

FROG CALL



NEWSLETTER No. 71
May 2004

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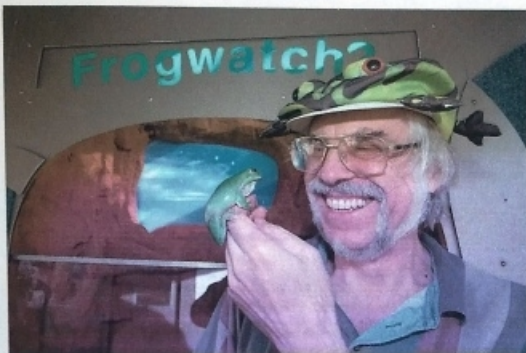


Photo by Holli and Annemarie Hollitzer

*You are invited to
our next meeting*

6.30 pm for a 7.30 pm start

Friday 4th June 2004

Australian Museum, William St Sydney entrance

Your home-made frog cage may win a prize at our June meeting. Have you made one out of styro boxes or some other material? Bring it in and show us what you did. The prize, if you are a member and have your licence with you, is a large Green Tree Frog



MEETING FORMAT for 4th June 2004

- 7.00 pm A small number of frogs are ready to display and collect from the Frog Rescue Service. People to take a numbered ticket. Please bring your FATS membership card and Amphibian Licence. Preference given to those who do not have a frog already.
- 7.30 pm Welcome and announcements
- 8.00 pm Main Speakers: Chytrid outbreaks in Sydney: - Barbara Barteo -Terrey Hills, Dana Ip -St Ives & Lothar Voigt.
Martin Harris: The WWF Frog Program is not dead
David Nelson: Jervis Bay field trip report
Alistair MacDougall Video: Barren Grounds field trip.
Mystery Frog answers and winners
- 9.30 pm 5 Favourite Slides Anyone wishing to speak about their recent frogging trips or experiences is most welcome to tell all. If you have slides or other images that you would like to show, bring them along as well.
- 9.45 pm Auction and drawing of door prize
- 10.00 pm Tea, coffee and relaxed conversation

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LAST MEETING 2ND APRIL 2004



Banjo frogs danced and sang on the Halstrom Theatre big screen, at the commencement of another FATS meeting at the Australian Museum. Many thanks to Marion Anstis for bringing in Stan Orchards' animated video clip. This has to be one of my favourite animated clips!

Lothar Voigt provided us with current chytrid treatments (see this issue, page 5) and demonstrated his frog enclosure made out of styro.

Arthur White spoke about chytrid outbreaks at Londonderry. Spawn, tadpoles and frogs must never be relocated from one water body to another. The results could cause the extermination of a healthy frog colony or the infection of a suburb. Portable field testing equipment for chytrid is delayed due to the CSIRO resources being redirected bird flu and SARS research.

The FATS committee is seeking more frog rescuers. If you are interested, please contact Arthur White. You will need a vehicle. (fridge magnet article on page 3).

Arthur White spoke about and displayed overhead slides of the Great Barred frogs *Mixophyes iteratus*, *M. balbus*, and the survey work in the Sydney Basin from the Hunter region, south to Macquarie Pass and west to Kanangra and the Wombian Caves. High elevation species appear to have declined in numbers, possibly due to changes in microclimate and exotic diseases such as chytrid. There are a whole series of pressures on remaining populations. The rate of loss may be declining, suggesting a resistance to chytrid. Whilst *M. iteratus* appears to be in trouble, *M. balbus* is surviving better in warmer areas.

Marion Anstis described frogging in the Northern Territory with fascinating and detailed slides of many *Cyclorana* frogs and tadpoles including *C. cryptotis* - hidden ear, *C. maini*, *C. longipes*, *C. cultripes* - knife footed, *C. maculosa* - Daly Waters Frog, *Limnodynastes convexiusculus* - marbled frog (very noisy), *Litoria gilleni* - Gillen's Tree Frog (very cute), *Notaden nichollsi* - Desert Spadefoot.

THIS MEETING - 4TH JUNE 2004

Your homemade frog cage may win a prize at our June meeting. Have you made one out of styro boxes or some other material? Bring it in and show us what you did. The prize, if you are a member and have your licence with you, is a large Green Tree Frog.

Despite the previous meetings' equipment failure (sorry Grant) - Grant Webster was able to properly present the field trip report and slides for the fire trails and parks within the Wattagan Mountain range, which is 30 k south west of Newcastle. Frogs encountered included *Litoria revelata*.

We watched a Channel 2 ABC, Creature Feature film clip of Alexander Mitchell-Brook's Balmain High School herp club. The club has been operating for some years and has its own school license. Alexander won the FATS guessing competition - a huge frog poster. The meeting ended with an auction. Guests and members mingled in the lobby enjoying light refreshments and good conversation. MW

MYSTERY FROG

Can you identify the mystery frog? The five clues below, plus your field guide or a look on the internet, will help you find the answer. Write your answer on an entry form at the FATS meeting (don't forget to include your name). \$1 per entry. First correct entry drawn wins a prize.

