

# FROG CALL

THE FROG AND TADPOLE  
STUDY GROUP OF NSW INC.

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The next meeting is on

**FRIDAY 4<sup>th</sup> OCTOBER 2002** at the AUSTRALIAN MUSEUM, WILLIAM ST ENTRANCE

**6.30 PM for a 7.30 PM start**



*Litoria caerulea* (Green Tree Frog)



Marion Anastis, winner of the The Whitley Medal,  
Stan Orchard, Arthur White and Louise Egerton of New Holland Press,  
photographed by Lou Petho



*Limnodynastes dumerilii dumerilii* (Eastern Banjo Frog)

**TADPOLES**



*Pseudophryne australis* (Red-crowned Toadlet)



*Litoria peronii* (Peron's Tree Frog)



*Uperoleia tyleri* (Tyler's Toadlet)

**John Cann** (the snake man from La Perouse) will speak, giving a personal view of "Herping in Australia", complete with lots of great photos. This meeting is a fund-raiser for the **Cairns Frog Hospital**. People are encouraged to bring some money with them. There will be raffles, auctions and door prizes throughout the night.

Join us at the Halstrom Theatre 4<sup>th</sup> October to hear guest speaker John Cann



## FATS COMMITTEE CONTACTS

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## THE LAST MEETING 2<sup>nd</sup> AUGUST 2002

Committee members elected at the AGM are listed above. Welcome to Adam Crawford, our only new member. If you would like to join the committee it's not too late!

Our main speaker was Trent Penman discussing radio-tracking Giant Burrowing Frogs in Southern NSW. There is reason for concern as only 18 individuals were sighted in the Southern population. If any are found, an exclusion zone of 200 ha is required. Almost all sightings have been on land subject to commercial logging. Frogs are anaesthetised and transmitters are placed internally. Some frogs with transmitters become prey to red bellied black snakes. Threats to this species include car rallies, back burns, dumped rubbish and firewood collection.

Future research needed includes home range analysis, night movements, ecological requirements of the species and factors leading to burrow selection.

Arthur White described a new species in Australia, *Bufo melanostictus*, the Black-spined Toad, originally from Thailand and Sumatra. Many are thought to have arrived in mining equipment and customs are being vigilant to look for any further accidental imports.

Slides included Striped Marsh Frog and egg masses, *Lit. garcilentas* and *caeruleas* photographed by Adam Crawford. Frank Lemckert showed many slides including the Heath Frog, Dentata, Perons, Bell Frog and *Mix. Balbus* slides. Simon Thompson was the winner of the Reuter baby weight guessing competition (enjoy the Red-eyes) with Marc Thumm being a close runner up. Many thanks to the speakers and slide presenters. MW

## FROGWEEK

The Frog lecture organised for Friday 1<sup>st</sup> November (for Frog Week) will have two speakers. Dr Michael Mahony from the University of Wollongong will join me in presenting an overview of life as a desert frog. The combined talk has been titled "Frog Lust in the Dust". The talk is free and open to all comers but anyone interested in coming will need to ring Karen White to reserve a seat. Arthur White

## WHITLEY MEDAL WINNER MARION ANSTIS

At the Australian Museum, on August 30th, the Royal Zoological Society of New South Wales held its 2002 Whitley Awards ceremony, with Arthur White as Master of Ceremonies. The Whitley's are among the most prestigious awards in Australian natural history publishing - with awards in the following categories:

Best Natural History Text, Best Zoological History Best Popular Zoology, Best Symposium Proceedings Best Field Guide, Best Zoological Periodical, Best Children's Illustrated Book, Best Children's Series, Best Upper Primary Book, Special Commendation for Services to Australasian Zoology 2002 Whitley Medal

The Whitley Medal is a particularly coveted prize because it is not awarded annually but is reserved only for the most exceptional achievements, whenever they may arise.

The winner of the 2002 Whitley Medal is Marion Anstis, for her landmark publication, 'Tadpoles of South-eastern Australia a guide with keys', and needless to say, this medal was the last award of the evening Marion was in attendance, with her mother and brother, to personally receive the award. The large, solid silver medal was presented to Marion by Professor Rick Shine, of the University of Sydney, who also provided a comprehensive critique of the book - putting it in perspective with relation to its significance to contemporary science and conservation biology in Australia. Professor Shine's remarks were followed by a few words from Louise Egerton of New Holland Press - the book's proud publisher - and a few additional congratulations came from Stan Orchard, National Co-ordinator, WWF/Rio Tinto Frogs Program, who's program contributed financially towards the publication of this remarkable book.

Marion made a heart-felt acceptance speech that was truly memorable. The remarks from all speakers will be printed in full in an up-coming issue of the Australian Zoologist, published by the Royal Zoological Society of NSW.



# A tale about daring frog adventures, new waders and a touch of romance.

As the moon gently gazed upon my back I inhaled the exquisite sea air. My mind replayed Stan Orchards uncanny impersonation of Rhett Butler. The scene was appropriately set for a bit of romance, except for the fact I was up to my waist in sludge. Curiously though my heart was racing, one suspects to ward off hypothermia, my hands were clammy, though only from the fear I was about to disappear down some hidden hole, and the moment was intimate, except for the fact I was surrounded by a bunch of crazed frog nuts. I looked down to see a cute Dwarf Tree Frog *Litoria fallax* eyeballing me. Visions of a beautiful princess infiltrated my senses but before the scenario could reach its dubious conclusion the little blighter bellowed. This explosion of sound seemed to equate to "don't look at me you freak, I'm a male". With my heart aching with rejection I looked for inner comfort by reflecting upon the past few days ...

