

FROG CALL



THE FROG AND TADPOLE STUDY GROUP NSW Inc.

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NEWSLETTER No. 109 October 2010

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



Photo *Heleioporus australiacus* metamorph by Ben Brown

MEETING FORMAT Friday 1st October 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 speakers: Marion Anstis will be the main speaker: her topic "Who needs a tadpole to become a frog?" We will also show the Footage of the New Zealand herp group working on Leiopelmatid frogs..

9.30 pm 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.

Arrive 6.30 pm for a 7pm start.

Friday 1st October

FATS meet at the Education Centre, Bicentennial Park

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

Take a torch.

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 2 way road and park in p10f car park (the last car park before the exit gate).

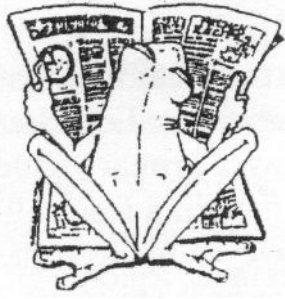
See map p4

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LAST FATS MEETING FRI. 6th AUGUST 2010

Presidents Report

2010 was another good year for FATS. FATS undertook a new change of venue- as we departed Building 22 at Newington Armoury in favour of the Field Studies Centre at Bicentennial Park. Although the new venue is smaller it is a lot cosier (especially in winter). Thanks to Judy Harrington for her help with the move.

Our team of willing workers have kept the various activities running, such as the Frog Rescue Service, public exhibitions, school workshops, field trips and community workshops. We continue to be invited to contribute to Governmental Panels in areas such as Threatened Species Conservation and the listing and keeping of native animals as pets. More recently we have been asked to assist with the Cane Toad control program at Taren Point- this is the first time that Cane Toads have successfully become established and bred in Sydney and a concerted effort is required to eliminate these pests.

The Students Grants scheme is proving popular and this year three grants were awarded:

Jo O’Cock (UNSW) for her studies with frogs in western NSW

Crystal Keleaher (Syd. UNI) for her work on the interactions between toads and native frogs

Bill Koutsamanis (UNSW) for his work on automated frog survey procedures.

FATS also donated \$ 1,000 to the New Zealand Save the Frog Campaign and wrote letters to the NZ governments urging that the government not approve a mine development on land where extremely rare Leiopelmatid frogs occur.

Robert Wall, our field trip co-ordinator, again produced a nice array of field trips throughout the year, and he was ably assisted by Matt and Brad McCaffrey and Grant Webster in the running of these trips. In February 2010, we undertook our first organized a bus field trip; the trip visited places such as Dorrigo rainforest areas, Washpool and Gibraltar Ranges National Parks and Barrington Tops. It was a novel adventure and one that was enjoyed by all who went. From time to time you will see various items about field trips and the codes of conduct during field trips advertised in FrogCall.

The FATS executive has been busy and efficient as usual and I thank them all for their efforts. Karen White has been our Treasurer and has kept FATS accounts in the red. Wendy Grimm and have been our ever-efficient secretary and Punia Jeffery our Chairperson at the public meetings. Monica Wangmann continues to put out FrogCall packed with juicy articles and tales of interest. Andrew Nelson has maintained our membership data base and looks after new memberships. Alistair MacDougall and Marion Anstis and others have been busy helping to update the website. Everyone on FATS helps and that is why we are able to run so many different activities.

Finally, although we have lots of helpers, we always could do with more. Many of you have helped at the various community days, at meetings, with frog rescue or frog care or other activities. If you want to be more involved, don’t be shy, let us know.

We are also open to suggestions about how we might better operate or other services that could be run by FATS. So if you want to help or merely have some suggestion, approach a FATS executive member and let us know what is on your mind.

Happy Frogging Arthur White President



The far Side

“See, Frank? Keep the light in their eyes and you can bag them without any trouble at all.”



Photo George Madani

Uperoleia rugosa

Wrinkled Toadlet

Nyngan

NIGHT TALK 30/9 – JODI ROWLEY

What drives a scientist to trek through the rainforest of Indochina, climb mountains, scale waterfalls and get eaten alive by blood-sucking invertebrates? In the case of Museum scientist and photographer Dr Jodi Rowley, the answer is simple: Frogs.

Jodi's work takes her to the remote forests of Vietnam and Cambodia where the frog fauna is relatively unknown, yet is still subject to human impacts through habitat destruction and predation.

Jodi will talk about her work, often conducted under extreme field conditions, to reveal a more detailed understanding of these fascinating animals.

Where: Australian Museum, enter via William Street

Costs: \$20 Members, \$30 non-Members

Bookings: Book online

www.australianmuseum.net.au/members
or phone 9320 6225

Inclusion: Light refreshments and a one hour talk, followed by open question time.

