

FROG CALL



THE FROG AND TADPOLE STUDY GROUP NSW Inc.

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NEWSLETTER No. 114 August 2011

Photo by George Madani
Crucifix Toad *Notaden bennetti*

Arrive 6.30 pm for a 7pm start.

Friday 5th August

**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 p11.

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NSW NPWS amphibian licences must be sighted, to adopt frogs.

MEETING FORMAT Friday 5th August 2011

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

7.00 pm Welcome, FATS AGM and announcements.

7.45 pm The main speaker is Michael McFadden Endangered frog programs in Australian zoos and amphibian training throughout the Australasian region. A brief update on some of the programs at Taronga Zoo (Corroboree, Castanea, Booroolong etc), and some other programs taking place in Australia (Taudactylus in Currumbin, *L. spenceri* at Healesville and ARC, Geocrinia at Perth, Northern Corroboree at Tidbinbilla). After that, he may give an overview on husbandry and conservation training in Australia, Malaysia, Thailand, Indonesia and New Zealand.

8.30 pm Arthur White will talk about the Amphibians of Japan.

9.00 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.





Robert Wall – Main speaker in June

LAST FATS MEETING 3RD JUNE 2011

Punia Jeffery opened the meeting and welcomed everyone. Following announcements, Robert Wall our diligent Field Trips Coordinator spoke about the Barred Frogs of Gloucester Valley. I will report on the talks, in a later edition. Robert's subject matter was very interesting. Not a sound was heard, not even from the young children, during his talk. Everyone was fascinated. There were many questions of him at the end of the presentation.



FATS continues to offer rescued frogs at our meetings. They make great pets.



Jake Janos and his FATS rescued Green Tree Frog *Litoria caerulea* that he has had for four and a half years.



Rescued *Litoria fallax* Dwarf Tree Frog
Photo Nick Edards from WIRES



<http://www.abc.net.au/tv/newinventors/txt/s3214684.htm>
Short brilliant video clip from Bright Spark Joel Cassar, who demonstrated his Cane Toad catching invention.

His very impressive design was aired on the ABC. Joel and his dad were kind enough to show us how it worked. We were able to see a video clip of the device in action. Congratulations again from FATS Joel!



Inventor Joel Cassar and his dad.

Grant Webster spoke about driving along looking for frogs. An understatement! A 3550 kilometre, five day whirlwind frogging trip which included Tumut, Victoria, Nyngan and Broken Hill. Despite the huge distances covered, many frogs were observed or heard, including *Uperoleia rugosa* The Winkled Toadlet, *Cyclorana cultripes*, the Knife-footed Frog and *Neobatrachus pictus* the Painted Frog which is a threatened species in NSW. Thanks for sharing the photos and experiences Grant.

Punia Jeffery spoke about our very successful FATS day at the Easter Show 2011. We expect that a frog and reptile day or two will become a regular feature in at the show in future. Peter Street spoke about frogs near his home. The meeting ended with a light supper, raffle and good conversation. MW

EGGS HEAD FOR THE HILLS IN PROJECT TO SAVE ENDANGERED FROG SPECIES

Deep in the Snowy Mountains a helicopter lands on boggy ground, bearing three scientists and their precious cargo of 100 frog eggs. The tiny, delicate balls are the offspring of the southern corroboree frog, one of the most endangered animals in the world. In an attempt to save the species, which is being wiped out by the chytrid fungus, scientists from the Department of Environment and Heritage have developed a breeding program with Taronga Zoo.

After a seven-hour drive from Sydney, and a cold night in a hut in the mountains, the eggs are placed in ponds designed to prevent frogs with the fungus from depositing their eggs there. The co-ordinator of the exercise, David Hunter, a departmental threatened species officer, said the species was at the "pointy end" of extinction in the wild. Fewer than 100 can be found in their natural habitat.

Without the breeding program this tiny black-and-yellow striped frog would vanish in less than three years, Dr Hunter said. The aim is to keep a population of the frogs in the wild long enough for them to develop resistance to chytrid fungus.