Shortly upon our arrival we were required to complete a team building exercise. The mission, to extract the sole key from a secured room. As Stan disappeared up the manhole in search of enlightenment the rest of us threw around a frenzy of more sensible ideas, many obviously fuelled by experiences from shady pasts. This initial successful laid the groundwork for a very successful weekend of faunal discovery and social generosity.

With the aid of our leader President Arthur and his trusty canine friend Gerald, we plundered the water bodies of Smiths Lake in the name of conservation. It may sound selfless but I can assure you it is purely self-indulgent. Our enthusiasm was rewarded with a list of 13 species, made remarkable by the appearance of mysterious 'patches' of cold air. In all it was a little spooky really, considering the camp started on Friday the 13<sup>th</sup> (whoohoo followed by a blood curdling laugh).

We were treated to the appearance of Lesueurs Frog *Litoria lesueuri* whose leg markings rarely fail to impress. We spent many an hour attempting to locate Red-backed Toadlets *Pseudophryne coriacea*. Their striking belly markings and their habit of walking like a crawling baby, which is always worth a full-blooded oohhhh, aptly rewarded the effort required in finding them. *Litoria revelata* and *Litoria fallax* were exhibitionists as usual, with a small number of Whirring Tree Frogs *Litoria verreauxii* thrown in to confuse the issue. Haswells Frog *Paracrinia*

*haswelli* croaked loudly and were often discovered practicing risqué manoeuvres. While Tusk Frogs *Adelotus brevis*, Tylers Tree Frog *Litoria tyleri*, Leaf-green Tree Frogs *Litoria phyllochroa* and, of course the ever faceless Wallum Froglet *Crinia tinnula*, teased the searchers as they advertised their location only to remain aloof. Common Eastern Froglets *Crinia signifera* nibbled at our toes, while a lone Perons Tree Frog *Litoria peronii*, perched high in the tree, exhibited its emerald spots. It was obviously inspired by David's brave attempt at reproducing the call. But the real highlight was the discovery of Red-groined Toadlets *Uperoleia laevisgata* (I suspect this will be disputed). These little guys are gorgeous but they are often cast aside as little brown jobbies. Their personalities and general habits are worth more attention.

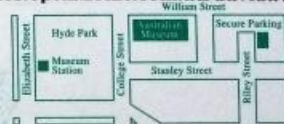
The show provided by the frogs was matched by the performances of my fellow frog fiends. Priceless moments were provided by Andrew for the expression of triumph when he discovered his first Red-backed Toadlet, and what's more one that sat on a healthy stack of eggs. Stan Orchard, who risked dirtying his only clean shirt to rescue a dazed cormorant, that had been predated by the imaginary Osprey. Stan again for his frighteningly accurate renditions of cinema classics namely 'Gone with the Wind' (too much time on his hands). Punia for initiating the team building exercises and for squeezing lemon juice into her eyes to alleviate soreness (not sure about that one). Finally, Karen for feeding us jellied snakes, which undoubtedly enticed the endangered Stephens Banded Snake to attack the vehicle. It won of course as it left the occupants slightly guilty for making fun of biting the heads off the jellied snakes.

...Suddenly I was awoken out of my wading coma by an influx of water. Despite the rather 'fresh' experience I was strangely comforted by the fact I looked awfully sexy in my sparkling new waders and the fact I had spent a fun filled, action packed weekend with a great bunch of people and a pleasant bunch of amphibians.

**Matthew "Mr Sleepy" Bulbert**

You can view pics from the Smiths Lake field trip, by David Nelson at:

<http://members.optushome.com.au/davidadavid/smiths0902/>



Present your parking ticket to Museum staff on entry for validation.

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## CHATSWOOD GOLF COURSE FIELD TRIP

**L**eaders Robert and Punia, participants Sarah and Ian, Des and son Grant. A full, bright equinox moon, a clear sky, cool, no wind, very low humidity and almost no amphibian activity. Around the creek, a lot of privet, crofton weed, wandering jew, weeping willow and many castor oil plants. David was not able to lead because of an unforeseen obligation. Robert and Punia stepped in --- up to their proverbials, in the creek near the 15<sup>th</sup> green.

In spite of high enthusiasm, things started off slowly. We heard desultory Common Eastern Froglets, *Crinia signifera*, as usual very shy and wary on approach. Robert tricked one into calling again with bursts of his trusty tape recorder playing #2 of **Frog Calls of the Greater Sydney Basin**. The repeated vigorous Eastern Froglet chorus plus ever present voice of David Stewart filled the dark and made #29, a few Leaf Green Tree Frogs, *Litoria phyllochroa*, call as well. We stopped our unrewarded searches for the sneaky lie-low froglets, went down to a deep hole in the bend of the creek where on searching for *L. phyllochroa*, found a dark mottled robust little *Crinia*. Then Punia and Grant triangulated and pounced on a *phyllochroa* calling on flowering crofton weed beside the deep water. "Careful!" This pretty animal was the first live observation for Sarah, Ian, Des and Grant. Everyone admired his eye stripe and examined his hidden brick-red colours.

Grant had heard earlier a distant Peron's Tree Frog, *Litoria peronii*. Now it was time to walk up to the big pond featuring noisy artificial mid-water fountain. At first there were no calls, but once again, the tape on #35 did the trick and soon there were several *Litoria peronii* doing the right thing; calling in response from the cover of lily pads, at the sides on mats of algal slime and just above head-height in the Callistemons around the pumphouse and one individual, snug in a crevice by the pumpline looking like Pooh in his House at the Corner. We enjoyed catching five of them, noted: mango-yellow and black flash colours, rounded snout, green dorsal dots and strong smell.