FATS THIRD FROG-O-GRAPHIC COMPETITION

The FATS Frog-O-Graphic competition closes on 1/10. Entries must be your original work, not photo enhanced and unpublished (except for FrogCall). Limited to 6 entries per person. Please identify your age if under 18, title (Mrs/ Ms / Miss / Mr etc), name, address, phone and mobile contact details. Entries should be emailed to [Arthur White 1arthur@tpg.com.au](mailto:Arthur.White1arthur@tpg.com.au) no later than 1st October 2010. Winning entries may be featured in FrogCall, our web site or other FATS publications. Winners of the froggie images, do-dahs, artwork or drawings will be announced at the December FATS meeting. No correspondence will be entered into, following the judges' decision.

Categories:-

- 1 a Best frog image (all ages)
b Best frog image (under 16 yrs old)
- 2 a Best frog artwork ie drawing, sculpture, cartoon or painting (all ages)
b Best frog artwork (under 16)
- 3 a Most interesting image (all ages)
b Most interesting image (under 16)
- 4 A "people's choice" award will be judged at the December meeting of FATS.
(open to all ages)

Are there prizes? Yes fabulous ones.

The FATS Committee



Photo George Madani Nyngan *Uperoleia* groin

DEVIL ARK



Check out www.devilark.com.au

"If it's feral, it's in peril" John Weigel AM
Australian Reptile Park
Pacific Hwy, Somersby, NSW.
PO Box 737, Gosford, NSW, 2250
ph 02 4340 1022 fax 02 4340 2990
jweigel@reptilepark.com.au
www.reptilepark.com.au
www.snakeranch.com.au



Litoria aurea Green & Golden Bell Frog photo Ben Brown

LITTLE TREE FROG A RARE AMPHIBIAN FIND



CAMOUFLAGE: The new frog found in the Arkaroola Wilderness Sanctuary by young scientist Kaya Klop-Toker, inset. A YOUNG scientist has discovered the state's first new frog species in 45 years. Kaya Klop-Toker, 23, was invited to study frogs, bouncing back after the rain, in Arkaroola Wilderness Sanctuary. She found lots of "cute" little tree frogs with "fantastic camouflage" and took specimens to the University of Adelaide expert, Associate Professor Mike Tyler.

Straight away, he knew this "pretty little thing" was special. The brand new frog species will bring the total number in South Australia to 29. "This is the first new species to be found in South Australia since 1965, when another species unique to the Flinders Ranges called *Crinia riparia*, or the Flinders Ranges froglet, was described," Prof. Tyler said. "The Flinders is very important in terms of the frog fauna, because there are species that are unique to the area, they don't occur anywhere else in Australia."

Associate Professor Tyler called Sanctuary owners Marg and Doug Sprigg with the exciting news. It was a very different phone call to the one they'd received earlier that day from the chairman of Marathon Resources. The uranium exploration company has served Arkaroola with notice of further work on site.

This is the same company that illegally buried about 35 tonnes of low-level radioactive material in 22,800 plastic bags at Mount Gee back in 2007.

Ms Sprigg has "serious concerns" about the potential impact of uranium mining on many little known and as yet undescribed species. "Last year a giant gecko was found in the Northern part of Arkaroola, again undescribed," she said. "We just wonder what else is here that could be under threat from exploration and mining."

Ms Klop-Toker said she wanted to work in conservation and frogs were the "most at-risk type of animal that we have at the moment". "We've lost more frogs than any other type of species in the last 50 or 100 years, so that makes me want to try and save them," she said. The species' name will be confirmed by an international naming committee.

From Grant Webster by CLARE PEDDIE

The Advertiser 15/6/2010 Source: AdelaideNow
<http://www.adelaidenow.com.au/news/south-australia/little-tree-frog-a-rare-amphibian-find/story-e6frea83-1225880108110> Pictures: KAYA KLOP-TOKER

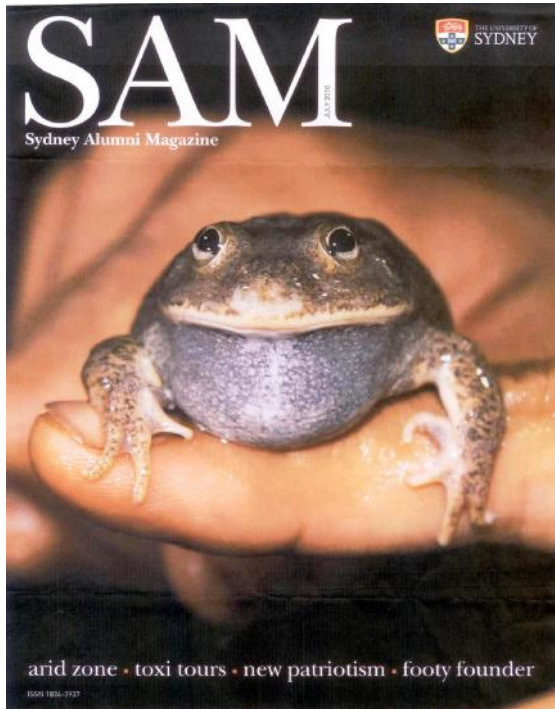
CHOCOLATE QUOLL PROJECT

The Wildlife Preservation Society of Queensland (a Non Government Conservation Organisation) is involved in a new and exciting initiative....the Chocolate Quoll Project. As you may be aware Quolls and other Marsupial Carnivores have had a critical collapse across much of Australia and are in danger of being lost from the wild. See Adopt a Quoll Program, Quoll Information Pack: <http://www.wildlife.org.au> Yours Sincerely Glenn Kvassay Far North Quoll Seekers Network (WPSQ) Amanda & Glenn Kvassay ag.k@live.com.au



Nick Edards from WIRES has cared for this little Dwarf Eastern Tree Frog who is now in quarantine awaiting adoption.