Here are the clues:

1. I am found in South-eastern Australia.
2. I am not a large frog, but I have very well developed parotoid glands.
3. My belly is smooth and uniform brown with white flecking.
4. Some of my relatives are found in Sydney, however I am not.
5. The spelling of my species name is like an alcoholic drink.

By Grant Webster and Brad McCaffery

THE WILD AUSTRALIA EXPO

Is set to bring the great Australian bush into the heart of the city with incredible displays of live crocodiles, giant pythons, lizards and frogs, to name just a few. Hands-on demonstrations and information sessions on Australian wildlife, reptiles as pets and the importance of environmental conservation will be key attractions.

The expo will also feature a range of exhibitors offering products and services for lovers of the great outdoors. Hall 3 Sydney Convention and Exhibition Centre Darling Harbour

Saturday 4 and

Sunday September 2004

WEBSITE: www.wildexpo.com.au





Designed by Alistair MacDougall

At the last meeting we handed out the new fridge magnets. They are for you, dear members, not to keep but to take to your supermarket, your large greengrocer and your large florist, to put on – yes, you guessed it – their large fridge. If you need a few more magnets, you can pick them up at the next meeting, together with some covering letters to hand out with them.

The idea, of course, is for shops to ring the FATS Frog Rescue Service whenever they find a stowaway frog amongst their produce. Pre-magnetised greengrocers etc have a tendency to shove their findling frogs out of the window into the Sydney suburbs, where they don't belong. But magnetised ones ring our 0419 249 728 number; upon which the Helpline advises this on the phone:

1. We check that frog really is non-local (you'd be surprised how many resident garden frogs people want "rescued").
2. We reassure them we will look after frog (because there's some dissection paranoia). But we need to get hold of it. Can they drop it off at any of our collection points? If not, we arrange for it to be picked up by a "Frog Rescuer" within the next couple of days, and we assure them it will not need to eat until then.
3. We check that frog is put in an escape-proof container with a well-fitting lid and only a bit of water, and that they place the container at room temperature (not back in the refrigerated room) and where other staff know about it (so they can hand it over if the caller's not in).
4. We take down address, contact name, opening times and phone number. If the caller is anxious about it, we explain that frog will be kept by itself for at least a month, until we know it is healthy but that most rescued frogs can't be released back into the wild for a number of reasons, and that they will then be looked after under licence. The main reason is we can't be sure whether frog might still be a carrier of the new chytrid fungus frog disease and that it could infect wild frogs in a new area. By this time the caller is truly anxious to get off the phone to a mobile number. If not, we tell them about the FATS Group's next meeting, and suggest they make themselves known at the meeting so that we can make them feel welcome there.

The Helpline then usually rings a Rescuer to pick froggy up. Rescuer then rings the shop, mostly to check froggy is still there (lots escape again) and to tell them when Rescuer's coming (so that the finder won't get restless and keep ringing). Rescuer picks frog up and if possible gives shop a membership leaflet, a fridge magnet or a Frogfacts sheet. Just in case, Rescuer has own transport container, e.g. a strong wet plastic bag and elastic band. Otherwise Rescuer takes frog in shop's container but removes any rock (clobbers frog in transport) and any rotting lettuce.

Rescuer then rings Helpline to arrange for frog to get into FATS quarantine. Ideally, frog gets dropped off at one of our collection points (Rose Bay, Rockdale, Ashfield, Broadway, Australian Museum). Otherwise, Rescuer takes froggy home and looks after it until handover can be organised. Looking after it means keeping it and its moisture away from any other frogs, and feeding, housing and treating it.

Wanna be on our list as a Rescuer? You might get called upon maybe once a month, maybe once a year, sometimes to go to a shop in your local area, sometimes to somebody's home where a frog's jumped out of a shopping bag. Simply ring 0419 249 728 or 9371 9129 (Lothar) or 9599 1161 (Arthur). L.V.

FLY PUPAE

The pupae now come to you from FATS directly. So pay our Treasurer Karen for them, not me. I was told there was too much in each tub. If you have too many flies coming out, just take the tub out of the cage again (easier of course if it pokes halfway through a hole in the cage lid), stick some masking tape over the little escape hole in the tub and put the tub back in the fridge.

We would like to recycle your flyscreen squares, please. Better still, cut up all the nylon flyscreens you can find around the house, into 15 x 15 cm squares (2 cm bigger or smaller is still ok) and bring them in. I then disinfect them myself, and I could do with about 200 – 400 or so, mostly for the Frogmobile frogs.

I know of three shops where you can (sometimes) buy fresh pupae between meetings: Pet Care 2000 at Taren Point, South Windsor Aquariums and Kellyville Pets. Check that they are less than a week old and remember to gut-load them (e.g. a smear of sweetened condensed milk + Herptivite + liquid calcium/vitamin D onto the tub wall when you repackage them). The ones from FATS are already gut-loaded.

