karen White presented images and spoke about our last Smiths Lake field trip.

Jilli Streit presented a entertaining video and images about her trip to Far North Queensland. Arthur White spoke about over winter habitat for frogs and variations, generating lots of questions at the end of his talk.

Cameron Webb was our main speaker. See article above. Thank you to all the presenters. We are so lucky to have such a diverse group of professionals and enthusiasts willing to share their experiences and research with us. The meeting ended with tasty super, raffles and a chance to reflect on the topics of the night. MW



CANE TOADS: a tale of sugar, politics and flawed science BY NIGEL TURVEY

Cane Toads are the villains in the Australian landscape. Since their release in 1935 they have marched relentlessly across the country leaving a trail of carnage and death behind them. While their devastating impact on native ecosystems and wildlife is reasonably well documented, the processes that preceded their release have been politely ignored.

Nigel Turvey decided that it was time that the whole process was revealed. He has delved into parliamentary records, correspondence between the sugar cane industry, the government and the pressure that was placed on scientists to give the government and industry the answer that they wanted and expected. This is not an exemplary history - rather it is an account of what happens when industry pressures government along a predetermined road.

Queensland's sugar cane industry was all powerful in the early 20th century. They were one of the biggest employers and contributed significantly to the state's revenue coffers. The fact that they had imported infected sugar cane stock - was Hawaii was not a lesson to them to be circumspect in their activities, rather it was the impetus to hide the damage that that poor piece of business has created. Hawaii and Puerto Rico, small islands with restricted cane (and toad feeding) areas had used toads to limit the damage that the cane beetles

were doing to their crops. This was a ready-fix as far as they were concerned and no dilly-dallying scientist or parliamentarian was going to stop the importation of this simple solution to their problem.

The government of the day consulted scientist to seek an opinion of the wisdom of this action (which was probably going to happen anyway). Some scientists labelled the importation of toads as an unwittingly stupid idea (and ultimately resigned in protest or were moved sideways); some could see the political realities of the situation and buckled to government and industry pressure. That was all that was needed- cane toads were shipped to Australia and released. Of course, they never did the job that they were imported for and have been a menace ever since.

There are clearly many lessons to be learnt from this saga. Science is meant to be impartial and impartiality does not occur when governments (via industry links) pre-empt the decisions. Furthermore, pre-determined decisions are often wrong, because they are based on unfounded assumptions. Let's hope that politicians and industry leaders read this book; science can move slowly and may not give you the answer that you wanted- but it is more likely to the right answer. Arthur White Frog and Tadpole Study Group of New South Wales

More about the book Before the birth of modern insecticides, farmers and gardeners used predatory and parasitic wasps and flies, insect-eating birds, lizards and toads as agents of biological control. In the late 19th century sugar cane scientists carried cane toads from Barbados to Puerto Rico, to Hawai'i and then Queensland to control pests. Toads were introduced to some 138 countries, and are now ranked among the world's most invasive species.

Queensland's sugar scientists released the toad into cane fields in 1935. They were supported by cane growers, politicians, the nation's leading scientists, the premier of Queensland and the prime minister of Australia. Only a lone voice objected. In the following 70 years they spread as far as western NSW and Western Australia. This story is about good intentions, unintended consequences and of simple acts leading to catastrophic outcomes. It is about scientists so committed to solving a problem, serving their country, their leaders and the industry that employed them, that they are blinkered to adverse impacts. There are lessons to learn from the toad's tale. And as the tale shows, we still come perilously close to repeating the mistakes of the past

About the author Nigel Turvey resides in Darwin where, as an Adjunct Professorial Fellow in the Research Institute for Environment and Livelihoods at Charles Darwin University, he supervises postgraduates and writes. Nigel is the author of *Terania Creek: rainforest wars*. He also manages planted forests in Queensland and is Executive Chairman of KeeptheHabitat, tackling ways to stop tropical deforestation. ISBN: 9781743323595 RRP: \$35.00 plus postage. You can find out more about our book by visiting our website: Fisher Library F03 The University of Sydney purl.library.usyd.edu.au/sup/9781743323595