DESERT OF THE HEART



Cover of the current Sydney Alumni Magazine

After five days on the road and 2000 kilometres on the clock, the Simpson Desert finally stretches before us. We are on the land of the Wangkamadla people and I am riding with Mark Lithgow, Reserve Manager for Bush Heritage's Cravens Peak property, when the first dune appears.

"Hold on tight," he says. We are halfway across a kilometre-wide swale. He puts his foot down and we speed towards the rising wave of red. For a moment I think we won't make it, but we nudge over the paper-thin crest to see an endless vista of red dunes, like a perfectly formed set of waves rolling towards an unknown shore. We are in the lead and two more University Hiluxes follow in close succession. We've made it, but the roller-coaster ride into main camp is only just beginning.

Ecology Professor, Institute of Wildlife Research Director and founder of the Desert Ecology Research Group (DERG), Chris Dickman says, "Once you get red sand under your skin it pulls you back irresistibly. You don't have much say about it."

When Dr Glenda Wardle, Botanist, Senior Lecturer and fellow DERG leader, first came to the University she thought Dickman "must be mad to work in the desert". The prospect of spending three weeks sleeping on the ground, enduring flies and 40C+ daytime temperatures did not fill her with enthusiasm. But after just one April day in 1998, she knew she would be back. "I don't ever conceive of a time that I couldn't be returning, which makes me think there must be something magnetic about the desert," Wardle says.

Biodiversity But it's more than the sand and sky that draws the DERG back to the Simpson Desert three to four times a year. It is a place where the depth and processes of biodiversity continues to intrigue and surprise scientists with each visit.

When Dickman first set out in 1990, he thought they'd know all they could about biodiversity in Australia's arid dry-zone in five or six years. That was 20 years ago. After hundreds of collective visits, the head scratching continues. "On every trip we see something we haven't seen before," says Dickman.

Bobby Tamayo (BSc '95), Operations Manager for the DERG and a veteran of 50 desert expeditions, knows how important their work is. "It has become clear," he says, "that learning and understanding even more about the arid zones, which make up 70 per cent of Australia, will be vital to the future of Australia."

While the Simpson Desert is only one part of the continent's vast arid zone, it covers more than 17 million hectares of central Australia. The parallel dunes, running southeast to northwest, extend for up to 200kms, aligned with the dominant wind direction when they were formed during the Pleistocene epoch, about 80,000 years ago. Like the still water between waves, the swales lie between the shifting masses of red – either as wind-polished gibber pebbles or mineral encrusted clay pans.

DERG works mainly within Queensland's Diamantina Shire channel country area on Bush Heritage Australia's Ethabuka and Cravens Peak reserves as well as the Carlo and Tobermorie cattle stations in the Northern Territory.

For Dickman, the dunes and swales are an environment where the diversity of life is "in your face". "There's a richness that hasn't been greatly affected by human activity," he says.

Four-time volunteer, David Nelson (BSc Adv (Hons) '08), refers to a common misconception about life in the desert. "So many people think there aren't a lot of animals out here," he says. "But really, the desert is home to so many amazing creatures and plants."

And as 95 per cent of desert mammals are nocturnal, it's when the sun sets that life really gets going. "You only need to walk along the top of a dune to see the footprints of a dozen species that have been active the night before," says Nelson.

You may not think it, looking across the quiet landscape, but in the Simpson Desert there are 17 small mammal, more than 150 bird, four types of frog and 54 reptile species. In fact it is home to the most diverse reptile population of any arid zone in the world. It's also the animals themselves, from the Hairy-footed Dunnart to the Water-holding frog – emerging with the rain – that keeps the excitement high during these trips. The Mulgara, a small marsupial with a tail sporting a distinctive crest of short black hairs, seems to be on everyone's "favourite" list. "Mulgaras are little packets of ferocity," says George Madani (MA AppSc '06), wildlife ecologist and six-time desert returnee. "They're full of spunk and attitude and their size belies their strength."

But most impressive is the animals' ability to adapt: an inhospitable environment such as the Simpson Desert has its challenges. For four-time volunteer, Henry Cook (BSc '05 MA (AppSc) '06) the Rufous Crowned Emu Wren, one of Australia's smallest birds, wins the resilience

prize. “They’re so improbable; they only weigh three or four grams. They’ve got little wings that are hopeless for dispersal so they hop between spinifex clumps. But they still persist. “Without burrows or the ability to store a lot of fat they have learned to thermo-regulate in extreme climatic conditions, from near zero to 50 degrees,” says Cook.