Before the fungus, a pathogen that lives off compounds in frog skin, was introduced in the 1980s, tens of thousands of southern corroboree frogs could have lived in the Snowy Mountains region. The supervisor of the herpetofauna division at Taronga, Michael McFadden, said eggs had been collected in the wild and hatched at Taronga and Melbourne zoos. Of releases in the past four years, at least half of the eggs have reached adult stages. Whether they have survived after that is unknown.

Michael McFadden and a helper release frog eggs in the Snowy Mountains. Photo: Peter Rae



Eggs-and-spoon race... Michael McFadden, FATS main speaker in August, is from Taronga Zoo.

It takes four to five years for southern corroboree frogs to reach sexual maturity, so the team will not be able to measure the success of their program until the first group of frogs return to their hatching area to breed. However, its members are sure that corroboree frogs will flourish again. "The zoos have been so successful breeding eggs I feel confident we will re-establish good-

sized populations out here in the wild," Dr Hunter said.
<http://www.smh.com.au/environment/animals/eggs-head-for-the-hills-in-project-to-save-endangered-frog-species-20110502-1e57t.html> Nicky Phillips 3/5/2011
Sent to FATS by Steve Weir

FATS HAS A FACEBOOK PAGE

The Frog and Tadpole Study group of NSW – FATS has recently launched its Facebook page. Our numbers are growing daily. We have 157 Facebook members from all over the world and just as diverse as our FATS society, with scientists, museums, frog lovers, herpetologists, environmental organisations, students, eco warriors, and keepers represented. You need to sign up to Facebook to be able to see our FATS Facebook page.

Come along and chat or just read some of the interesting frog related projects, links and discussions posted by our members. We have created an "open" group so you can see the postings. If you would like to chat, with us, ask questions or upload a frog photo, then you need to press the "Join group" button. Let us know what you think of our site.

Here is a post from our Facebook page, 25/7/2011 from Huascar Bustillos Cayoja "Rhuascar DarkfatKenobi"



Photo by Huascar Bustillos Cayoja

The leptoactylid frogs of the genus *Phrynopus* occur in the paramo, subparamo and cloud forest, along the eastern side of the Andes in Colombia, Ecuador, Peru and Bolivia. *Phrynopus kempffi* is an endemic species from Bolivia known only in cloud and elfin forest along the crests of mountains in the Serrania of Siberia, a very humid place between the regions of Santa Cruz and Cochabamba, belonging to the National Park Amboro and the Carrasco National Park respectively. This little toad (3cm) lives only at elevations of 2500–3160 m. It is usually found amidst mosses, under stones and rotten logs and leaves.

The coloration is a mixture, between dark brown and yellow spots underbelly. The call of *P. kempffi* recorded with an air temperature of 12 C, consists of a short, single whistle emitted both by day and night. The mean note duration is 85 ms. The dominant frequency is 3180 Hz and the note repetition rate is 9.9 notes per minute. Drugs and illegal coca crops are invading their forest. (Editor: See more about saving the Bolivian forest and frogs, on page 6 and 7.)

<https://www.facebook.com/home.php#!/groups/195517897165936?ap=1>

WHAT'S AT THE BOTTOM OF YOUR GARDEN?



I posted up the 'Have you seen a Green and Golden Bell Frog (GGBF)' poster around the office at work. After a month or so one of the engineers came up to talk about a frog he found in his Riverstone backyard which looked similar and could be caught sunbaking on his geraniums. Once he said sunbaking, my hopes picked up and I asked him to get some photos. He got some great pics which were forwarded onto DECCW and confirmed that he was lucky enough to have found a gorgeous GGBF. Attached are a few of the pics compressed. The poster sparked a keen interest and I now receive regular photo updates of the escapades of the GGBF around the garden. **Kind regards, Hannah Shuttleworth**