Later, back at the deep hole, we located the one and only Striped Marsh Frog, *Lymnodynastes peronii* we'd heard all evening. He was a very large, dark, beefy, sumo wrestler type. For good measure, we caught another *L. phyllochroa*.

Other wildlife spotted: a calling Tawny Frogmouth, a Ringtail Possum, Moorhens, Wood Ducks with several ducklings, a Fruit Bat up a poplar tree.

A good night's frogging under the beaming moon. We came, we saw, we found! **Punia Jeffery Sep 2002**

## CAIRNS FROG HOSPITAL

**T**hanks to everyone who has provided me with some info on chytrid symptoms and treatments. We have been using those suggestions to treat the massive numbers of frogs we have received in the past 8 weeks. However, we have not been getting the results that others have had, and the symptoms we were seeing were **far more aggressive** than what has been reported for chytrid (tympanums dissolving away, holes in webbing, breathing difficulties, drugged look to the pupils, etc.) Now we know why!!!

Lab results have confirmed that we do NOT have chytrid fungus, however, we do have a fungal disease and another batch of material has been sent for testing. Another fungus is suspected (and unfortunately for us, it is worse than chytrid) and we will let you know the results when they are ready. **Thanks again to everyone who replied to my frantic requests for help! Cheers, Deborah Frog Decline Reversal Project, Inc.**

**Cairns Frog Hospital** [www.fdrproject.org.au](http://www.fdrproject.org.au)

Centennial Parklands [www.cp.nsw.gov.au](http://www.cp.nsw.gov.au)

[Info@cp.nsw.gov.au](mailto:Info@cp.nsw.gov.au)

ph 9339 6699

10th Oct.

### Various dates

#### SPOTLIGHT PROWL

A chance to see the wild nightlife of Centennial Park. Join Rangers spotlighting possums, flying foxes and lots of other night creatures. All ages. Bring torch. 6.15pm-7.15pm. \$8.50 per person. Meet Robertson Rd Gates. Bookings essential! (02) 9339 6699.

#### RAPT IN REPTILES

Get rapt in reptiles during this one-hour close up look at some of Australia's amazing snakes and lizards. Children over 5 years. 10-11am. \$8 per child. Meet Superintendent's Residence, Paddington Gates, cnr Oxford St and Lang Rd. Bookings essential! (02) 9339 6699.

## AUSTRALASIAN AMPHIBIAN DECLINES

*Satellite Conference in Association with ESA 2002*  
4th December 2002, Rydges Plaza, Cairns

**D**ue to overwhelming interest, we have scheduled a satellite conference in conjunction with the Australasian Amphibian Declines symposium to be held as part of the ECOLOGY 2002 ESA meetings in Cairns. This satellite conference will serve as a whole day forum devoted to problems of amphibian decline. Presentations should focus on the relationship between ecological theory, methodology, and management practices in Australian and New Zealand environments. We especially encourage presentations on the impact of newly emerging infectious diseases, methods for monitoring declines, and management strategies for reducing threats to wild populations. A\$45 (NZ\$52) will include a full lunch, along with morning and afternoon tea and snacks. Our plan is to provide an environment that will foster a full day of presentations, discussions, and brainstorming. Please prepare your abstract using the ESA 2002 format, and email your abstract as a Word attachment to [frog@gnu.org](mailto:frog@gnu.org) before 1 October 2002. Department of Zoology University of Canterbury Private Bag 4800 Christchurch New Zealand Ph 64 3 364 2066 fax 64 3 364 2024 Email: [bw@zool.canterbury.ac.nz](mailto:bw@zool.canterbury.ac.nz) Registrations by 1 November 2002 Editor: NB This is an extract only of the full message



## FATS AT THE "VETS AT WORK" OPEN DAY

Department of Veterinary Science, University of Sydney Saturday, 31 August, 2002

**Participants:** Karen, Arthur, Marion, Punia. Cliff dropped in for a while.

We were there early in the cool grey morning, which later became very warm and sunny. FATS had a stand next to the ferrets, next to the herps, near many displays concerning dogs and doggy things --- washing and grooming, accessories etc. With us were Gus and Brutus, the amenable and docile amphibian members of the White family, two Dainty Green Tree Frogs [*Litoria gracilentia*] assorted Marshies [*Lyamnodynastes peronii*], all with a beautiful orange dorsal stripe, from Lothar's pond, a Sphagnum Frog [*Kyarranus sphagnicolus*] and an isolationist Inland Banjo Frog [*Lyamnodynastes interioris*] which spent nearly all day under the red inland soil in its terrarium, of course. We had a steadily decreasing pile of Marion's book the Whitley Medal Winner "Tadpoles of South-Eastern Australia", good numbers of Frog Facts One to Seven, and most of our informative, easy-to-read laminated posters on metamorphosis, frog rescue, amphibian declines and froggy photos. They were well velcroed to excellent carpeted display stands provided by the vets. The vets, wonderful hosts, also provided us with more tasty food than we could possibly eat --- quiche, tartlets, pizza, sandwiches, constant tea, coffee and water.