Says DERG Research Assistant and 29-time returnee, Aaron Greenville (BSc Biology (Hons) ’01), “I have experienced flooding rains and dry dust storms. This has highlighted to me how amazing the environment of arid Australia is and how reptiles, mammals, birds and plants cope under what we would consider extreme circumstances.”

Front row seat For Tamayo the most thrilling part of the desert is having a front row seat. “We get to see some of Australia’s most interesting wildlife in conditions that not many other people will experience,” he says.

The Simpson Desert is an ancient landscape, one with relatively few signs of human presence. This, says Wardle, is what allows scientists to look at how an ecological system works in total. “I hope to live long enough to complete the picture but the more questions answered by the combined research team, the more we’re bringing in new blood and exciting them about a range of more complicated questions,” she says.

This “new blood” represents the many Honours and Doctoral students – past and present – who have spent time in the desert helping unlock its mysteries. Nicole Hills (BSc (Hons) ’08), a PhD student looking at the complex predator-prey interactions of goannas and small vertebrates in arid Australia, is one of them. She fell in love with the desert after one trip. “It’s unique and I enjoy pushing myself and working with animals that haven’t had a lot of research done on them.”

Desert gurus Tony Popic (BSc (Hons) ’08), another PhD student, is working with Wardle, “When you start doing the really long term studies you have a large data set and are in a better position to answer questions and know how systems work,” he says. And according to Wardle, “the DERG’s is among the longest and most comprehensive arid zone research projects in Australia.”

Since he first went on a DERG trip in 2004, Madani puts down learning so much about the arid zone to good-natured teachers. “They are interested, excited and enjoy what they do so they want to share it with other people,” he says. He is referring principally to Dickman and Wardle, the desert gurus, who both have troupes of loyal followers.

Having joined in with desert studies 12 years ago Wardle says she has enhanced but not changed what Dickman first started. “I think I would give credit to Chris’s personality,” she says. “He is definitely key and pivotal to the successes of this desert program.”

One of the first PhD students to work with Dickman in the desert was Martin Predavec (BSc (Hons) ’91 PhD ’94) who, from 1991, clocked up 20 desert visits. Now an ecologist for an environmental consultancy, he says Dickman’s love for science is infectious. “He is a true scholar and gentleman in every sense of the word,” Predavec says. “He

is what drew me into doing work on mammals in the desert.”

Errol Nye (PhD ’04) also completed his PhD at the University under Dickman and attributes much of what he has achieved professionally to Dickman’s supervision, mentoring and friendship. “Chris deserves all the plaudits he receives,” Nye says. “He is a truly great man among men.”

Tamayo, another “desert guru”, who has worked closely with Dickman for years, says, “He’s like the Pied Piper of ecologists. So many people just want to follow him and do as he does because he’s such a good mentor for not only myself but a lot of other people.”

It’s not only biology students who are led into the desert, there are also hundreds of volunteers who’ve been infected with the red sand syndrome. “It’s hard to describe. You see it catch up to people during the trip,” says Wardle. For many, it’s an experience that involves the heightening of senses.

Megan Hughes, first-time volunteer in 2009 reflects on the sound of silence. “It’s a feeling of being nowhere, but being in the right place and loving it,” she says.

It’s not surprising that after so many years, the locals in Bedourie in Queensland – the last stop before main camp – have coined a nickname for the team. On a fuel stop in the early ’90s, Dickman was approached by a local and asked what he was doing. After explaining that they were on their way to the desert to catch small mammals, reptiles and rats, the group was christened “the rat catchers”. While no one’s seen a rat in the desert since 1995, the name stuck. The nickname has also filtered down to other towns along the way, marking the Sydney to Simpson trail from sea to red sand.

Camaraderie When a long day’s driving is over the Hiluxes pull off the road, swags are rolled out for the night before doing it all again the next day. But one thing frequent desert travellers know is to never count on anything going to plan. The November/December 2009 trip was no exception: inland rain closed the road to Bedourie, and we sat it out in Windorah where we squatted under a big tin-roofed tennis court for three nights. After two days at Coopers Creek we were back on the road, this time north to Boulia, an alternative route into the Desert. On journeys like this desert camaraderie lays its traps. “There is an intimate interdependence among people. You negotiate what you’re going to cook each day, where you’re going to get firewood and who is going to fetch the water,” says Wardle. And more than anything, there’s time. “Just being able to look into things is a pleasure for an ecologist,” she says.

This doesn’t mean the days aren’t filled with hard, laborious work, however. At dawn the birds are up, the breeze is cool and the sun bathes everything in a golden light. The long shadows and crisp air coax everyone out of swags. The routine goes something like: check pit fall traps for small mammals and reptiles, process the catch, conduct vegetation surveys, mend traps and fences; at night go spotlighting for animals and, on the

November/December trip, chase and noose Sand goannas. And during the midday hours, there's time to read, talk and sit back.

Main camp, located on Bush Heritage Australia's Ethabuka Reserve, is impossible to miss. Marked by an unusual cluster of the slow-growing Gidgee trees, it is the centre of the DERG's activities. Another feature is The Caravan, tattooed with the hands and names of those who have gone before; a treasure trove of eating utensils, crockery, canned food, sunscreen 10 years past its use-by date, shovels, research tools and red dust.