Keep in mind that pupae or pre-hatched flies can only be kept in the warmer part of the fridge, and only for up to two weeks. After that, little more will survive. Hatch them at room temperature or a bit warmer; but don't let ants get at them. Check that the frog cage is fly-proof and that you have an efficient way of getting fly corpses out again (and of course of changing the frogs' bath water without letting the flies out. If you haven't, perhaps use a separate plastic feeding cage with damp sphagnum moss and no open water, and with a pantyhose over the lid. L.V.

TEAR DOWN PARADISE,
PUT UP A BLOCK OF FLATS
By SIMON BENSON Environment Editor



Daily Telegraph 17/4/04

THIS is what the Federal Government has had locked away behind a barbed wire fence in Sydney's west for 50 years. And its what the land's new owners, developers Delfin Lend Lease and the State Government, now plan to turn into a 5000-home suburb, industrial park and regional parkland.

Supporters of the development claim much of the 1535 ha of the former ADI site at St Mary's is "exotic pasture". But also to be found within its suburban perimeter (more than seven times the size of Centennial Park) are wetlands, lagoons – which will be filled in – and the largest remnant of what is left of Sydney's Cumberland Plains woodlands, which is now classified by the State Government as an endangered ecosystem.

This week The Daily Telegraph was taken to a prohibited area on the site by a group of local residents to see what it is that they, scientists and conservation groups are so desperate to save.

Emus and kangaroos were common across the site, although there was little sign of the over-grazing that the animals are accused of.

Within minutes of walking into the area designated for a regional park we came across one of western Sydney's rarest plants – *pimelea spicata* or the pink rice flower – which also grows in the western development area of the ADI site. We uncovered the shell of what was suspected to be an endangered Cumberland land snail.

Within the space of merely a few hectares six other threatened plant species were found to be thriving.

Botanists claim that, of the 1800 species of plants growing on the site, more than 25 per cent are endangered.

Amateur naturalists Noel Butler and Lachlan Laurie, who are members of the local resident action group ADI RAG which has been opposing the development since 1991, have been conducting unauthorised fauna and flora studies of their own and believe authorities do not want to know what is there. They are pushing for much of the site to be declared a nature reserve

"We are not radicals," said Mr Butler, a high school teacher. "We are just a group of people that care. It's the kind of place that you don't appreciate until you see it and experience it." "It was a sheer accident that they put a fence around it and forgot about it." "This would have to be one of the longest environmental fights on record."



Photo by Holli and Annemare Hollitzwer – Centennial Park

By SIMON BENSON
Environment Editor

IT'S the survivor of the frog world. Despite a worldwide decline in the number of frog species, the striped marsh frog is thriving in our backyards.

Martin Robinson from the Australian Museum said the species was doing well due to a lack of natural predators like snakes and backyard lights that attracted large amounts of insects.

The survival of the striped marsh frog comes despite the spread of the deadly chytrid microfungus disease, which is threatening to wipe out at least 19 other species of frog across NSW and is beginning to appear in the green tree frog (pictured above).

The Daily Telegraph has learned the



State Government is drafting laws which would seek to discourage children from taking tadpoles from streams to stem the spread of the disease.

The striped marsh frog is one of the few species which appears to have a resistance to the disease.

The NSW Scientific Committee believes the future for many frogs is far worse than thought and human interaction – relocating frogs, mixing tadpoles and handling individuals – could be accelerating the spread of disease.

It has listed the chytrid disease as a key threatening process under the NSW conservation laws, which places a legal obligation on the Government to deal with it.

The only involvement students will soon be able to have with tadpoles and frogs would be under a licence system.

Strict guidelines would allow the taking of a maximum of 20 tadpoles. They would not be allowed to be mixed with tadpoles from other areas and when they metamorphosed the frogs would have to be returned to the exact location.

It will also keep statutes, which in 1997 former Environment Minister Pam Allan promised to remove but didn't, that technically allow for anyone, including children, to be prosecuted for taking tadpoles.

"We have already lost 10 species of frog. There are another six perilously close to going the same way," National Parks and Wildlife Service threatened species officer Ross Wellington said.

Mr Robinson believes the disease may be a symptom of an underlying problem.

"My guess is that it is climate change," Mr Robinson said.

Frog
survives
an
amphibian
assault

FROG MEDICATION

FATS has been selling frog medication at our meetings for several years. It contains two main ingredients, an aquarium fish fungicide ("Aqua-Remedy") which is readily available, and benzalkonium chloride which is not stocked in normal shops. It now appears that Aqua-Remedy works well enough by itself against chytrid fungus, and possibly against other frog skin problems. This has two advantages: It keeps better on its own, and you can get a \$4 bottle from the fish food section at K-Mart that will last you for years.

So, we no longer need to take the green milk bottles to the meetings. But do get that fish fungicide. Here is how I suggest you use it:

As a preventative: Add 8 drops of Aqua-Remedy to 500 ml water in a spray can (which is half the application strength for treating fish as per label). Lightly spray frogs and cage daily. (Store spray bottle in the dark.)