**Scenes from the day:** We ask, "Would you like to hold one? Brutus and Gus, the large Green Tree Frogs [*Litoria caerulea*] were held out. Some hesitated, most didn't --- after a good squirt with Karen's ironing water spray to clean and moisten hands. A dad comes along, holding his young son in arms, "What have we here?" he asks. "Frogs looking at people. See how they're looking at us son? They're seeing what they can learn about people." Back yet again comes Rosie, about nine years old, the tenth time she tells us, to hold Brutus and Gus. We were heartened by the number of informed and interested people who were keen to learn more --- about frogs. It was a memorable day. **Punia**

### CANE TOADS IN PNG

**In the last 30 years, cane toads have spread extensively across much of southern Papua New Guinea - from Alotau to the eastern banks of the Fly River delta.** The spread of this species SEEMS to correlate very closely with the rapid decline in abundance of the once common anuriphagic elapid, *Pseudechis papuanus* - especially in Central Province. Since 1990 only three specimens of this snake have been collected and identified, despite very significant efforts to locate specimens over the last twelve years by both Mark O'Shea, myself and others. Enzyme immunoassays of blood and serum from snakebite patients occasionally give positive results for *Pseudechis papuanus* venom,

and clinical evidence suggests that the species still causes envenomation in at least two isolated areas within Central Province, and in communities built near the coastal littoral swamps between Lese Oalai and Kerema - but to this point in time specimens (either dead or alive) have not been located.

All this flies in the face of statements by Slater during the 1950's and 1960's that *Pseudechis papuanus* was the most common venomous snake in these regions. A number of other factors (such as deforestation, burning/clearing of habitat, and the droughts which have afflicted much of PNG in the past decades) may have contributed to this dramatic decline, however given that the species remains abundant in Irian Jaya, and in areas throughout Western Province (PNG) on the western bank of the Fly River (areas which have also been subject to these other external factors) it seems PROBABLE that the cane toad may have played a very significant role in the decline of the species to the east.

A number of other species that incorporate frogs and toadlets in their diets also appear to have become less abundant - including *Acanthophis spp.*, however these declines have been to a much lesser extent than in *Pseudechis papuanus*. **Cheers David Williams** oxyuranus@hotmail.com Sadly there is another Bufo species overrunning the island to our north, and it impacts Australia as well. *Bufo melanostictus*, the Black-spined Toad, has been transported to Irian Jaya from the Malay Peninsula and/or Indonesia proper, most likely accidentally, and is very common around mining settlements. AQIS is screening all incoming equipment, but the initial stowaways were only detected after leaving the shipping containers. So far I'm led to believe these toads have been found in Qld and WA, but not as part of a breeding colony. For more info on the toad see. [http://www.frogweb.org/species\\_images/anu00000031.html](http://www.frogweb.org/species_images/anu00000031.html)

**Steve Weir** Stephen.Weir@csiro.au

When I was a kid in Lae(1960s) we lived in an area that proliferated with cane toads. The area was mostly devoid of reptiles except for the surrounding jungle where there was innumerable animals. The cane toads were so thick that in a pit that my father dug in the backyard we managed to collect about 400 in one night.

Fortunately the toads didn't seem to like the jungle but spawned in any standing water that was available. There was a pipe laying project and a mate and I went into the trench that had been dug and found thousands of toadlets. Does anyone have any knowledge of the impact that they are having on the wildlife there. **Peter Buckley**

**To:** [australianherps@yahoogroups.com](mailto:australianherps@yahoogroups.com)

*Litoria revelata* Whirring Tree Frog  
Smiths Lake field trip  
Photographed by David Nelson





## CANE TOADS APPROACH DARWIN

**D**arwin residents have been put on alert to stop cane toads breeding, with the first toxic invaders expected to reach the northern capital this wet season. While the main invasion force is probably two years away, Frog Watch coordinator Graeme Sawyer fears hitchhikers from Kakadu National Park and infested towns along the Stuart Highway could breed in Darwin soon. "What we'll get this wet season is more and more hitchhikers and that's what we're trying to prevent," Mr Sawyer said. "What's happened in a couple of other places is that you get a number of toads introduced by hitchhiking and as soon as a male and female breed, you get 20,000 eggs. So you get an explosion of cane toads way ahead of the front of the invasion."

Householders are asked to listen for the whirring motor-like mating call of the toad in backyards and to check ponds for their distinctive strings of eggs. A 30cm high fence around ponds will enable most native frogs to breed but stop cane toads, which are poor jumpers. Breeding-age toads are big, tend not to hide and are easy to catch. The recommended humane way of killing toads is to place them in a freezer.

Hitchhikers had created large toad populations in places such as Gapuwijak in Arnhem Land, in the Northern Territory's east, while the natural spread was still a wet season away. Mr Sawyer said there was no chance of preventing cane toads becoming established in Darwin. "What we're trying to do is minimise the prospect of them getting into Darwin in big numbers as long as possible," he said.

[http://www.heraldsun.news.com.au/common/story\\_page/0,5478,5135682%255E1702,00.html](http://www.heraldsun.news.com.au/common/story_page/0,5478,5135682%255E1702,00.html) Rod McGuirk

## PETS HERPS IN WESTERN AUSTRALIA

**T**he State Government today announced new regulations were being introduced under the Wildlife Conservation Act 1950 allowing the keeping of reptiles and amphibians as pets in Western Australia. Environment and Heritage Minister Dr Judy Edwards said the new Wildlife Conservation (Reptiles and Amphibians) Regulations would provide the framework for a licensing system to keep native reptiles and amphibians as pets (Pet Herpetofauna) under strict controls managed by the Department of Conservation and Land Management.

Dr Edwards said species on the list included the western green and goldenbell frog (motorbike frog), western bearded dragon, western bluetongue lizard, bobtail lizard, Stimson's python and South-West carpet python. "While there will be very few animals available initially for keeping, numbers will increase over time through licensed sources," she said.