The day-to-day schedule and the logistics of cooking, sleeping and eating under the big sky are simple. I can even look forward to warm milk on my Weetbix and a cup of tea in the morning. In fact, with minimal resources, every dinner at the end of a hard day is unfailingly delicious. Then again, maybe everything tastes better cooked over an open fire, under the stars – there are several capable cooks among us. The fresh veggies are gone in the first week but we eat stir-fries, pastas and curries. One night, there's even chocolate pudding, made craftily by Nic Hills.

Without running water, toilet facilities or electricity, the desert offers everyone a chance to, literally, get back to nature. On arrival, we sit down to an informal "desert orientation", covering hydration, work schedules and the all-important "poo dune" etiquette. "Tie the pink flagging tape up, take a shovel, head on over and dig a good hole," says Madani. "Burn everything."

There is a complete disconnect from the outside world but for two hours of satellite phone connection in the evening. This simple way of life is a welcome change. "There's a sense of relief when you get out there," says Cook. "Your phone stops working, you don't have to answer emails and what we do is relatively simple." For researchers and volunteers who go regularly, the desert, or "five million star hotel", becomes a second home.

Wardle agrees. "If you go four times a year for three weeks you've actually lived three months of that year, in the desert." Looked at this way, over 20 years, Chris Dickman has spent roughly five years on the sand.

Research projects Their current work is focused on two Australian Research Council (ARC) funded projects. The first, "The renaissance predator: complex predator-prey interactions and vertebrate diversity in arid Australia", investigates the effects of predators like the Red fox and Sand goannas on the broader prey community in arid Australia. The second, "Dynamic networks in a patchy landscape: will species interactions adjust to increased climatic extremes?" seeks to probe and extend current theory about how ecological systems, including plant-pollinator interactions, respond to extreme events, and provide the first insights into the mechanisms that drive change.

For these projects, Nature could not have organised a better weather event than the 2010 February/March inundation of Western Queensland. In a good year the Desert can expect around 150mm of rain. On March 1, more than 185mm fell on Bedourie, roughly 160kms from the main research site.

The Bureau of Meteorology estimates that during the 10-day period ending March 3, 403,000 gegalitres of rain fell on the Northern Territory and Queensland. And that was not the last of it. The 2010 rains have been saturating enough to bring on what the scientists call a "boom period". Wardle expects the germination of the annual plants from the seed banks and an explosive flowering of perennial trees and shrubs. But it's not just the plants that benefit from the usually dry land's inundation. "Six months from now we'll expect the productivity of plant resources to flow into the animals."

In 2010, a year of rain, it is also a year for bridging communication gaps between scientists and local community. While the DERG has built relationships with many of the Bedourie townspeople, explanations of their research have never extended beyond a chat over a beer at the pub. On July 1, however, the DERG arrived in Bedourie, after three weeks in the desert, to present an evening to share what it is they actually do in the desert. This initiative forms part of the Iconic Landscapes Study, funded by the Institute of Sustainable Solutions, aiming to connect scientific research with communities.



Dancing brolgas On my last day, I see a flock of dancing Brolgas. They leap into the air, bouncing as if on a trampoline; their wings spread wide. Within seconds, they are a gliding flock of silver in the sky. After 10 days on the road and in the desert, I'm also about to fly home. The others will drive back to Sydney in a week.

It's 3pm. I'm sitting at the Simpson Desert Oasis bar talking to Gary, Bedourie's carpenter. I gabble about my experience and ask him what he thinks of the desert. He says the thing he likes most about being in Bedourie is the people. "It's about community." It strikes me then that I've only scraped the surface of what makes this part of the world so special. Then I'm in the big sky of big sky country and can see the dunes laid across the land we charged over in 4WD convoy. From the air, the fluidity of the channel country and the way it bleeds colours, textures and shapes resembles an ever-changing abstract canvas. It reminds me of the words Chris Dickman spontaneously recited when I asked him about the desert landscape months before: "And the sun sank again on the grand Australian bush – the nurse and tutor of eccentric minds, the home of the weird, and of much that is different from things in other lands." Henry Lawson had it right in *The Bush Undertaker*.