Photo from Virginia at Davistown, Green and Golden Bell Frog



Peron's Tree Frog *Litoria peronii* – Andrew Nelson

FATS AGM NOTICE FOR 5TH AUGUST 2011

The FATS AGM will be held on 5th August 2011, commencing 7pm. FATS meet at the Education Centre, Bicentennial Park, Sydney Olympic Park. If you would like to ask questions about joining the FATS committee, please give us a call. Contact our secretary, committee members or myself for further information. See contacts on page 10. **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 marvellous photos, 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 7 categories in this competition: Best Frog Image (Adult & Junior), Most Interesting Frog Image (Adult & Junior), Best Frog Artwork (Adult & 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 winner. No correspondence will be entered into. The judge's decision is final. Entries must be original and your work. The winning entries may be featured in a colour supplement in FrogCall.

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. **Arthur White**

STRANGE DEVELOPMENT IN TREEFROGS

There's these two species in the same genus of tree frogs in Minnesota and much of North America known by their common name the Gray Treefrog. They are both known by this because for a while the difference wasn't known. "Gray" is really a poor descriptor of these species because both species can vary over time in coloration from pearl pink to brown to green to gray. Their patterns change to be different combinations of these elements. This is why one is known as *Hyla versicolor* the other is *Hyla chrysoscelis*.

Stranger yet is that *versicolor* is tetraploid meaning that it has four of each chromosome instead of the usual two. It looks like *versicolor* came from multiple separate cases of *chrysoscelis* having a whole genome duplication in the past and then interbreeding. This is an extremely strong case of speciation in action. Molecular clock dating attributes that the most recent event of duplication that ended up contributing to the species at large was as recent as the end of the last ice age.

They are mostly identical except for this tetraploidy. There is one important difference though that puzzled scientists for a while. The mating calls of the species differ. When you look at what genes are being expressed it doesn't look like there is a significant difference in gene expression that might happen from this. Likewise, their anatomy differences are very subtle and really only come out when you take tons of measurements and average them together.

There is something that came along that could explain this and if true is a very unexpected way that evolution shaped development. It has been shown that you can use various techniques and make your own separate genesis of a tetraploid tree frog like *versicolor* by inducing tetraploidy in *chrysoscelis*. This has been done much more when comparing the tetraploid frog model organism *Xenopus laevis* to a close diploid sister species *Xenopus tropicalis*.

What seems to happen is that when these duplications happen in the lab there isn't that great a difference in call structure initially, but there is some difference. This could have been explained away with the observation that these man made tetraploids are in fact physically larger than the wild tetraploids. It was found that there is a significant change in cell volume due to these events. Wild type *versicolor* frogs have a difference but not all that much. In recent publications this difference has been attributed to there physically being more DNA in the cells which bloats the cell at large.

The change in cell volume though differs from tissue to tissue. It has been shown that cells in the respiratory system are exceptionally loosely packed making them larger. Gerhart et al, found that the wild-type *versicolor* frogs had more than a 50% lower sounding call compared to our diploid *chrysoscelis*. The other cells seem to have found ways to epigenetically do some space saving.

Chrysoscelis females do like lower sounding calls because, it is thought, they are an advertisement of body size which is a signal of a successful male. The two species are found along side at it looks like females have evolved some way

to be able to discriminate and not simply get wooed into mating with the tetraploid from which they would not get their eggs fertilized. This cell volume thing could really complicate the difference between how we generally think of phenotype flowing out via the central dogma of gene->rna->protein--(other interactions)---->phenotype.

This is however a good example of how evolution acts on heritable phenotypes. To selection it doesn't matter that this is a ridiculous way of producing a more attractive call, all you need is to express that phenotype and it goes from there. It would be interesting how a species was able to emerge from this tetraploid event and if the call being more attractive happened to also strengthen this speciation event.