FATS AT THE 2014 SOFAR EXPO. See pages 10 and 12



TOAD VS TOAD: SCIENTISTS DISCOVER WAY TO USE CANE TOAD POISON AGAINST ITSELF



Professor Rick Shine, a biologist at the University of Sydney, with a cane toad in his laboratory. Picture: Alan Pryke The Australian

In what could be a possible silver bullet in the war against cane toads, Sydney-led scientists have discovered a way of using the dreaded creature's poison against itself. By isolating the deadly poison secreted from the parotoid or shoulder glands of dead toads, researchers have been able to develop a powerful bait that can lure cane toad tadpoles into funnel-like traps set in infested waterways.

In a study published today in a scientific journal Sydney University researchers, in collaboration with the University of Queensland, have been able to show how the bait and trapping method virtually eradicated an entire cane toad population from a natural pond. Importantly, while cane toad tadpoles find the chemical bait irresistible, it repels the tadpoles of native frogs.

Sydney University's School of Biological Sciences professor Rick Shine said the biggest obstacle to getting rid of the introduced and invasive species was that a single clutch laid by a female could contain more than 30,000 eggs. "This means that even if you catch and kill 99 percent of the adult toads in an area, the few that are left

can produce so many offspring that before you know it you are back to where you started just as many cane toads as ever," he said.

The lead author of the study said the only way around the problem was to stop the toads from reproducing. "This is the first powerful tool we have created to control cane toads," he said. "If we can do this, then removing adult toads can make a big difference because there are no new toads being born, to replace the ones we are eliminating." Cane toads - Rhinella marina have had a decimating effect on native species since their introduction in the 1930s during a failed bid to control sugar cane beetles. They have since spread exponentially throughout much of the northern half of Australia, killing native predators that try to eat them. Professor Shine said in some local populations of crocodiles, goannas and quolls, more than 95 per cent of the animals were killed within a few months of the toads' arrival.

"A chemical bait created from the toads poison is a real magnet for toad tadpoles," he said. "This is perfect to use in funnel-traps in ponds to catch toad tadpoles. Other native fauna such as fish and insects aren't attracted to this chemical but toad tadpoles are incredibly good at detecting it, and they search for its source as soon as they encounter it. "When we use this chemical as bait in a funnel-trap we catch thousands of toad tadpoles and almost nothing else. "In one natural pond, we collected more than 40,000 toad tadpoles in less than a week. And I think we got them all - over the next few weeks, not a single toad emerged from that pond."

The researchers hope to train people from local toad-busting community groups how to safely collect the poison but said in the meantime even a dead toad inside a funnel- trap could work as an effective bait, without any risky squeezing of poison glands. "In continuing work with our collaborators at the University of Queensland we are developing an even stronger, safer, and easier-to-use bait," Professor Shine said. "To do this, we will isolate the active agent in the toad's secretion, and use it in pure form without all of the associated poisons." by: Richard Noone, The Daily Telegraph, 13 June 2012

FROGCALL NEWSLETTER & WEBSITE

Progcall is available as a pdf file of under 2 MB. Please let me know via email to wangmann@ihug.com.au if you would like to receive an electronic colour copy every 2 months. The Login part of the FATS Web Site www.fats.org.au has been removed for easier access. Frogcall newsletters will be available to the general public. MW

SMITHS LAKE FIELD TRIP 21-23 FEB 2014 Field trip leaders: Arthur and Karen White Photos by Michelle Toms

Smiths Lake provided a spectacular setting for the latest FATS field trip and despite dry conditions there was still an abundance of wildlife to be seen. The first night we geared up with headtorches and gumboots and our convoy of froggers set out into Wallingat NP. We had success with a number of reptiles including an Eastern Small Eyed Snake, Marsh Snake, Hemiaspis signata and Golden Crowned Snake.