By Gemma Deavin (BA (Media&Comm '09) is the Iconic Landscapes Study's project officer and a freelance journalist.

http://sydney.edu.au/alumni/sam/july2010/desert_of_the_heart.shtml sent to FrogCall by Andrew Nelson

**FROG & TADPOLE STUDY GROUP
STATEMENT OF INCOME & EXPENDITURE
FOR THE YEAR 01/07/09 – 30/06/10**

	01/07/09– 30/06/10	01/07/08-30/06/09
Opening Balance	\$29,207.48	\$19,866.28
 <u>Income</u>		
\$ 1239.08	Interest	\$ 2192.53
\$ 5465.00	Membership	\$ 7200.00
\$ 890.00	Donations	\$ 1605.00
\$ 2000.00	Grants	\$ 2000.00
\$ 1201.00	Sales	\$ 1645.00
\$ 546.00	Auction/Raffle	\$ 404.00
\$ 2420.00	Rescue Frog Sales	\$ 1645.00
\$ 946.00	Field Trip Income	\$ 1022.00
\$ 1243.00	Frogmobile Income	\$ 4710.00
\$ 618.00	Workshop Income	\$ 1412.66
 Total Deposits	 \$16,568.08	 \$23,836.19
	\$45,775.56	\$43,702.47
 <u>Expenditure</u>		
\$ 6.00	Bank Charges	\$ 10.00
\$ 47.00	Dept of fair Trading	\$ 45.00
	Insurance	\$ 1160.00
\$ 528.50	Printing- Sundry	\$ 295.36
\$ 1352.10	Printing – Frogcall	\$ 3058.00
\$ 1074.75	Postage – Frogcall	\$ 1188.58
\$ 72.60	Stationery	\$ 119.78
\$ 123.00	Post Box Hire	\$ 117.00
\$ 902.00	Field Station Hire	\$ 996.00
\$ 618.75	Herpetofauna	\$ 1336.50
\$ 1708.08	Sales Expenditure	\$ 1681.75
\$ 2918.88	Sundry Expenses	\$ 2105.61
\$ 719.82	Mobile Phone	\$ 722.59
\$ 4206.00	Frogmobile Expenses	
\$ 640.00	Photographic Comp	\$ 621.82
\$ 110.00	Subscriptions	\$ 70.00
\$ 1545.00	Donations	\$ 600.00
\$ 2800.00	Student Grants	\$ 367.00
 Total Expenditure	 \$ 19,373.08	 \$ 14,494.99
Closing Balance	\$26,402.48	\$29,207.48
 TOTAL FATS ASSESTS		
Cash in bank	\$26,402.48	\$29,207.48
Term Deposit	\$37,114.65	\$37,114.65
	\$63,517.13	\$66,322.13



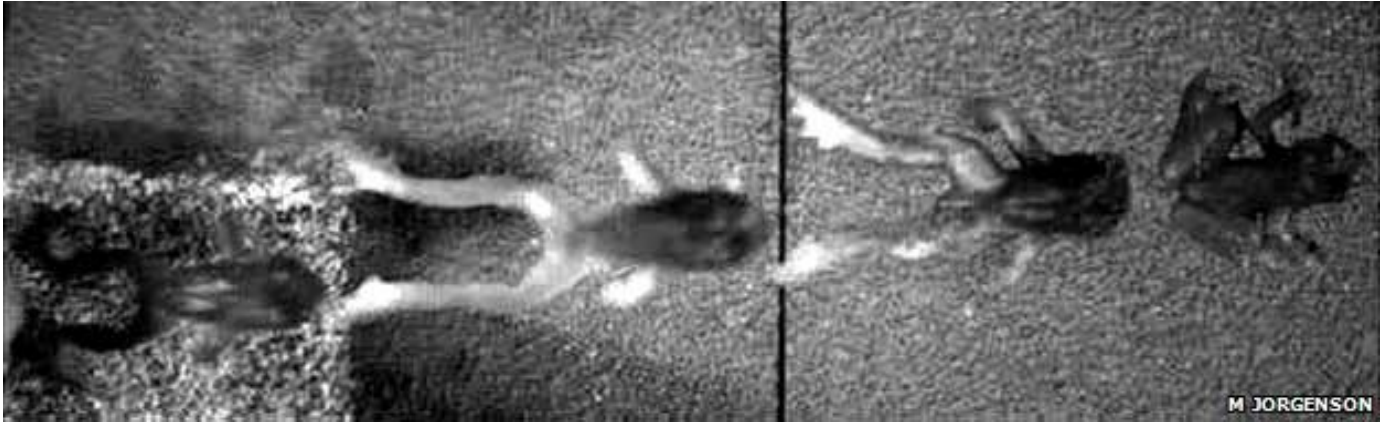
Frogs need saving too - from Lothar Voigt



Thank you to the many FrogCall 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, Brad & Matt McCaffery, Grant Webster, Marion Anstis, Punia Jeffery, Fiorella, Andrew & David Nelson, Al MacDougall and Bill Wangmann.



BELLYFLOP SHOWS HOW FROGS EVOLVED



Frogs evolved the ability to jump before they perfected the art of landing, according to scientists. The researchers, from New Zealand and the US, studied a primitive group of frogs called *Leiopelmatidae*.

They captured slow motion footage of the creatures leaping and landing, and noticed that they hit the ground in a rather inelegant bellyflop. The scientists report their findings in the journal *Naturwissenschaften*.

The team compared jumping in primitive frogs to more advanced species. The team, led by Richard Essner from Southern Illinois University Edwardsville, wrote in their paper that these bellyflop landings also "limited the frogs' ability for repeated jumps". This adds to the weight of evidence that jumping in frogs evolved as an ability to leap quickly into the water, rather than to move around on land.