By gonza275 4/11/2010 Sources;

<http://www.jstor.org/stable/1563361>

<http://rspb.royalsocietypublishing.org/content/268/1465/341.full.pdf> <http://www.jstor.org/stable/1563777>

<http://onlinelibrary.wiley.com/doi/10.1002/jez.1402100115/abstract> Sent to Frogcall by Andrew Nelson

<http://blog.lib.umn.edu/gonza275/myblog/2010/11/theres-these-two-species-in-1.html>

INTERESTING FROG SITES

iFrog is a free educational website created to teach people of all ages about frogs and toads. It is packed with forums, news, facts, expos, pictures, games and more. This site is meant to serve as a portal into the world and plight of one of the most important faunas this world has to offer. A diverse array of creatures that, if left to extinction by any means, will devastate the circle of life.

<http://www.ifrog.us/> and images page

<http://www.ifrog.us/images/>



Photograph courtesy Eli Greenbaum

SEE-THROUGH FROG

Bursting with eggs, a pregnant frog with see-through skin is one of five "lost" amphibian species recently rediscovered in the Democratic Republic of the Congo (DRC). First described in 1950, *Hyperolius leucotaenius* was recently found on the banks of the Elila River in southeastern DRC. Published 17/5/2011

http://news.nationalgeographic.com/news/2011/05/pictures/110517-lost-frogs-science-amphibians-congo-africa-animals-extinct-see-through/#/lost-frogs-rediscovered-congo-see-through-frog_35650_600x450.jpg

**SAVE THE BOLIVIAN TIPNIS
INDIGEN TERRITORY AND NATIONAL PARK
ISIBORO SECURE
THE MOST BEAUTIFUL JUNGLE IN THE WORLD
AND A PLACE RICH IN FROG SPECIES**



Area of deforestation linked to road network

The National Park and Indigenous Territory Isiboro-Secure (TIPNIS) is a natural reserve in Bolivia, created as a national park by 7401 DS of November 22 of 1965 and declared Indian Territory through the DS 22 610 September 24 of 1990, thanks the struggles of indigenous peoples in the region. It is approximately 1,236,296 ha (12 363 km²). Located between the department of Beni (province Moxos) and Cochabamba (Chapare province). The municipalities included are San Ignacio and Loreto Moxos in Beni, and Villa Tunari in Cochabamba Orochata. At 1,098,580 square kilometers (424,160 sq mi), Bolivia is the world's 28th-largest country. It lies between latitudes 9° and 23°S, and longitudes 57° and 70°W.



Bolivia was a landlocked nation from 1879 to 1992, from when it lost its coastal department of Litoral to Chile in the War of the Pacific. However, it does have access to the Atlantic via the Paraguay River. Though no ports on the Pacific yet exist under Bolivian sovereign rule, in 1992 a coastal parcel of land was given to Bolivia by Peru. In 2010 this was expanded into a 99-year lease allowing the development of a port and naval station on a 3.6

square kilometer land parcel 18 kilometers south of Peru's port of Ilo. However, since no ports yet exist on this land, Bolivia is in effect still landlocked.

Many ecological zones are represented within Bolivia's territory. The western highlands of the country are situated in the Andes and include the Bolivian Altiplano. The eastern lowlands include large sections of Amazonian rainforests and the Chaco Plain. The highest peak is Nevado Sajama at 6,542 meters (21,463 ft) located in the Oruro Department. Lake Titicaca is located on the border between Bolivia and Peru. The Salar de Uyuni, the world's largest salt flat, lies in the southwest corner of the country, in Potosí Department. <http://en.wikipedia.org/wiki/Bolivia>

SAVE TIPNIS

We report before Bolivia and before the world that our government is breaking the constitution, which they themselves put into law. Also the Environment Act, the Protected Areas Act and many other national laws and international commitments. They are trying to build this road, which would cause the greatest ecological destruction in the history of Bolivia, illegally without respect for the law or the rights of the indigenous peoples who inhabit it. The road constitutes an attack on the life and culture of the Moxenos, Yurakaré and Chimanes peoples. It would also condemn to extinction the unique fauna and flora of the forest. The rivers, lakes and scenic beauty of the area would be irreparably affected. We ask President Morales that he is consistent with his speech and laws in defense of Mother Earth and the rights of indigenous peoples.