Golden Crown Snake

We arrived in Wallingat NP to hear a chorus of red-backed toadlet calls and managed to locate the odd one. At the quarry site not many frogs could be found, however there was an abundance spiders. Towards midnight we travelled further into the National Park to see Wallingat River which was eerily beautiful with a layer of fog resting over the water.



Spider



Red-backed Toadlet

The second night we set off in the other direction towards the old twin mine dams. Though the water was low there was still a variety of frogs to be found including Eastern Dwarf Tree frogs, Jervis Bay Tree frogs, Whirring Tree Frogs, Striped Marsh Frogs, and a number of metamorphs. Namkhai was skilled at spotting out and catching a number of snakes too. I set out scratching around in the leaf litter to find a calling Mixophyes though despite my persistence he proved elusive.



Jervis Bay Tree Frog



Jervis Bay Tree Frog



Whirring Tree Frog (metamorph)

The field trip also provided a great opportunity for more adventures during the day and as a pair of biologists we set out exploring the field station site and surrounding Blueys Beach, Seal Rocks and Booti Booti NP. We came across an abundance of wildlife including Diamond pythons, Lace monitors, Whistling Kites, Glossy Black Cockatoos and Bottlenose Dolphins. The snorkelling was also a highlight with flatheads, leatherjackets, stingrays, a wobbegong shark and a green sea turtle.



Lace monitor

CORRECTION FROGCALL 130 The yellow-faced whipsnake on p6 is actually a Marsh Snake, *Hemiaspis signata*. Thanks to Eric Vanderduys Technical Officer CSIRO Ecosystem Sciences for letting us know.



Diamond Python

Being in our element as biologists we couldn't resist the temptation to use our camera to document our wildlife encounters in true David Attenborough style commentary (complete with British accents).



Green sea turtle



Superb Fairy Wren

We look forward to returning at the end of the year to find the elusive Mixophyes! Thankyou to FATS for organising the venue and a fantastic field trip! **Hannah D'eau**

FATS AGM NOTICE FRIDAY 1st August 2014

The FATS AGM will be held on 1st August 2014, commencing 7pm. FATS meet at the Education Centre, Bicentennial Park, Sydney Olympic Park. If you would like to ask any questions about joining the FATS committee, please give us a call. Contact our President Arthur White at least two weeks before the meeting for further information and to submit items. We appreciate fresh ideas and new members on our committee. No experience required. The FATS committee meet 6 times a year. No task commitments or time expected of committee members, other than what you are able to spare. See contacts details on page 11. Arthur White

FATS FACEBOOK FRIEND ALEXANDER DUDLEY'S front yard at Coolatai:

Survivor of recent severe drought sheltered in a "frog pole"
- a length of pvc pipe half-buried upright in the ground allowing the frog to escape the extremes of temperature.







Tadpole photos above & below by Peter Soltys

ne of the ongoing debates on the FATS Facebook page is the identification of tadpoles and frogs. Many of the 975 + FATS Facebook members are experienced froggers or herpetologists, like Marion Anstis. They willingly and generously offer assistance and advice. MW

Common Eastern Froglet or Limnodynastes?



AMPHIBIAN LICENCE RENEWALS & FAUNA RECORD BOOK RETURNS DUE BY 31 MAY 2014

All licensed native animal keepers are required to maintain a fauna record book and lodge it with the Wildlife Licensing and Management Unit each year. The ebook is the fastest and most efficient way to do this, but it can alternatively be done in a paper book by licence holders who do not have access to a computer.