Category 1 - (Exempt from licensing) easiest and safest to keep reptiles and amphibians. (This category will not be used initially, but may be used in the future once there is a ready availability of reptiles in the pet trade that may be suitable for unlicensed keeping, as currently occurs with birds such as budgies);

Category 2 - Basic Keeping Licence, for the easy to keep and common reptiles and amphibians;

Category 3 - Standard Keeping Licence, for the slightly more difficult to keep reptiles and amphibians;

Category 4 - Advanced Keeping Licence for the difficult to keep reptiles and amphibians; and

Category 5 - Expert Keeping Licence for the very difficult to keep and dangerous (highly venomous) reptiles and amphibians. This includes special restrictions on housing, handling and exposure of other persons to dangerous reptiles and amphibians.

Dr Edwards said the licensing system would operate on a fee schedule, with higher fees for higher species categories. Full details of the operation of the licensing system would be made available over the coming months.

"The system will be managed by the Department's Wildlife Branch and operate on a similar basis to avian fauna licensing," she said. Minister's office: 9220 5050 <http://www.calm.wa.gov.au/news>

## MAORIS HELP THREATENED SPECIES

**T**he Conservation Department Spent \$2355 Flying Three Maori Elders To Christchurch With 49 Endangered Frogs In July. Figures obtained by National MP Murray McCully show that the department spent \$2234 on airfares for the three, \$80 on petrol vouchers and \$41 on food. The archery's frogs, caught in a King Country forest, were transferred to Canterbury University as a precautionary measure. There are fears the species could be wiped out in its native environment by the chytrid fungus, which has killed off 10 frog species in Europe. In the past seven months, the fungus has been found in five dead frogs in Whareorino Forest. Conservation Minister Chris Carter said that in recognition of the relationship of Maori to native wildlife it was standard procedure to involve them in threatened species programmes. "The returns for conservation far outweigh the modest total cost incurred by the department in funding travel of kaumatua (elders) assisting with species transfers." But Mr McCully said the exercise was a case of "political correctness getting right out of control. I'm all for kindness to animals but I think we are getting into the realms of absurdity here". **The Dominion, New Zealand, 9/10/02** [www.herpdigest.org](http://www.herpdigest.org)



**The objective of the Wetland Management in the Hawaiian Islands Workshop is to bring together a broad spectrum of individuals, agencies, and organizations involved in wetland management in Hawaii.** Today, over 30% of Hawaii's natural lowland wetlands have been filled or converted to other land uses such as agriculture and urban expansion. Many coastal wetlands are small and isolated by topography and urban expansion. Most of these areas are closely associated with human communities. Long-term protection of the remaining wetlands is essential to ensure the survival of native Hawaiian water birds, increase native vegetation, provide flood control, aid in groundwater recharge, and protect an essential component of Hawaii's beautiful landscape. **The Wildlife Society The Pacific Coast Joint Venture (US Fish and Wildlife Service) The State Department of Land and Natural Resources The U.S. Natural Resource Conservation Service David G. Smith, Hawaii Chapter Representative The Wildlife Society - Hawaii Chapter 1421 Aalapapa Drive Kailua, Hawaii 96734 (808) 973-9786; (808) 286-9016 (cell) [vikings@hgea.org](mailto:vikings@hgea.org)**

#### **SCIENCE CATCHES UP WITH CANE TOADS**

By Jordan Baker, 08/07/2002, Australian Associated Press General News TOWNSVILLE, Aug 6 AAP -

**Science may finally hold the key to exterminating one of Australia's ugliest and most hated invaders, the cane toad.**

Researchers at CSIRO Sustainable Ecosystems are developing a way to stop the toad's metamorphosis from tadpole to adult. Wildlife Pests and Diseases leader Tony Robinson said today the unit was looking for a protein that was not found in tadpoles but was essential to adult toads. If the tadpole could be made to produce antibodies against the protein, it would kill or greatly weaken the toad during metamorphosis, he said.

"(To spread the disease) we're looking at using a virus which would be attenuated so it did not affect native frogs or other species," Dr Robinson said. "Then (we would) put the gene that encodes the protein we eventually settle on into the virus, so the virus will spread this to toads." The highly poisonous South American toads were first introduced to the country's north in 1935 to save the sugar industry from cane beetles. They failed, but created an environmental disaster of their own by infesting Queensland and parts of northern NSW and the Northern Territory.

Last year they entered the river systems of Kakadu National Park Dr Robinson said it was unlikely the

virus would kill all cane toads but it would dramatically cut their ever-increasing population. The research would probably take five to 10 years. It was still early days but initial experiments had produced significant findings and were encouraging, Dr Robinson said.

"We've shown that if you inoculate adult toad's haemoglobin into cane toad tadpoles, they ... end up not producing adult haemoglobin," he said. "If we now find other adult proteins that aren't expressed in the tadpoles but are essential for metamorphosis and for an adult to survive, we may be able to compromise the toad from going through metamorphoses." Some scientists argue cane toads are less worrying than other pests and there was little evidence they were having an impact on wildlife. But Dr Robinson said cane toads did have an impact, although it was difficult to measure. "All stages of the toad are toxic, from the tadpoles right up to the adults, and there's no doubt that if the animals eat them, they die," he said. "The other impact is probably competition with lizards and things for food."

#### **Message to Frognet from Stan A. Orchard**

**With reference to Science Catches Up With Cane Toads.** By Jordan Baker, 08/07/2002. The possible release into nature of a designer virus carrying a designer gene with a designer encoded protein to any animal population is the real crux of my concern. Mistakes have been made in the past and I feel an extreme degree of concern about this line of research.

In the case of the cane toad research, an 'attenuation' of a virus needs much further clarification to a concerned community. The neutralising of pathogenicity in a virus (if that is what is meant) still does not mean it won't ever mutate. How can we dare to take such a chance of putting our already highly stressed amphibians to ANY risk at all of an unknown outcome for possible short-term benefits? If it is a choice between a new virus of unknown potential and the cane toads, I would take the toads any day.