<http://www.isiborosecure.com/indexenglish.htm>

**NATURALIA BENIANA - T.I.P.N.I.S. SOS
"The most beautiful forest" D'orbigny, 1832**

In the middle of 1832 the great French naturalist Alcides D'Orbigny went from Moxos towards the Earth of the Yuracarés- located on the foot of the eastern mountain of the Andes, in the port of Loreto the priests and retailers told him to direct the trip, sailing in convoy, this is part of their story: " at the arrival had surprised me the arrogant aspect of Yuracarés, that, however, welcomed to me perfectly. Their regular characteristics, their almost white color, their developed ways, surprised so much to me as the beauty of the places in which they dwell" (...) **extract (first paragraph) from an article by Huascar Bustillos Cayoja Biologist, specialist in Biodiversity and Scientific Research email dunkleoustus@yahoo.com**



Elachistocleis ovalis Olive Toad photo by Marco Antonio Senzano

The *Elachistocleis* genera includes a set of species of amphibians, small sized, nocturnal, of triangular head, small eyes with circular pupil, oval body, free fingers and of uniform dorsal coloration. The Bolivian specie *Elachistocleis ovalis* or “Olive Toad” has a thin body, triangular, very small head, pointed snout, short front legs, longer back legs, round pupil, smooth lubricated skin, brownish or yellowish back with clear vertebral line. Could be found in temporal lagoons surrounded by bushes or rushes, underneath trunks of trees and stones, in shady or humid places. They have fossorial or semifossorial habits and feed predominantly on small insects such as small ants and termites.

There is interesting information about the natural history and ecological data of its reproductive cycle. The characteristics of the egg laying in *Elachistocleis ovale* are typical of the Microhylidae family; putting eggs, that remain submerged or adhered to surrounding vegetation (Duellman & Trueb, 1986). Some Bolivian reports comment on reproductive activity in this species are known, where there were gravid females in November and December. Following the same study, it was indicated that the transformation of the egg to tadpole happened in three days (De la Riva, 1993). According to our preliminary reproductive studies in Bolivia the period was restricted to the months of October and November, whereas the egg transformation to tadpole lasted a little more than 24 hours, constituting a species with high explosive reproductive ways, according to the proposal by Wells (1977). In Bolivia the males of *Elachistocleis ovalis*, vocalize semi submerged, raising the front region of the body, from the water pools, under protection of the vegetation (Rodrigues., 2003). The matings take place after strong rains, the belly of the male secretes a substance that adheres it to the back of the female (Scrocchi & Lavilla, 1990). (EDITOR: Kindly translated from Spanish by LIC. Huascar Bustillos Cayoja. Autonomía University of Beni, Laboratory of Mammal Ecology, Micromammals and Biodiversity, Cel:70207747-3304235, Trinidad-Bolivia)

Two tree frogs inhabit remote areas of Bolivia, which harbor an astounding diversity of vertebrate species. Yet much of the country remains scientifically poorly documented for frogs—including the protected areas. In 2001, Raoul Bain from AMNH's Center for Biodiversity and Conservation teamed up with Bolivian scientists to survey the frogs of one biological hotspot—the Amboró-Madidi corridor of the High Andes. Documenting Bolivia's frog species is a first step toward bolstering conservation efforts.

<http://www.amnh.org/exhibitions/frogs/museum/bolivia.php>

Sustainable forestry and protected areas are crucial for the survival of Bolivia's frogs.

<http://www.nature.org/ourinitiatives/regions/southamerica/bolivia/explore/saving-frogs-in-bolivia.xml>

PROPOSED HIGHWAY THROUGH TIPNIS

The park is the site of the Segment Two (of three) of the proposed Villa Tunari–San Ignacio de Moxos Highway, which would provide the first direct highway link between Cochabamba and Beni Departments. While the highway has been discussed for decades, a \$332 loan from Brazil's National Bank for Economic and Social Development (BNDES), approved by Bolivia in 2011, will make construction possible.