Electronic fauna record book (e-book) The e-book is an easy to use web-based record book. It provides licensees with a fast and efficient way of managing animal holdings and transactions. By using the e-book to maintain and lodge fauna records, license holders can save on postage and handling costs.

http://www.environment.nsw.gov.a u/wildlifelicences/electronicFaunaR ecordBook.htm

POTENTIAL CURE FOR CAPTIVE AMPHIBIANS WITH CHYTRID FUNGUS

Researchers have identified an alternative to a sometimes toxic therapy that protects frogs in zoos from a deadly fungal infection that has been destroying the amphibian populations worldwide. Researchers at Vanderbilt University have identified an alternative to a sometimes toxic therapy that protects frogs in zoos from a deadly fungal infection that has been destroying the amphibian populations worldwide. Their research is published ahead of print in Applied and Environmental Microbiology. The fungal disease, chytridiomycosis, has been decimating frogs all over the world. At present, nothing can help amphibians in the wild, but zoos currently rely on the often-toxic itraconazole to eradicate the disease from infected amphibians they wish to acquire.

To preserve the most at risk amphibians, zoos have been acquiring "founding populations" of species threatened by chytridiomycosis, which is caused by the fungus, *Batrachochytrium dendrobatidis*. "Some species, such as the Panamanian Golden Frog, are nearly extinct in nature, and doing well only in zoos," says Louise Rollins-Smith, a researcher on the study. "Facilities which house multiple amphibian species need safe treatments to protect their valuable colonies." Brian Gratwicke, a conservation biologist with the National Zoo, describes the difficulties zoos face in treating the creatures. The animals must go through 10 days of immersion in an itraconazole solution. "Itraconazole is a fairly expensive drug, and depending on the species we treat we can see a very high mortality rate," says Gratwicke. "An alternative treatment would be very helpful."

In the study, Rollins-Smith and colleagues, of Vanderbilt University, Nashville, TN, tested two potential alternatives, chloramphenicol, and amphotericin B. Although both drugs reduced *B. Dendrobatidis* infection, neither could eradicate it. But amphotericin B had a critical advantage over chloramphenicol. The investigators found that chloramphenicol can cause major changes in the community of microbes inhabiting amphibian skin, while amphotericin B does not, says Rollins-Smith.

Previous research has shown that altering or reducing the skin microbiome leaves amphibians more vulnerable to chytridiomycosis infection, she says. Whether by competing for space, or by providing antimicrobial compounds, the skin microbiome is probably protective. Moreover, amphotericin B is much less toxic to frogs than is itraconazole.

Rollins-Smith suggests that a more benign cure for chytridiomycosis might involve treatment first with amphotericin B, followed by itraconazole, which would enable a lower, less toxic dosing with the latter. "That makes sense," says Gratwicke. "It would also correspond with my field observations." Chytridiomycosis is a skin disease. Clinical signs include reduced appetite, weight loss, lethargy, and loss of righting reflex. Death is thought to result from disruption of sodium and potassium ion transport in the skin, resulting in osmotic imbalance and asystolic cardiac arrest. Gratwicke and others hope eventually to be able to cure chytridiomycosis with probiotic treatments that would add protective bacteria to the

skin. But such efforts have yet to bear fruit. *B. dendrobatidis* was first identified as a threat to amphibians in 1998.

There are about 7,000 amphibian species in the world, including roughly 6,000 frogs, 600-700 salamanders, and about 200 caecilians, says Gratwicke. The International Union for Conservation of Nature lists 122 "missing" species of frog, on its "red list," most of which are likely extinct, including 90 for which chytridiomycosis is listed as the essential threat. Some salamanders and caecilians are also endangered. (Caecilians are legless borrowing creatures that look like the progeny of a mating between a snake and a worm). Story is based on materials provided by American Society for Microbiology. Science Daily. Forwarded to FATS by Marion Anstis. 12 5 2014

www.sciencedaily.com/releases/2014/05/1405121 55314.htm

SNIPPETS FROM FATS FACEBOOK PAGE



Theressa Rossdale shared her status. Recent photos of my friendly frogs







Gus Johnston Id ????