We know too little about the biology of tadpoles in our country to dare to presume that we could introduce a new gene (with encoded protein) via a virus that would forever only select *Bufo marinus* tadpoles as the host to infect. Consequently, its proposed introduction is of great concern to me and I shudder at the prospect that it could begin attacking natives tadpoles

As someone who has spent their life studying and observing tadpoles, I am horrified by this prospect. I hope those scientists directing this research will provide much more information to allay the legitimate fears of the frog conservation community. **Marion Anstis**

#### **AUSTRALIAN MUSEUM**

**The Australian Museum, Australia's oldest museum, was founded in 1827 and is currently celebrating its 175th birthday.** Check out this webpage for more information on our history  
7 <http://www.amonline.net.au/archives/fact01.htm>



## A special time for 'froggers'



### Overview of Frog Week 2001 at O'Reilly's By Craig Cleeland Queensland Frog Group

'A special time for froggers', at least so wrote Denise Voltz in an article published by the Queensland Sun on the Frog Week activities at O'Reilly's Rainforest Guesthouse, and who would I be to argue. I know I have written before of the food, the frogs and the people that make Frog Week in early December at O'Reilly's a memorable event; but I have failed on prior attempts to give a good account of what is in store for those who have yet to make the journey up the mountain.



Last year was the seventh annual Frog Week and I arrived late to find everybody in the theatre listening intently to Dave Stewart (Nature Sounds) replaying some of his more unusual recordings from over the years. Many of the participants and presenters are regulars of Frog Week and yet there is always something new to see and hear. Harry Hines (Queensland Parks and Wildlife Service) topped of the morning by finding an *Assa Darlingtoni*, Hip Pocket

Frog on one of the nearby trails. It was an unusual *Assa* with the most vivid yellow spotting over its body.

That evening we took a bus trip out to Kerry Valley, where Ed Meyer (University of Queensland) found some Whistling Tree Frogs (*Litoria verreauxi*) around Albert River. Bleating Tree Frogs (*L. dentata*) and Naked Tree Frogs (*L. rubella*) made their regular appearance on the stonework around the BBQ area of Darlington Park but the highlight for the evening, with the exception of the BBQ itself, was the Ornate Burrowing Frogs (*Limnodynastes ornatus*).

It appears *ornatus* prefers sandy soils and what better then the sand of the children's playground. The *ornatus* literally started appearing from under our feet as we stood there.

I was interested to hear that some recent genetic work might indicate a closer affiliation with *Lechriodus* rather than *Limnodynastes* for this species. Both *Limnodynastes ornatus* and *Lechriodus fletcheri* tadpoles have the shallow fins and rapid larval development that is suited to life in the temporary water bodies in which they are often laid. M. Anstis (2002) described the tadpoles of both as voracious feeders that will readily consume any protein source within the pond including tadpoles of the same species. Both tadpoles have a very similar appearance and look distinctly unlike any other *Limnodynastes* species. Perhaps in the future we might see *Lechriodus ornatus* as a name in field guides for this species!

The next day Harry and Ed took us all down an old snigging trail to Cainbale Creek where we met up with Naomi Doak who is currently working on a PhD project investigating movements of Fleay's Barred Frog (*Mixophyes fleayi*) both within and between populations. Naomi had just located, via radio tracking, a female *M. fleayi* which it appears (by virtue of the 10 grams she had dropped in weight in the past 24 hours) had spawned in the creek the night before. It wasn't long before the spawn was located and Ed managed to catch some *M. fleayi* and *M. fasciolatus* tadpoles swimming in the deeper pools along the creek. Further along the same trail we came across a drainage line that had Red-Backed Brood Frog (*Pseudophryne coriacea*) tadpoles in it. With some persistent calling we were able to triangulate a male sitting on his nest of eggs. To top the day off, after dinner, we set off to Stockyard Creek to find more Whistling Tree Frogs and Cascade Tree Frogs (*L. pearsoniana*) but Tim O'Reilly's find of a Tusked Frog (*Adelotus brevis*) was the 'catch of the evening'.



The following day we took a short trip down to Duck Creek. It had been reasonably dry across Lamington National Park for some time and the creek was barely flowing. However in the larger still pools of water that had formed along the creek were numerous species of tadpoles. Of particular interest was the high number of tadpoles showing morphological plasticity (changes in physical appearance) presumably triggered by exposure to predator cues in the small ponds. Although work has been done on Striped Marsh Frog (*Limnodynastes peroni*) tadpoles to illustrate this in the laboratory, Ed was genuinely surprised to see it so pronounced in these tree frog tadpoles.



The idea of morphological plasticity in tadpoles is not a new one. D.C. Smith and Van Buskirk (1995) demonstrated that competition and predation interacted with the phenotypes of larval *Pseudacris crucifer* and *P. triseriata* in predictable ways. Both species showed some alterations to their physical appearance when raised in the presence of predators. McCollum and Leimberger (1997) and McCollum and Van Buskirk (1996) showed that larval *Hyla chrysoscelis* and *H. versicolor* raised in the presence of predators developed

different morphology and color patterns than those raised alone.

There has been some research that has shown predation does favor tadpoles with shallow, narrow bodies, high tail fins, and a wide tail muscle. Hence some species of tadpoles exposed to dragonfly larvae during development have acquired these features. For more information about tadpole defenses against predators see P. Marantelli (2001).

Between numerous field trips there was time to relax and enjoy the amenities of the guesthouse or to attend the many talks / lectures that are arranged during the day. The presence of frog luminaries such as Gordon Grigg (University of Queensland) made sure the talks were every bit as interesting as the daily field trips.