In May 2010, the meeting of TIPNIS Subcentral and corregidores throughout the territory stated their "overwhelming and unrenounceable opposition" to the project. In June 2011, President Evo Morales inaugurated the project with a ceremony at Villa Tunari. However, neither a final design nor environmental approval has been completed for Segment Two. In July 2011, the Subcentral, the Confederation of Indigenous Peoples of Bolivia, and the highland indigenous confederation CONAMAQ announced they would participate in a national march from Villa Tunari to La Paz opposing the project.

http://en.wikipedia.org/wiki/Isiboro_S%C3%A9cure_National_Park_and_Indigenous_Territory#Ecology

Since most of the pressures and threats to the protected area can be traced to local sociopolitical processes and to the strategy adopted by the park administration in response to these constraining factors, the resolution of conflicts, the control and abatement of harmful activities, and the implementation of sustainable management plans for the use of the area's natural resources will only succeed with an improved and intensified relationship between the park administration and the local communities.

These aspects are important to consider when proposing recommendations intended to help strengthen the park's natural ecosystems against human encroachment. Unlike other Parks Watch profiles, the authors of this report thus decided to concentrate on the resolution of these underlying problems instead of formulating specific prescriptions for each individual threat.

<http://www.parkswatch.org/parkprofile.php?l=eng&country=bol&park=isnp&page=rec>

Other web sites about TIPNIS :

<http://www.isiborosecure.com/indexenglish.htm>

<http://govinthelab.com/in-bolivia-tipnis-the-fight-has-just-begun/>

<https://bolivianthoughts.wordpress.com/2011/07/03/tipnis-government-confusion-vs-alternatives/>

BIG LEAP IN UNDERSTANDING FROG THREAT

University of Sydney researchers have identified two new parasite species causing disease among endangered Australian frogs. They say they are most likely native, overturning a commonly held view they were introduced with cane toads in 1935.



A Green and Golden Bell Frog, one of the species affected by this parasite.

The parasites have so far been found in 10 frog species, including the iconic Green and Golden Bell Frog, the Southern Bell Frog and even the Yellow Spotted Bell Frog - a species presumed extinct for 30 years until recently.

These singled-celled myxosporean parasites have been identified in bell frog populations since 1997, says Ashlie Hartigan, a PhD student leading the research with Dr Jan Šlapeta from the Faculty of Veterinary Science, David Phalen, Director of the University of Sydney's Wildlife Health and Conservation Centre, and Karrie Rose from the Australian Registry of Wildlife Health.

"Infected frogs lose weight, are lethargic, and some can't move their back legs, making them more vulnerable to predators," Hartigan says. "Infection could also be reducing the number of tadpoles that become adults, with affected tadpoles more likely to delay metamorphosis and die from liver disease."

When Hartigan and colleagues genotyped parasites from frogs and cane toads collected in New South Wales and Queensland and compared them to myxosporea from South American cane toads, they found that the Australian parasites were distinct from the South American species. This debunks the theory the parasites came to Australia with cane toads.

"We are 99 percent sure the cane toad did not bring it in," says Hartigan, whose research was recently published in a leading science journal PLoS ONE.

But the cane toad is not completely off the hook. "Our data suggests these parasites recently spread across eastern Australia from their original source," Hartigan said. "While the spread may have occurred by a number of means, it is possible that by infecting the invasive Cane Toad the parasite has spread faster and further as a

result." Hartigan says frogs are under increasing threat of disease, and global losses can be attributed to different pathogens. Frogs are bio-indicator species, she says: "The presence of frogs in a habitat indicates good environmental health."

"If we can learn more about the life cycle of these parasites, how they are spread, and identify other potential hosts, we will be able to screen frogs for infection and control the spread to captive breeding populations and threatened populations in the wild."