The researchers compared the frogs to more advanced, or highly evolved, species. These creatures flexed their legs mid-leap, setting themselves up for a perfect landing on their feet.



The more advanced *Lithobates* frogs land squarely on their feet. The scientists wrote that this shift to "early hindlimb recovery might have been a key feature in the evolutionary history of frogs".

It appears to have allowed frogs to make controlled landings on the ground and, crucially, to repeat their jump once they have landed. It may also have been a key feature in the development of the familiar "frog kick" swimming cycle - where the creatures kick out and tuck in both their hind limbs in synchrony.

The scientists concluded: "[This may] have offered advantages for longer distance locomotion, better landing postures, and improved predator avoidance and foraging. By Victoria Gill Science reporter, BBC News forwarded to FATS by Andrew Nelson <http://www.bbc.co.uk/news/science-environment-10743038>



Litoria aurea Green & Golden Bell Frog photo Ben Brown



Photo George Madani *Opisthodon ornatus*

FROG LEG CONSUMPTION ON THE RISE, BUT NOT EVERYONE'S A FAN

Warning: story could offend some
**Frogs Everywhere Face Many Dangers,
Including the Fork**

It was never easy being green. Now add to habitat destruction and climate change the newest danger facing frogs: the fork.



Fried frogs legs on plate, at Roger la Grenouille restaurant, Paris, France. Frogs everywhere stand in danger not only from habitat destruction and climate change, but also from the fork.

Across the country and around the world, frog legs are reportedly on the rise as a popular dish, but not everyone is a fan.

"We sell the hell out of them," said Dan Marciano, owner of The Arches in Newport Beach, CA, which has served frog legs sautéed in garlic butter sauce as an appetizer and entrée since the 1940's. Marciano said Hollywood stars and locals alike love the French recipe.

At Brasserie Jo in Chicago, frog legs garlic provençale is accompanied by watercress coulis. And at Uncle Julio's Rio Grande, a Tex-Mex themed chain with restaurants nationwide, frog legs are marinated, grilled, and served with rice, frijoles, and pico de gallo as one of "Uncle Julio's favorites."

According to Save the Frogs!, described as America's first and only public charity dedicated to the protection of amphibians, Americans eat 20 percent of the world's frog legs, and soon the U.S. is likely to overtake France and Belgium as the world's largest consumer of frog legs.

But their growing popularity amidst increased extinction of frogs and their cold-blooded brethren has many environmentalists and scientists concerned. Amphibians are "the most imperiled animal group" in the entire animal kingdom, according to Noah Greenwald, a spokesman for the Center for Biological Diversity, an advocacy group for endangered plant and animal species. About one third of all amphibians are at risk of extinction.

European consumption totaled about 120 million frogs each year during the 1990's. In France, where frog legs are a traditional dish, overharvesting led the government to ban farming and capturing frogs in 1980. Much to the chagrin of purist Gallic gastronomes, the law is strictly enforced and a guilty verdict on poaching charges was returned as recently as 2007.

But in the U.S., there is little regulation of frog legs as a dish even though some say it is an ecological danger.

"It has been estimated that globally 100 million frogs are taken out of the wild for use as food each year," said Save the Frogs! founder and executive director Dr. Kerry Kriger. Based on an analysis of UN trade data, that number may actually be as high as 1 billion, according to a report in the British newspaper The Guardian.

Growing Taste for Frog Legs Imperils Species

Kriger cites an even bigger problem among farm-raised frogs: disease. "They spread chytrid fungus, and they escape their farms and eat native wildlife" in China, Indonesia, Vietnam, and 12 other countries, he said. Chytrid fungus has been blamed for the extinction of over 100 different amphibian species worldwide.

Sixty-two percent of farm-raised bullfrogs in shops in New York, Los Angeles and San Francisco were carriers of the chytrid fungus, according to a recent study posted on the Save the Frogs! website. "These three cities alone have been importing over five million amphibians per year," the website notes. **By CONOR FINNEGAN 9 July 2010 Story forwarded to FrogCall by Andrew Nelson <http://abcnews.go.com/US/frog-leg-consumption-rise-everyones-fan/story?id=11120312>**

Under the garden umbrella



Rachel and Stella's Peron's Frog at Wyong

Background: Chytridiomycosis is a fungal disease linked to local and global extinctions of amphibians. Susceptibility to chytridiomycosis varies greatly between amphibian species, but little is known about between- and within-population variability. However, this kind of variability is the basis for the evolution of tolerance and resistance evolution to disease.

Methodology/Principal Findings: In a common garden experiment, we measured mortality after metamorphosis of *Alytes obstetricans* naturally infected with *Batrachochytrium dendrobatidis*. Mortality rates differed significantly among populations and ranged from 27 to 90%. Within populations, mortality strongly depended on mass at and time through metamorphosis.

Conclusions/Significance: Although we cannot rule out that the differences observed resulted from differences in skin microbiota, different pathogen strains or environmental effects experienced by the host or the pathogen prior to the start of the experiment, we argue that genetic differences between populations are a likely source of at least part of this variation. To our knowledge, this is the first study showing differences in survival between and within populations under constant laboratory conditions. Assuming that some of this intraspecific variation has a genetic basis, this may suggest that there is the potential for the evolution of resistance or tolerance, which might allow population persistence.

