## Official Newsletter of the Queensland Frog Society Inc.

## President's Report by Rod Pattison

Winter 2006 has arrived. When you start work at 6.30 in the morning the seasons appear to change virtually over night. It feels as if one minute you're sweating in broad daylight and the next you're shivering and turning lights on to see what you're doing. North Queensland has been deluged and devastated by cyclones. While the people in the north are probably hoping they never see rain again we, in the south, are becoming desperate for it. The summer frogging seemed even quieter than in recent years. I heard similar reports from everyone I spoke too. On the nights when the rain did pour down I had the feeling that even the frogs weren't all that enthusiastic about things.

Evolution has enabled frogs to cope with drought but it falls dramatically short when it comes to a frog's ability to stop bulldozers. If we were to let our imaginations run wild we could mass produce miniature rocket-launchers and train frogs in the finer art of ambushing
bulldozers. Of course, the reality is if they hop their little hearts out they just might make it to the next piece of bush before it too is cleared for yet another McDonalds. I work in the Bunyaville State Forest at an environmental education centre. In one of our programmes we show a series of aerial maps of the area dating from 1938 to 2005. Apart from a handful of cleared fields on the 1938 map it is impossible to determine the boundaries of the reserve amongst the sea of green. Believe me, you would stare in disbelief when you see the 2005 map beside it. The borders are clearly defined; totally surrounded by what has now become a sea of roofs. If you ask me "what is the meaning of life ? ", I will tell you that I haven't got the faintest bloody idea! What I do know for certain is that mankind didn't make the ground we stand on, the sky above nor the plants and animals that we are supposed to be sharing this world
cont'd on p3

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SAVE HABITAT - GET THE FROGSHEET BY EMAIL
We can send the Frogsheet by email (pdf of about 600kb) - or send you an alert that the newsletter is available for download (at your leisure) from
the website. Send your email address to Jenny qldfrogs@bigpond.net.au stating your preference.

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Most of the Co-ordinators now hold the "Frogs of Brisbane" poster and you can pick up your FREE (to members) poster from them.

## DIARY DATES

## Bowman Park Habitat Working Bees:

First Sunday in August, October and December. Time: 8am to 11am. Please phone Jenny 33661868 for further information.

17 June - 2 July<br>Oxley Creek Water Festival www.oxleycreekwaterfestival.org

25 June Frog -friendly gardens - how to decide what ponds are suitable for the frogs that come into your garden. Fraser Coast WPSQ, Hervey Bay. Contact Carolyn Bussy, Ph 41295979

19-20 August
S.G.A.P. Spring Flower Show \& Plant Market. Mt Coot-tha Botanical Gardens, Toowong. QFS Display will be there.

21-24 August Landcare Conference: Bridging the Urban-Rural Divide. Brisbane. more info sam@landcare.com.au or Ph 0732114413

16 September
QFS Annual General Meeting. Starting at 5pm at Downfall Creek Bushlands Centre, Rode Road, McDowall.

4 November THECA forum


Wondering why there is a pic of a horse here? turn page side on and look again.


## NEW MEMBERS

Jennifer Batycki, Margaret Sheahan, Andrea Peasons, Patricia Rooskov, Robyn O’Leary.

cont'd from p1
with. We must find a way to stop destroying this world - even if it comes down to manufacturing miniature rocket-launchers!

In previous frog sheets I have reported on the Green-thighed Frog (Litoria brevipalmata) colony at Joyner. All parties concerned finally accepted a development proposal. Under the development legislation a frog reserve has been allocated, encompassed by a permanent protective fence to be erected before any construction begins. The society is of course delighted with this outcome. But - as with all great stories with their multiple characters, woven story lines, their highs and their lows when you think you have the conclusion all worked out along comes yet another twist. The land has been sold! The new owners may go ahead with the approved development or they may choose to change it completely. Should the latter occur, I can assure you, the local residents will be screaming down the phone at me before they have a chance to put the last screw in the notice boards. For the moment we can only watch and wait - and hope we don't have to return to where this story began.

Until next time, keep those headlights shining and good frogging to all,

Rod Pattison.


## 'Basic Care for Injured Frogs’ Booklet Distribution

This booklet was compiled by, and based on the experience and observations of, an experienced frog-carer.

It covers causes of injury, rescue, first aid (acute trauma care), collection and housing, hydration, feeding techniques and equipment, encouraging the 'patients' to feed themselves, day-to-day care and eventual frog release.

QFS have reprinted the booklet with the aim of distribution to veterinary clinics to encourage treatment of injured frogs.

Thank you to the few members who have volunteered to deliver the booklet to Veterinary Clinics in their area. I will be in touch soon to see what numbers you need.

We would like to get this booklet into as many clinics as possible - PLEASE HELP phone Jenny on 33661868.

## Frog uses Ultrasonic Communication

BATS, whales and dolphins use it to communicate. Baby rodents call their mothers with it and now a rare Chinese frog has shown it can hear and respond to ultrasounds.

The Concave-eared torrent frog (Amolops tormotus), is the first non-mammalian species known to use the ultra-high frequencies that humans cannot hear. It comes in handy to be heard above the pounding waterfalls and streams in the mountainous region of east-central China where the frog lives.

Kraig Adler, a biologist at Cornell University in New York, first noticed the frog with no external eardrums while surveying amphibians in China. He told Prof Feng (an auditory neuroscientist who studies frogs and bats) who conducted tests on the frogs to determine whether they could hear and respond to ultrasounds.