For a fan of the tail-less amphibian can it get any better than this? Well in fact, for me, it did. Dinner at Rose and Joe's Dam is a regular Frog Week event and for good reason. The chorus of frogs (particularly for a southerner like myself) is exceptional. It is impossible to describe but I have attempted to illustrate this.

So ended another Frog Week at O'Reilly's Rainforest Guest House. Under the guidance of our host Woo O'Reilly, and with the able support of Harry Hines (QPWS) Ed Meyer (University of Queensland) and Dave Stewart (Nature Sounds) we were treated to a broad range of activities including lectures, workshops and of course fieldtrips. For more information on Frog Week 2002 call O'Reilly's toll free on 1800 688 722.

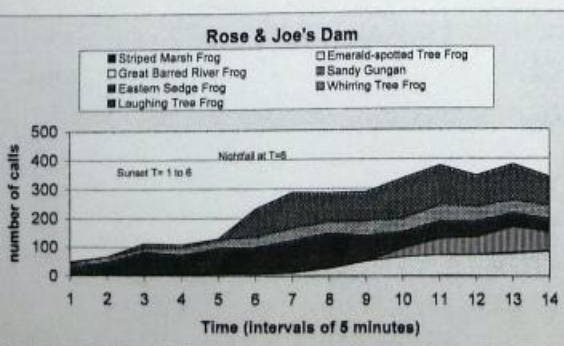
Anstis, M., 2002. *Tadpoles of south-eastern Australia*, New Holland Publishers, Aust.

Smith, L. D., and J. Van Buskirk. 1995. *Phenotypic design, plasticity, and ecological performance in two tadpole species*, American Nat. 145:211-233

McCollum, S. A., and J. Van Buskirk. 1996. *Costs and benefits of a predator-induced polyphenism in the gray tree frog *Hyla chrysoscelis**, Evolution 50:583-593.

McCollum, S. A., and J. D. Leimberger. 1997. *Predator-induced morphological changes in an amphibian: Predation by dragonflies affects tadpole color, shape, and growth rate*, Oecologia 109:615-621

Marantelli, P., 2001. *Do tasty tadpoles recognize death when they look it in the face?* In the Spotlight, Vol. 6 No. 1



Male *Paracrinia haswelli* Haswell's frog  
Aka Red-groined Floglet  
Smiths Lake field trip  
Photographed by David Nelson



**THE QUEENSLAND FROG SOCIETY &  
THE QUEENSLAND MUSEUM PRESENT...  
"FROGS FROGS FROGS!"**

**T**he second joint symposium will be held at the Queensland Museum, South Brisbane on the weekend of the 19 and 20 October 2002 and will include presentations ranging from the backyard frog pond to the most up to date information on decline and disappearance as well as the efforts being made to recover threatened species.

Where are the missing frogs? What caused the disappearances? Which species are endangered and which are not? Who's doing something? Which frog is which? What are the frog laws in Queensland? Where can I get some tadpoles? Are backyard ponds important? **ENQUIRIES: Jenny Holdway**  
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### Slitherers & Croakers

**Date: 15-17th November**      **Leader: Ken Griffiths**  
This is a very popular course so be quick to book. Come and bask in the sun with lizards and snakes slithering around Barren Grounds by day and by night explore froggy haunts for nocturnal amphibian loud mouths. Ken is your guide and author of the recent book "Frogs and Reptiles of the Sydney Region", has a way of knowing just where to find all those special skinks and frogs. The course has previously found several new species for the reserve help us find more!



- Bristlebirds, Ground Parrots - high in the heath
- Star Light, Star Bright!
  - Nature Walking
- Wildflowers of the Heath
- Wildlife Survey Techniques
  - Song and Dance
- A Warden's Life is Never Dull
  - Slitherers & Croakers
  - Wildlife and Wild Places

### BELL TOLLING FOR A LITTLE FIGHTER

**T**HERE is little doubt in Arthur White's mind that without human intervention the green and golden bell frog will be extinct in 25 years. For a frog that seems to thrive in waste, filth and degradation, this prognosis seems incongruous. They are constantly turning up at industrial sites, tips and areas that seem completely uninhabitable - and they love it. So why, despite their penchant for living in the wastelands on Sydney's urban fringes, are these frogs at risk of disappearing?

"Green and golden bell frogs are unusual," Dr White, the president of the Frog and Tadpole Study Group and an associate scientist at the Australian Museum, said. "They spend most of their life looking for habitats to colonise. They are gypsies, always on the move looking for new areas. They have a reasonable tolerance to contaminants and salt and are explosive breeders." Despite these in-built survival mechanisms, the green and golden bellfrog has become one of the most vulnerable amphibian species and is expected to disappear from NSW within 25 years if policies aren't developed to protect them. The Foundation for National Parks and Wildlife has chosen the frog as this week's threatened species and has developed a fundraising program to save it. "Humans have destroyed their habitat, imported exotic predators and disease and reduced numbers to critical levels," Dr White said. The main reasons for the bleak outlook is an outbreak of a fungal disease, Chytrids, and the arrival of a pest species of fish, Gambusia, which eats their tadpoles.

One theory is that the frogs seek out wasteland is that those areas are too degraded for the fungal disease and the fish to live in. "We have no way of protecting the wild colonies," Dr White said. The known colonies in Sydney are at Kurnell and Homebush and smaller populations at Enfield, Long Reef and Arncliffe. Populations along the Georges River have been lost as has one at Roseberry.

"In a species like bell frogs their survival depends on interconnected areas where populations can migrate in and out of habitat areas." The Foundation for National Parks and Wildlife claimed the frog was just one of a number of species that were facing a bleak future.