Citation: Tobler U, Schmidt BR (2010) Within- and Among-Population Variation in Chytridiomycosis-Induced Mortality in the Toad *Alytes obstetricans*. PLoS ONE 5(6): e10927. doi:10.1371/journal.pone.0010927

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ABSTRACT above - 8 page article available from Editor. Sent to FrogCall by Anne Peaston. (It suggests, but inconclusively, that there is possibly some genetic basis to Chytrid resistance in European Midwife Toads. That frog repopulation might occur from individuals and small populations that are genetically resistant to fungus.)

INSURANCE DISCLAIMER FATS has public liability insurance for its various public functions. This insurance does not cover FATS members, it covers the public and indemnifies FATS. We are currently checking with insurance firms to see whether a realistic group policy can be organised to cover FATS volunteers and people who attend field trips.

FATS MEETINGS commence at about 7 pm, end about 10pm and are usually held on the **first Friday of every EVEN month February, April, June, August, October and December (but not Good Friday) at the Education Centre Bicentennial Park, Sydney Olympic Park, Homebush Bay.** 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) 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). Turn off to the right if entering from the main entrance. 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.

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FIELD TRIPS

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.

15th -17th October. Smiths Lake Camp-Out. Leaders: Arthur and Karen White.

Scientific names are generally said to be in Latin. Latin was used because early taxonomists were classical scholars and Latin was the preferred language for academia. It possessed a clarity and elegance few other languages could equal. Gradually, names included a mix of Latin and classical Greek. More recently, authorities have included 'latinised' names of people and places *fletcheri*, *barringtonensis* as well as including even obscure languages such as swahili, inuit and local aboriginal phrases. Many feel that 'Latin' names are difficult, however we sometimes forget that famous scientific names like *Tyrannosaurus rex*, *Boa constrictor*, *Eucalyptus* and *Rhododendron* have easily slipped into popular culture. This weekend, examining some local frogs, we will look at the many and varied sources of scientific names. Arthur and Karen share a familiarity with both Latin names and Smiths Lake. Their many years of study around this area and their intimate knowledge of the species here are a guarantee for a fun-filled and interesting weekend. A **non-refundable** fee of \$14-00 p.p per night applies. Dormitory-style cabins or campsites available. There is a commercial kitchen and all crockery and cutlery supplied. Hot showers. Phone Arthur and Karen directly on 9599-1161 for bookings and further details.

20th November 7-15p.m. Chullora Wetlands. Leader: Darryl McKay.

Meet in Dasea St, near the cnr of Rookwood Rd, Chullora (outside the RSPCA Shelter). Once a barren railway shunting yard, this area has now been transformed into a magnificent wetlands habitat. It has set a world-class standard in bush regeneration and wetland rehabilitation work. Darryl, an accomplished naturalist, has been instrumental in both saving this area from development and involved in the subsequent re-vegetation program. Tonight he will show us the intricate means by which suburban stormwater is purified by a natural wetland system to create ideal frog habitat. He will also discuss the peculiar history and the politics of this former railway-yard wasteland and its subsequent transformation into a valuable wildlife refuge. We will meet slightly earlier than usual so that, with the benefit of some daylight, we may better appreciate the magnitude of this project. Public access is generally restricted at this site.

5th December 10-3 The Australian Reptile Park, Somersby - Christmas Party Host: John Weigel

The ARP will hold its Interclub Christmas party on Sunday 5th December 2010 from 10 am to 3pm. This once a year get-together of the herpetological societies is an event not to be missed. John Weigel is likely to be Santa again and a big croc gets a Christmas treat. Us mere mortals may get a behind the scenes tour. Free entry to FATS members. Please take your current FATS membership card as proof of membership.

11th December 8.00p.m. The Watagans. Leaders: Brad and Matt McCaffery.

Take the F3 north. Travel approximately 83km and take the Morisset / Cooranbong exit. Turn right and drive 2km to the cnr. of Mandalong Rd and Freemans Dr.

Ecological succession is an important scientific concept. Over time, especially after some major disturbance event such as fire or logging (or simply a windthrown tree in the rainforest), there is a gradual shift from bare open ground to more complex vegetation. This is often accompanied by a subtle but continual change in the local fauna. Scientists now believe that some animals, including some threatened species, are pioneer species that flourish immediately after a major disturbance event. These species may simply benefit from more open environments or may take advantage of less competition. Conversely, other animals will prefer the more densely vegetated communities that only develop over time. This weekend, we will look for evidence of ecological succession and with an emphasis on frogs, we will discuss successional stages in our bushland environment and how it influences the species we may find at a site. Brad and Matt possess a fine understanding of the different habitat requirements of frogs. Tonight they will pass on some of their vast field-work experience and will explain what to look for when searching for frogs.

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 and by attending agree to; a release of all claims, a waiver of liability, and an assumption of risk.