If chytrid contact suspected (and for quarantine): Place frogs in a bare plastic tank for one month, with plastic plants and/or plastic hiding place. Spray frogs and entire cage daily; with 15 drops per 500 ml. Keep frogs warm. Keep the humidity up by partly covering the lid. Also use the same solution as the frogs' bath water every other day: Pour a cupful of the 15/500 solution in and put the cage on a slope. Next day, pour it out through the closed lid and pour a cupful of tap water in instead. Third day, the 15/500 solution again. And don't stick your ungloved fingers in, if you also have frogs elsewhere. You can minimise insects drowning if you cover the water surface with thin strips cut from a styro cup (better still, from a black styro tray).

In the meantime, completely sterilise the main frog cage and keep it uncontaminated. Read Frogfacts No. 8.

If sick: 30 drops per ^{3 LITRES} 500 ml. Spray twice daily. Also use as bath water, every other day. In addition, give them a Betadine bath on the tap water days, but only for 5 minutes for small frogs or 30 minutes for very large ones. Then back to tap water for the rest of that day. Use Betadine at 25 drops per litre, but the cage has to be well rinsed first.

With this regime, we still lose some very small frogs to chytrid. So please ring me up, in case there is an update. L.V.

Litoria Caerulea photographer Paul Solomon



Striped Marsh Frog photographer Paul Solomon

SHARP JUMP IN FROG CANCER RATES

Staff at a north Queensland frog hospital are concerned at the number of webbed patients being admitted with cancer - a disease extremely rare among amphibians. Cairns Frog Hospital curator Deborah Pergolotti said a white-lipped tree frog handed in last week displayed the same type of cancerous facial tumour seen on five other frogs admitted to the hospital. She said the six frogs handed in since 1999 with the squamous cell carcinoma might not seem a lot but because of the extreme rarity of cancers in frogs, it was a disturbing number.

"We've had more cancer cases here in Cairns than in all of Australia combined, and more cancer cases compared with how many have been reported globally. The Registry of Lower Animals in the United States had tracked animal cancer cases over 40 years and only five cases of amphibian squamous cell carcinoma had been reported in that time" Ms Pergolotti said. "We have more of these cases coming in than the rest of the world, there must be a reason for it," she said. "All we know so far, because the lab work has not been done, is that these cancers are believed to be caused by a virus."

Ms Pergolotti said federal Environment Minister David Kemp had been alerted to particular disease problems facing frogs in the Cairns region over a year ago but had declined funding for lab work. "We have not been able to get the lab work done to isolate the cause of these cancers," she said. "If this is a herpes virus causing these cancers, we have no idea what other animals, including humans, can pick this up."

A spokesman for Mr Kemp said if Ms Pergolotti had further concerns she could raise the issue again with the minister. Ms Pergolotti said the frogs with the tumours were found in back yards around Cairns and there was no knowing how many were out in the bush. Associate Professor Rick Speare, an amphibious diseases expert at James Cook University in Townsville, said cancer was rare in frogs but there seemed to be a higher incidence of it around Cairns. He said the cancer could be a type that was spreading from frog to frog or it could be an indication there was either an environmental problem or a widespread immunity problem in the frog population.

We are slowly getting the hang of it. On Sunday, 4 April, FATS ran a frog pond workshop for Centennial Park (to say thank you for them providing safe overnight parking for our Frogmobile), and we gave the participants a private showing of the FM. Two weeks before that we had the FM out by the Duck Pond again, where Punia, Alistair and I counted around 700 - 800 people coming over to see it throughout the day. Everyone was very, very pleased with that.

This time, on Sunday, 23 May, we parked the FM much closer to the road and the kiosk. Lo and behold, twice as many people crowded around it! Luckily, we had plenty of helpers: Wendy and Philip Grimm and Karen and Arthur White and Lance Brooker and Barbara Bohdanowicz from FATS; also Heinz Zimmermann, Daniel and Alice and Ken Taunton and David Lawrence from the Aquarium Society; Andrew Thornton from ANGFA. Centennial Park's Ranger Ernie carried tons of water to us on his truck, after we couldn't fit the hoses and the tap together. Senior Ranger Paul Solomon helped everywhere and also took some great shots. Then out of nowhere came two professional photographers, Holli and Annemarie Hollitzer, blitzing the kids, frogs and helpers alike. Thank you, thank you to all. Apart from me, who was panicking over all that water running everywhere, all had a marvellously relaxing time. Look at some of the pics and see for yourself. L.V.

FROGBITS & TADPIECES

Your home-made frog cage may win a prize at our June meeting. Have you made one out of styro boxes or some other material? Bring it in and show us what you did. The prize, if you are a member and have your licence with you, is a large Green Tree Frog.

The Wild Australia Expo at Darling Harbour has some new info on its website, including enrolment details for the concurrent conference. See www.wildexpo.com.au. The expo is on the first weekend in September, and yes, the Frogmobile will be there, too. L.V.