The singled-celled myxosporean parasites under an electron microscope

<http://sydney.edu.au/news/84.html?newscategoryid=2&newsstoryid=6979> Interview contact Ashley Hartigan 25 May 2011 Aaron Payne alerted us to this article



Red-eyed Tree Frog *Litoria chloris* Photo by Jake Janos

**Photo by George Madani
Limnodynastes lignarius Woodworker Frog**



Exciting time for frog enthusiasts

Ben Pike

FROG enthusiasts and scientists alike enjoyed a giant leap in their knowledge last Friday, when they hosted pioneering amphibian biologist Jodi Rowley.

Dr Rowley was made famous last year when she uncovered the first known species of tree frog that has fangs.

Addressing the Frog and Tadpole Study group of NSW at Sydney Olympic Park, the scientist discussed how she came to name the vampire flying frog.

"I first found this species of frog in March 2008 when I was in the mountain jungles of Vietnam, but it wasn't until July 2010 when I was back that I discovered the tadpoles" she said. "I found that the tadpoles had black fangs. This was the most impressive frog I have found so far. "Besides being beautiful, the frog has amazing tadpoles and I'm still trying to work out why it has those fangs."

FROG WITH FANGS

- **Name:** Vampire flying frog (*Rhacophorus vampyrus*).
- **Discovery:** Tadpoles normally have mouth parts similar to a beak. Instead, vampire tree frog tadpoles have a pair of hard black hooks sticking out from the undersides of their mouths.
- **Purpose:** The scientists do not yet know what purpose the fangs serve. However, frogs that raise tadpoles in tree-trunk water holes often feed their young by laying unfertilised eggs as meals.

She also drew attention to the plight of the endangered green and golden bell frog (*Litoria aurea*), around Homebush Bay.

For more information visit fats.org.au

Inner West Courier April 2011

LOST RAINBOW TOAD IS REDISCOVERED



Prior to this sighting, the toad was last spotted in 1924

A colourful, spindly-legged toad that was believed to be extinct has been rediscovered in the forests of Borneo. "To see the first pictures of a species that has been lost for almost 90 years defies belief" said Dr Robin Moore Conservation International. Scientists from Universiti Malaysia Sarawak (UNIMAS) found three of the missing long-legged Borneo rainbow toads up a tree during a night time search. The team had spent months scouring remote mountain forests for the species. Prior to these images, only illustrations of the toad had existed. These were drawn from specimens that were collected by European explorers in the 1920s.

Conservation International, which launched its Global Search for Lost Amphibians in 2010, had listed the toad as one of the "world's top 10 most wanted frogs". Dr Indraneil Das led a team that searched the ridges of the Gunung Penrissen range of Western Sarawak, a boundary between Malaysia's Sarawak State and Indonesia's Kalimantan Barat Province.

After several months of night-long expeditions, one of Dr Das's graduate students eventually spotted a small toad in the high branches of a tree. Lost hope: "Thrilling discoveries like this beautiful toad, and the critical importance of amphibians to healthy ecosystems, are what fuel us to keep searching for lost species," said Dr Das.



Sketch of the *Ansonia latidisca*, previously the only image depicting what the mysterious toad looked like

"They remind us that nature still holds precious secrets that we are still uncovering." Dr Robin Moore of Conservation International, who launched the Global Search for Lost Amphibians, was delighted by the discovery. He said: "To see the first pictures of a species that has been lost for almost 90 years defies belief. "It is good to know that nature can surprise us when we are close to giving up hope, especially amidst our planet's escalating extinction crisis. "Amphibians are at the forefront of this tragedy, so I hope that these unique species serve as flagships for conservation, inspiring pride and hope by Malaysians and people everywhere." Sent to Frogcall by Andrew Nelson. <http://www.bbc.co.uk/nature/14151541>



Hybrid Frog - Janelle Aleong's photo

FROG WRANGLER ON RADIO AND INTERNET

A Question of Balance has been providing the public with endless exposure to the FATS Group's frog and environmental messages for some years. In particular, AQOB has been pumping out "Frog Wrangler Time", Arthur White's 5-minute frog talks, about 60 of them by now, and has also syndicated them to dozens of other community stations. Presented by Ruby Vincent, AQOB is a grassroots environmental show that is aimed at the general community to show that we can do things to improve our environment and STILL maintain an enjoyable standard of living.