"Today Australia holds the world record for species extinction in the last 200 years," according to the foundation. "Half of the world's wiped out mammal species occurred in Australia. In NSW alone 765 plant and animal species are threatened and may soon be added to the 80 species already known to be extinct in our state. **Forwarded to FATS by Alice Voigt article By SIMON BENSON Environmental Reporter August 2002**



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## MEETING FORMAT for 4<sup>th</sup> October 2002

- 6.30 pm Lost frogs needing homes are ready for FATS members with amphibian licences.
- 7.30 pm Welcome.
- 8.00 pm Main Speaker: John Cann giving a personal view of "Herping in Australia".
- 9.15 pm 5 Favourite Slides (Please bring along any froggy slides that you would like to show)
- 9.30 pm Auction and prizes (during the night) This meeting is a fund raiser for the Cairns frog Hospital
- 9.45 pm Tea and Coffee in foyer



## FIELD TRIPS

### October 19 7-00p.m. Riverstone. \*\*

Meet at Knudsen Reserve, Garfield Rd, Riverstone (almost opposite Carnarvon Rd). **Leader: Liz Kelso.** The once-vast Cumberland Plain woodlands, an area represented by Sydney's greater west, has perhaps suffered more under the onslaught of urbanisation than any area of metropolitan Sydney. Liz possesses an intimate knowledge of this area and of its unique ecology. Tonight, she will provide us with a glimpse of the extraordinary richness and diversity that was once found in this region.

\*\* PLEASE NOTE: DROUGHT & SUBSEQUENT FROGGING CONDITIONS HAVE NECESSITATED A CHANGE FROM THE PREVIOUSLY ADVERTISED HAWKESBURY VENUE!!!!

**Call us if you intend coming so that the leader knows to expect you. CALL 9681 5308 FOR INFORMATION**

### November 9 7-30p.m. Hornsby Area. - Palmdale / Ourimbah

Take expressway, take Palmdale exit. Turn right at first roundabout, straight through second roundabout. Meet at Shell Service Station 200m away. Allow 40 min from Hornsby. **Leader: Karen Thumm.** Hornsby is nestled at the edge of some very rugged and almost inaccessible mountain terrain. To the north, there are many high-quality frogging locations obscurely hidden by this topography. As the vagaries of the weather continue, we move our venue a little further north than originally planned. Karen assures us there is an astonishing array of frogs to be found at Palmdale. Many of you have heard Karen speak at meetings about her research, come in the field with her as she imparts more of her amazing knowledge!

**Call us if you intend coming so that the leader knows to expect you. CALL 9681 5308 FOR INFORMATION**

### December 14 8-30p.m. Darkes Forest.

Take Princess Hwy south, then take Darkes Forest Rd turn-off. Meet 200m from corner. **Leader: Ken Griffiths.** The author of numerous books, including "Frogs & Reptiles Of The Sydney Region", Ken is our guide for tonight's walk. Darkes Forest is an outstanding location for frogging, and it is Ken's favourite site in Sydney. He knows where to find not only those more difficult frogs but also many of those nocturnal reptiles that may be lurking about. - So come prepared for absolutely anything! (Bring gumboots or shoes that can get wet.)

**Call us if you intend coming so that the leader knows to expect you. CALL 9681 5308 FOR INFORMATION**

In the event of uncertain frogging conditions (e.g. prolonged/severe drought, hazardous and/or torrential rain, bushfires etc.), please check with the Field Trip Co-ordinator. Remember! - Rain is generally ideal for frogging! Children must be accompanied by an adult. Bring sturdy shoes (gumboots where specified), torch, warm clothing and raincoat. Please be judicious with the use of insect repellent. - Frogs are very sensitive to chemicals!

Your leader is there to help you achieve maximum enjoyment from your frogging experience. - Please observe all directions that he/she may give. Children are welcome, however please remember that young children especially can become very excited and boisterous at their first frogging experience. - Please help ensure that the leader is able to conduct the trip to everyone's satisfaction. Unfortunately, due to current insurance requirements, all field trips are strictly for members only. Newcomers are however, welcome to take out membership before the commencement of the field-trip. - This situation has been imposed upon us and we regret any inconvenience.

We hold six informative, informal, topical and practical meetings each year at the Australian Museum, Sydney (William Street entrance). Meetings are held on the first Friday of every **even** month (February, April, June, August, October and December) at 6.30 pm for a 7.30pm start. **NO MEETINGS ARE HELD ON GOOD FRIDAY so check each newsletter for alternate dates.** Visitors are welcome. We are actively involved in monitoring frog populations and in other frog studies, and we 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 prior consent of the Editor or President of FATS. The permission of the Frog and Tadpole Study Group of NSW Inc and/or the author(s), must be obtained prior to any commercial use of material. The author(s) and source must be fully acknowledged.



Marion Anstis was awarded the 2002 Whitley Medal at the Australian Museum, for Outstanding Contribution to Natural History in Australia for her book, **Tadpoles of South-eastern Australia**. This award from the **Royal Zoological Society of NSW** is not made annually, but is reserved only for exceptional achievements, whenever they may arise. Congratulations to Marion.



*Pseudophryne coriacea* Red-backed Toadlet  
Male with eggs Sept 2002 Smiths Lake field trip  
Photographed by David Nelson



*Litoria lesueuri* Leseur's Frog  
Smiths Lake field trip  
Photographed by David Nelson



*Paracrinia haswelli* Haswell's frog  
Aka Red-groined Floglet  
Amplexing pair  
Smiths Lake field trip  
Photographed by David Nelson



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Lee Daynes and Dulkara Wildlife Gallery

*Litoria latopalmata* (Tadpole of Broad-palmed Frog)