FOR YOUR CALENDAR

Frogmobile at Centennial Park on the following next Sundays: 4 July and 15 August, 10 am - 4 pm. Again by the Duck Pond (near the kiosk and stone shelter pavilion). Free, but bring your picnic. Still need a few helpers.

Frogmobile at Wildflower Festival: Last weekend in August. Ku-Ring-Gai Wildflower Gardens, Mona Vale Road. Free entry for Frog Explainers.

Frogtalk on Radio 2RRR (88.5 FM). Every Friday at 3 pm (15 minutes during a one hour programme on environmental issues). L.V.

Going through my old Helpline notes, and I got out a few more gems and a few evergreens. And one or two questions that sadly never get asked, I put into this list anyway. Here it is. This lot is again minus the most common category, the garden pond ones. (Yes, I know you know the answers. You can compare yours to the ones on Radio 2RRR 88.5 FM, where FATS has a "Frogtalk" spot every Friday at 3 pm.)

Frogs at risk questions

1. Are there any threatened frog species left in Sydney?
2. How about elsewhere in Australia? Is the number of threatened frog species growing or shrinking?
3. Are there any success stories at all?
4. Which is our most endangered frog?
5. Why are frogs declining, what are the threatening processes, and what can we do?
6. What's wrong with those threatened frogs? Are these species on the way out, anyway?
7. What's happening overseas? Are frogs disappearing there, too?
8. Is it more useful to do frog surveys near population centres or in pristine areas?
9. If frog numbers keep going up and down with wet years and dry years, can we really tell whether a species is declining?
10. Which species are the FATS Group going to save from extinction?

Field trip questions

1. We want to observe frogs on our camping holiday. What equipment do we need?
2. We want to go on a proper frogging field trip. How do we go about it?
3. What's the best time of the year, of the day, the best weather - for finding frogs and tadpoles?
4. Why should the public go looking for frogs? Is there much purpose?
5. We want to improve this bushland. Should we check for frogs before or afterwards?
6. How often will we need to search a site before we can be sure which species do and which don't occur there?
7. How does one find; pick up; handle; examine; identify frogs (and spawn and tadpoles)?
8. Could there be any dangers to us or to frogs on a field trip? How about snakes, mosquitoes, glass shards, chytrid, wrecking habitats?
9. Should we record any measurements or frog calls and how and what should we do with them?
10. Our school would like to adopt a pond and clean up a stretch of stream for frogs. What should we concentrate on?



Exotic frogs questions

1. We used to eat Cuban bullfrogs, and I am very homesick. Where can I get some? (Actual question)
2. Do all frogs practice external fertilisation? How about the Tailed Frog in North America?
3. I heard of an African toad that bears live young. Can you tell me more about it? (Hint: Google under *Nectophrynoidea*.)
4. I heard a shaggy frog story, about an African frog that can stay under water for ages to look after the eggs. Is that true? (Hint: look up Hairy Frog.)
5. I'm doing an assignment on animals that breathe only through the skin. Can you help? (Hint: Lake Titicaca Frog.)
6. Why can't frogs be as big as kangaroos, or as small as flies? Or can they? If not, what stops them?
7. In America the pet shops sell flat aquatic frogs, and their tadpoles have long tentacles. Why can't we get them here, too?
8. You said to euthanase a frog, put it in the fridge, then the freezer. But isn't there a frog that can live in the Arctic and freeze solid?



photographers Holli & Annemarie Hollitzer at Centennial Park

9. Where frogs protect their eggs, is it the males or the females?
10. In the Americas, hasn't the Cane Toad got natural enemies that we could bring over here, too? L.V.



Karen White photo by Holli and Annemarie Hollitzer



With compliments Dot and Bernie Laughlin
<http://www.savetheadiseite.bmt.com.au/>



Arthur White photo by
 Holli and Annemarie Hollitzer



photographer by Paul Solomon



photographer by Paul Solomon

SIERRA NEVADA FROG

www.msi.ucsb.edu/ResHi/pict/apps/knapp/knapp.jpg



The Dramatic Decline Of Native Sierra Nevada Frog Linked (Mt. Yellow Legged Frog) To Introduced Trout Data gathered over seven years by a University of California, Berkeley, researcher have played a key role in convincing the National Park Service and the California Department of Fish and Game to remove trout from some high-altitude lakes in California's Sierra Nevada to save the disappearing mountain yellow-legged frog. UC Berkeley post-doctoral fellow Vance T. Vredenburg

showed that introduced trout have devastated native frog populations over the past 50 years in formerly fish-free high-Sierra lakes, but that removing the fish can allow the frogs to flourish once more. Vredenburg's study was published this week in the online edition of the Proceedings of the National Academy of Sciences. "The mountain yellow-legged frog used to be the most common inhabitant of the high Sierra, but frog populations have declined dramatically enough to put it on the endangered species list," said Vredenburg, who works at the campus's Museum of Vertebrate Zoology.