The stories and soundfiles from each radio program are presented individually on this website which is maintained by Victor Barry and Ruby Vincent. Over time, the site has expanded into an evergrowing environmental resource.

You can hear Frog Wrangler, Arthur White on Soundfiles including:

- Do frogs make good pets?
- Australian waterfall frogs
- Closed pipe irrigation and frogs
- Frogs and floods
- Bizzare breeding behaviours of barred rive frogs

And many more

With hundreds of interviews and stories now available on the site, the simplest way to find a particular topic, is to type a key word into the SEARCH window.

http://www.aqob.com.au/category.php?id=2&seo=Australian_Frogs&menuid=category_id_2



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FATS meet AT 7pm, on the first Friday of every EVEN month at the Education Centre, Bicentennial Park, Sydney Olympic Park



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, Grant Webster, Marion Anstcis, Andrew & David Nelson and Bill Wangmann.



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 7 pm, end about 10pm at the Education Centre Bicentennial Park, Sydney Olympic Park, Homebush Bay and 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. 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

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.

The FATS 2011/2012 Spring/Summer Fieldtrips Programme re-commences in September. Mark the following dates in your diary!

Sketch - <http://www.thequeensberry.co.uk/> Bath England



24 September 9-00a.m. Featherdale Wildlife Park, Doonside. Leader: Peter Spradbrow.

Kildare Rd, Doonside. Meet outside the ticket office. Many eminent scientists advocate the advantages of promoting a connection with our wildlife by allowing the keeping of native animals as pets. While this invites heated discussion at times, there is little doubt of the huge role that zoos and wildlife parks play in connecting the public with our unique fauna. Featherdale is one such facility. For many urban dwellers, this is probably the closest they will ever come to experiencing our wildlife. As such, Featherdale performs an important educational role as well as developing breeding protocols for our more endangered species. Tonight, Peter, the Educational Officer at Featherdale, will show us around this facility and may also arrange for us to meet some of their more interesting residents. Note: Discounted admission prices are: Adult - \$15-60; Child - \$10-60.

15 October 6-30p.m. West Head, Ku-ring-gai National Park. Leader: Grant Webster.

Meet at the Duckholes Picnic Area, cnr of McCarrs Creek Rd and West Head Rd. Terrey Hills. Research sites high in the canopy of Amazonian rainforests reveal an exuberance of biodiversity. This is mainly derived from an abundance of fruiting trees and high branches heavily festooned with epiphytic plant life ('ep-e-fit-ic' - living on, but not parasitising a host plant). Supplied with a constant source of moisture from tropical rains, these great towering heights have been described as one of earth's last great unexplored biological frontiers. Perhaps surprisingly, frogs figure prominently in the chaotic and sometimes overwhelming array of treetop fauna. Tonight we will look at some of the features of frogs and we will consider why some are superbly adapted to life in the wet treetops. We will also compare the ways in which tree frogs differ from their ground-dwelling relatives. Grant has spent considerable time travelling the state and studying our froglife. He has an exceptionally skilled eye for taxonomic detail and tonight will guide us through some of the subtle features to look for when examining 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 & by attending agree to; a release of all claims, a waiver of liability, & an assumption of risk.

Heleioporus psammophilus Sand Frog below – centre photo Andre Rank - below *Austrochaperina gracilipes* Shrill Whistling Frog



photo by George Madani



Smiths Lake field trip (centre) Karen, Phillip, Barbara, Renata and Fiorella



photo by George Madani