Unlike * Comment * Share * 5 January at 18:08

**You and 2 others like this.

Scott Elpper Peron's I ree I rog Literia pero 5 January at 18:11 * Unlike * 4 8

Claudette Hudson very nice @
5 January at 21:24 * Like

Christian Hofmann Literia percrii
5 January at 21:44 * Unlike * 4 1

FATS FACEBOOK POST BY NATASHA WATSON

Natasha Watson: "Catchit is actually a dogs toy, but floats really well and the textured surface makes it easy for birds and frogs to grip, and the ring shape makes it easy to tie to tub handles etcand i have these inside my horse water troughs, to help birds that have fallen in get out again (had a few drowned Bower Birds and wrens prior to that & sticks fall out all the time) http://www.ebay.com.au/.../Chuckit-Canine.../ i bought one of these for a friends pool -

http://www.ebay.com.au/itm/271147694371?

ssPageName=STRK%3AMEWAX%3AIT&_trksid=p3984.m1423.l2649 "



Photos by Andre Rank Education Centre Feb 2014





Judy Harrington (left), Karen White (right)



Photo by Ben Brown 2009 *Heleioporus australiacus* metamorph



KATHY, SARAH, HARRIET AND DAVID POTTER AT CENTENNIAL PARK GREAT EASTER EGG HUNT.

The Potter family, friends and FATS members have been very busy again this year representing FATS. The very imaginative and resourceful, Kathy Potter has done an extraordinary job as our Events Coordinator. The family have brought in new ideas, committed long hours to FATS events and added excitement into the society's public activities. See pages 5 and 12. MW





FATS MEETINGS commence at 7 pm, (arrive 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 Good Friday). Call, check our web site 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. 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.

Thank you to the many Frogcall supporters.

Your articles, photos, media and webpage links, membership administration and envelope preparation is greatly appreciated. Special thanks to regular newsletter contributors, Lothar Voigt, Robert Wall, George Madani, Karen & Arthur White, Andrew Nelson, Wendy & Phillip Grimm, Marion Anstis and Bill Wangmann.

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Photo by George Madani Smilisca phaeota Masked Tree Frog

LUCKY GIRL

Rescued Litoria caerulea Green
Tree Frog came in with some
symptoms that indicated that she
might have chytrid. She's recovered
well, didn't have chytrid but has some
residual nerve damage to both front feet
(she was a cat attack victim) which is
going to make her non-releasable. Now
homed with Nick's loving family.





A FROG CAME TO CALL – TRAVELS WITH THE FATS FROG COLLECTION

Despite the colder weather the FATS frogs have been busily hopping all over Sydney. We started the year with the Society of Frogs and Reptiles at their annual Expo, which was a terrific success with cues of fifty people or more waiting to view the frogs for most of the day. Working with the SOFAR people was a lot of fun and we are hoping to be invited back again next year.

Our last big event will be the Blacktown Council Greener Living Expo on 24 - 25 May, 2014 at Nurragingy Reserve, Knox Road, Doonside. This event is happening at the same time and place as the Council's big Medieval Fayre, so volunteers will be in for an interesting weekend!

If you are interested in helping at any of our display events contact me. Keep an eye on the FATS website for coming events and if you are interested in helping please contact: Kathy Potter at kathy@the-pottery.org



Frogs may not be the first thing you think of at Easter, but for the children who attended the Great Centennial Park Easter Egg hunt (see pages 5 and 10) that will certainly no longer be the case. For two days over Easter the 1500 children participating in this event were hopping like frogs in our frog races or leaping through our lily pads to get their

frog stamp and Easter egg. The FATS frogs were also popular with other park visitors who couldn't resist stopping to talk to us about our favourite subject.



Continuing the Easter theme the FATS frogs spent a productive two days at the Sydney Royal Easter Show, with many hundreds of children and adults stopping by to marvel at our display make our origami frogs.



Many thanks to the following people who have been making our displays and activities such an overwhelming success: Kathy, Sarah, Harriet and David Potter, Monica Wangmann, Punia Jeffery, Peter Street, Matthew Mooney, Jilli Streit and Namkhai Barber-Fielding.



FATS visit St Ives Primary School