"I'm not saying that other things didn't cause a decline as well, but this report shows that most of the problem came from fish." "People want their trout, but they don't realize what they're getting along with their trout - changed ecosystems, diseases and all sorts of things," noted David Wake, a UC Berkeley professor of integrative biology who organized the first international conference on amphibian decline in 1990. In a 1915 survey of wildlife in the Sierra Nevada, UC Berkeley biologist and museum director Joseph Grinnell complained that mountain yellow-legged frogs (*Rana muscosa*) were so abundant that his survey team was stepping on them. Today there are probably fewer than 200 populations of the frogs - perhaps 5,000 adults - in their range from north of Lake Tahoe to below Sequoia National Park, Vredenburg said. (A separate endangered population, and perhaps a distinct species, exists in the San Gabriel and San Bernardino mountains of southern California.) Vredenburg, who has conducted more than 900 censuses of the frog population at lakes

throughout the basin, is continuing his studies of the mountain yellow-legged frog to find out how far the frogs roam, where they breed, and with whom. He has already implanted microchips in 1,200 frogs to enable easy identification, like running a bar code across a scanner, and has outfitted many frogs with radio transmitters. He also has teamed up with other researchers at the Museum of Vertebrate Zoology and at UC Berkeley's departments of integrative biology and plant and microbial biology to determine the effect of a chytrid fungus, *Batrachochytrium dendrobatidis*, on the mountain yellow-legged frog. The fungus, which is threatening frog populations around the world, attacks the mouthparts of tadpoles as well as adults, and can kill adult frogs. It was discovered in the Sierra Nevada in 2001. **EXTRACT ONLY** The research is supported by a grant from the Ecology of Infectious Disease Program that is run jointly by the National Institutes of Health and the National Science Foundation, and by the U.S. Geological Survey. University of California, Berkeley 13 May 2004, HerpDigest Inc. is a non-profit, 501 (c) (3), corporation that publishes the free, electronic weekly newsletter called HerpDigest, and runs the website under the URL www.herpdigest.org.

photo by Holli and Annemarie Hollitzer



photographer by Paul Solomon



ERRATA: The frog medication article on p. 5 of FC71 lists incorrect Aqua-Remedy concentrations.

Use the stated number of drops not in 500 ml but in 3 litres. Please put this sticker onto the same page.

A replacement article will be in the next issue.

My apologies. L.V.

**NEW NATIONAL PARKS IN BRIGALOW BELT
SOUTH BIOREGION:
MAKE A DIFFERENCE IN ONE MINUTE**

Despite all the effort conservation groups have put in over the past 2 years to have new National Parks gazetted for BBS (which stretches from Dubbo to the Queensland border), the NSW Government seems to be incapable of making a decision. The Western Regional Assessment for BBS was completed in September 2002 with promise of a decision on new conservation reserves in December 2002!

Parliament is sitting from 4 May-June 25. It is imperative to have a Bill for new National Parks in BBS presented in this sitting.

Logging continues. A whole range of new mining exploration activities has been announced for the upcoming months. We don't want this to continue.... So We are launching the Decision NOW! Campaign directed at Bob Carr.

**SEND THE FOLLOWING EMAIL OR FAX
TODAY to Bob Carr's Office. AND
PLEASE ASK YOUR FRIENDS TO DO THE
SAME...**

**Email: bob.carr@www.nsw.gov.au
Fax: (02) 92283935**

The Hon. Bob Carr, Premier
Parliament House Macquarie Street Sydney, NSW 2000

Dear Premier,

I urge you to make an immediate decision on new National Parks in Brigalow Belt South Bioregion and that the gazettal Bill be tabled during this Parliament session (May/June 2004).

The Western Woodlands in question are on public land belonging to the people of NSW and managed by the NSW Government. Whilst private landholders are making an effort to protect bushland, the Government has so far failed to protect public woodlands.

A 15 month logging moratorium which has suffered significant compromise is not adequate protection for these important woodland habitats. This stopgap measure needs to be replaced by gazettal of adequate longterm protection and should not be extended.

Western Conservation Alliance (WCA) has presented Government with a viable way forward with this issue that will ensure a sustainable future for small regional communities while protecting nationally significant temperate woodland values in the region.

The first Western Regional Assessment held in the Brigalow Belt South Bioregion was completed in September 2002 with promise of a decision in December 2002.

Basic findings are: There are 58 threatened animal species in the Brigalow Belt South There are 100 rare or threatened plant species including 8 endangered ecological communities. The timber industry generates

only 1.1% of the regional economy. The ecological values of the area present ideal tourism opportunities. Over 80% of high mineral potential in the bioregion is on freehold land and not on public western woodlands. The landscape of the Brigalow Belt South is highly fragmented and contains several of the largest remnants of woodland ecosystems in Australia. These are Pilliga, Goonoo and Bebo State Forests.

The timber industry is still harvesting its full quota from outside the moratorium compartments. This is causing considerable stress both to the timber industry and to the woodlands.

It is time for the Government to make a strong decision to protect biodiversity in this critical bioregion while assisting small local communities to move into sustainable enterprises. Again, I urge you for the health of NSW to make an immediate decision on the future of our Western Woodlands.

Yours sincerely, Name-- Address-- Email--

For more information on the Western Woodlands campaign, events and updates, visit:

<http://www.npansw.org.au/westernwoodlands>

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The information contained in this email is provided as a service to Nature Conservation Council (NCC) Member Groups and Representatives. Opinions expressed are the original contributors' and do not necessarily represent the opinion of the NCC
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QANTAS SERVES DIET CROAK SALAD

Qantas said it had changed its lettuce supplier after a passenger on a flight from Melbourne to Wellington found a live frog in her in-flight salad. The woman was quick to slap the lid back on her meal, preventing the frog from escaping. The Qantas crew notified the Ministry of Agriculture and Forestry Quarantine Service while the plane was still in the air and staff were waiting when it landed at Wellington Airport.

The 4cm brownish-coloured frog was identified as a native of Australia known as the whistling tree frog. MAF said the frog was taken from the plane and "euthanased" by being put in a freezer. A Qantas spokesman told National Radio that since the incident in February the airline had changed its lettuce supplier. He said tree frogs were common in the area where the lettuce was grown.

The salads were supplied in sealed bowls from an external contractor but the airline randomly checked such food. MAF said the incident was regarded as a "one-off" and no further action had been taken. **SMH 4/5/04**

The mystery of the disappearing frogs

writes **Steve Meacham**.

An ecological fable is the latest creation from illustrator Graeme Base,

Graeme Base is the kind of talent who inspires envy among other men. Movie star looks. Musical flair. Artistic virtuosity. And a bank balance enriched by being one of the world's best-selling children's authors – his best-known work, *Animalia*, has sold more than two million copies.

Now the 45-year-old Melbourne illustrator and writer is adding another qualification to his

impressive creative curriculum – museum exhibitor. The Australian Museum is hosting an unusual exhibition based on *The Waterhole*, Base's ecological children's fable which reigned for 15 weeks on *The New York Times* bestseller list. It will feature the original artwork and friezes that are reproduced in the book and which have delighted millions of readers around the globe. There are also the 3-D images and life-

size tigers that appeared when the exhibition had its debut at the Melbourne Museum last year. But for Sydney, the show will be supplemented by stuffed animals from the Australian Museum's own collection: a bear, an armadillo, monkeys, peacocks, a panda, mandarin ducks. And, as anyone who has read *The Waterhole* would expect, plenty of frogs.

Frogs are a vital feature of Base's book. Alone of the creatures which

appear in *The Waterhole*, the frogs are given human qualities. Some are dressed in jewellery, shirts or glasses. Others are shown sunbaking, like bathers at Bondi.

On the very first page, as one solitary rhino sups at an obviously African waterhole there are 10 of the frogs. But in each subsequent page, as the magical shrinking waterhole switches continent – from India, to South

America, the Himalayas, and on to Europe and the Galapagos Islands – the frogs disappear one by one. "Frogs are nature's early-warning system," Base explains. "They're the first to recognise that something is wrong with the natural habitat."

Base was born in England but moved to Australia when he was six. A talented musician who played both drums and keyboards in a band called Rikitikivi, he originally made his reputation as an illustrator of other people's stories. But it was when he realised he preferred making up his own words to illustrate that he became a globally recognised children's author.

Animalia was followed by *The Eleventh Hour*, *The Worst Band in the Universe*, *The Discovery of Dragons*, *My Grandma Lived in Gooligulch* and his 2003 children's novel, *Truckdogs*.

Like *Animalia* – at first glance a simple alphabet book – *The Waterhole* has won applause for its many layers of complexity. To a young child, it is a counting book, with each page featuring one more animal than the previous one. Older children might recognise the changing geographical locations (aided by glimpses of iconic buildings such as the Taj Mahal and the Eiffel Tower). They will also notice the friezes on each page, indicating the 10 animals that Base has cunningly concealed in each illustration. They might even spot the extinct animals – dodo, quagga, Tasmanian tiger and seven others – which are hidden in his illustration of the dead landscape once the waterhole has disappeared.

And adults? Base hopes that even if they don't notice at first, they'll eventually recognise his more subtle visual and verbal jokes. The single drop of rain that contains the promise of a rejuvenated earth. The Noah-like flood that forms the map of the world within its puddles. The human-like bureaucratic delay of the ladybirds when confronted with an ecological crisis.

The Waterhole took Base three years to complete, so on one level the exhibition is "a wonderful opportunity to see all the pictures from the book in one space, beautifully mounted and framed". But, more important, he says, "is the 'how to' section, showing all the background work, all the



Toucan tango: Graeme Base, left, and an illustration from *The Waterhole*.

smh.com.au February 14-15, 2004



sketches, all the scribbles, the ideas. Kids doing school projects can see how a book is made. It's a great thing to show a child that an idea can start off as something scribbled and rough and over time be refined into something you're really proud of."

He had the idea of setting a fable around a shrinking waterhole while on safari in Kenya and Tanzania. At first he intended the waterhole to be recognisably African. But eventually he realised that by making it a "magical waterhole" he could not only make the story of global relevance, but also allow himself the luxury of painting a much wider range of animals.

This is not a dark and depressing tale of mismanagement.

- Graeme Base

"Once the waterhole became transportable it brought home that water is a global resource and we all have a duty to conserve it," he says. But even though several of his illustrations in the middle of the book are bleak, "this is not a dark and depressing tale of mismanagement". Instead, he was anxious to show "this is a cycle that every continent goes through, it's a case of looking after the water we have".

Yes, he says, his books have become increasingly message-laden. And yes, *The Waterhole* is utopian. But he makes no apologies about that. "I've got a very optimistic and resilient outlook on life," he says, based largely on his experience as a father of three.

"My children have a much better idea of conservation and ecology than I did. They were words which were unknown to me and my peers when I was at school. Now conservation and ecology are an absolute focus for kids around the world. And that alone gives us hope."

The Waterhole is at the Australian Museum until July 18.

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Feeding "ERIC" the crocodile

Autumn / Winter Recess. No Field Trips Scheduled. The Spring/Summer Programme recommences in September. The FATS committee wish to thank Field Trip Co-ordinator

Robert Wall for making the programmes so successful. Our second season of Spring/Summer field trips has drawn to a close. We would once again like to express our sincerest thanks to our energetic and capable Field Trip Co-ordinator, Robert Wall and those leaders who conducted field-trips for us this year. We are also greatly appreciative of those who have quietly carried out vital 'reconnaissance' work for us as well as for the innumerable suggestions & advice that is always generously, continuously & freely offered. A successful programme is not possible without this 'behind the scenes' input. Once again, we have leaders who were not utilised this year but have nonetheless kindly offered their time & skills for future trips - we thank you. We are very fortunate to have such expertise available to us. It is also very rewarding when we consider the broad-ranging backgrounds from which this expertise is drawn from. The passion, skilled observations & intuitive feel from people of very 'ordinary' backgrounds make us feel that our sometimes precarious froglife is in the best hands possible. It also highlights the very significant contributions that such 'ordinary' members can make towards a greater understanding of our frogs - it certainly is not the unique preserve of scientists or academia.

Our tireless newsletter editor, Monica, who has become somewhat of a 'whiz' at deciphering illegible notes & scrambled diskettes & still somehow makes it all seem presentable in our newsletter, deserves a special mention. Finally, to our members, for the fantastic support you have given to our programme. Your keen interest, enthusiasm and good company make our field trips the enjoyable experience they are. We look forward to many more destinations when the next frogging season recommences in September 2004. **The FATS Committee.**

SPECIALIST FIELD TRIP / RESEARCH OPPORTUNITIES

Following recent discussions with Dr. Graham Pyke & The Australian Museum, FATS are now in a position to offer a range of specialist field-trip & research opportunities to interested members. Graham's research program provides opportunities for volunteers, training & student projects. All aspects of fieldwork, including handling, microchipping, measuring, & sexing of frogs & recording data will be explored. Lab work is also available, from the caring & maintenance of frogs to assisting with computer work. Graham can help students design projects & provide supervision. Projects can be carried out at school, College or University level. Tertiary level projects can be part of undergraduate, honours, Masters or PhD. programs. Furthering academic study is not however, a prerequisite for participation on this program, anyone who is interested in seeing frog research being carried out is most welcome- although some assistance with duties will be required! It is hoped that members of all ages & interest levels will take advantage of this program. Regular fieldwork is conducted at three locations; Long Reef Golf Course, North Avoca & Broughton Island (near Nelsons Bay). Duration of field trips vary from nightly work to 3-4 days. Fieldwork is carried out at regular intervals throughout the year. There are some limited transport pick-up and drop-off arrangements available.

FATS believe this program represents a major leap forward in nurturing the skills required to meet the future needs of frog research in Australia. It also provides a unique insight for the enthusiast and we encourage participation in this program. We will regularly provide updated field trip information in Frogcall. We thank Graham for the support he has shown FATS. For further details of field trip times and/or other details, speak to Graham Pyke directly the Australian Museum ph. 9320 6000 or to any Committee member. **Robert Wall**

INSURANCE DISCLAIMER FATS has public liability insurance for its various public functions. FATS members should be aware that 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.

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We hold six informative, informal, topical and practical meetings each year at the Australian Museum, Sydney, William St entrance. Meetings are held on the **first Friday of every EVEN month** (February, April, June, August, October and December) at 6.30pm 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 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 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 source must be fully acknowledged. **ALWAYS CONFIRM DATE AND LOCATION OF NEXT THE MEETING.**