Prof Feng, who reported his findings in the journal Nature, observed the eardrums to be thin and recessed. Thin eardrums are needed for detection of ultrasound and recessed ears shorten the path between eardrums and the ear, enabling the transmission to the ears.
(Edited version of story from Reuters March 16, 2006)

## CO-ORDINATORS' REPORTS

COOLOOLA REGION

I guess like everyone else, we're wanting some rain. We've had a little, but nothing too exciting. We've noticed an increase in toads since last year - they love all the farm dams - some toads have been enormous! Have noticed since it's been getting cooler, the winter frogs are beginning to call - it makes me realise how fast the year has gone already and that soon we'll be feeling the cold. Our son, Jack, managed to save a big green tree frog last week - not sure what from, but it had a white slime covering its body and it appeared to be battered around its head. We're guessing it may have put up a very brave fight against a python! Jack carefully bathed it clean and placed it in a small tub of water to enable the frog to rehydrate. He then placed the frog in a hidden area where it could recover. Thank goodness the frog was gone at the end of the school day - we're hoping it did recover.

We have found many different species of frog in our pool over the years and most have escaped themselves or been rescued. But we had a very big shock when we recently discovered that a bandicoot had drowned. So now we leave a hose placed so that whatever might fall in will be able to escape. Until next time - let it rain

Leanne Marshall

## ASHGROVE

Except for the occasional call from the Striped Marsh frogs in this area, everything is now quiet with the other species "tucked up" for the cooler months.

Our small Habitat Brisbane group is continuing its work on the frog habitat in Bowman Park, Bardon. In April about 120 more plants were added. We were pleased to see that only two plants from the January planting had died. In June our small working party concentrated on grubbing out couch and other nuisance grass around the newly planted shrubs and native grasses. A load of mulch was spread over this area and now we are praying for rain.

Displays and school talks are still on-going and it is encouraging to see that frog habitats are being developed within the school grounds and looked after by students.

Jenny Holdway

Froglet puts new project on hop
The wallum froglet - only 2 cm long - is again threatening to block a multi-million-dollar project, this time a $\$ 100$ million-plus supermarket and residential development in northern NSW. Less than three weeks after it was revealed the threatened amphibian had prompted northern NSW residents to take legal action against the $\$ 543$ million Tugun bypass on the Queensland border, the froglet now stands in the way of a Woolworths and apartments building on a 20ha block of land in the coastal town of Kingscliff. The NSW Land and Environment Court found last week the development proposed by Gales Holdings was likely to wipe out the froglets on the north side of Turnock Street in Kingscliff. But the court's decision to block or approve the project will have to wait until they have the answer to whether the froglets can cross the road to safety to another group on the south side of the street? If the northern froglets are found to belong to the same population group as those from the south, as argued by the developer's lawyers, the project can go ahead if it meets other approval requirements. But if the froglets are found to belong to two colonies separated by the road, as the Tweed Shire Council argues, the project will be blocked because it will kill off an entire population. After receiving clashing evidence, the court has ordered a species impact study, which could take up to a year. Gales Holdings owner Stephen Segal said he was "dumbfounded" by the decision. "We have been trying to develop this piece of land for 20 years," Dr Segal said. "This decision means more waiting." The wallum froglet prompted the Tugun Cobaki Alliance to launch legal action last month against NSW Roads Minister Eric Roozendaal and the state Roads and Traffic Authority to halt the Tugun bypass. The matter is to be heard in the NSW Land and Environment Court later this month. But in a letter to key stakeholders, Queensland Main Roads advised construction began on April 18. "It is an astounding display of the arrogance of Queensland Main Roads that they would go into an area of such high cultural and environmental value and undertake substantial work without ensuring the issues have been adequately resolved," said Tugun Cobaki Alliance president Valerie Thompson. "The community cannot trust this Government to follow appropriate process."
(Edited version of story in The Australian by
Annabelle McDonald May 03, 2006)

## DRAGONFLIES!

by Ric Nattrass

I have just finished my most ambitious project, "Dragonflies of South East Queensland: A Field Guide" (see page 12). So far 86 species have been recorded in the great southeast -I had to find that out for myself. In chasing down the 86, I quickly discovered that the most widespread, though not the most abundant, is the Fiery Skimmer Orthetrum villosovittatum, aptly named for the glowing red abdomen of the male.


Just about anyone with a frog pond will have seen them. We could even have called them the Frog Pond Skimmer. It's a puzzle to me why this skimmer should be so powerfully attracted to frog ponds when the far more abundant Blue Skimmer or any of the other common dragonflies are not. The clue might be in the amount of shade in the vicinity of the pond. In the natural environment the Fiery Skimmer prefers creeks with fairly thick vegetation and some shady spots. Fiery Skimmers tend to perch at $45^{\circ}$ on reeds and sedges whereas many of the other local species go
for blazing full sun and perch on open bare ground.

After mating (which is a fascinating subject all of its own!) the female detaches from the male and dips her tail end into the water, whilst still on the wing, to flick off the fertilized eggs. He either flies guard above her to keep other males away or heads off to feed, leaving the business of ovipositing entirely to her. I have seen, on some occasions, the female turn up on her own and begin to lay. Obviously the mating has taken place elsewhere. It's amazing how they find my pond. It's miles from anywhere that I've seen other Fiery Skimmers.

The eggs sink to the bottom of the pond. A short time later the larvae hatch from the eggs and, without feeding, immediately moult into the first stage nymphs. What fisherpersons call 'mud-eyes'. The nymphs, like their parents, are voracious predators of other aquatic beings; yes, including very small tadpoles. BUT, before we think of waging war on my friends the dragons, let me assure you that only the very early stages of tadpoles are vulnerable. Also, the mud-eyes are not targeting tadpoles; the vast majority of their prey is invertebrates not vertebrates. Odonatists (dragonfly nuts) who raise nymphs feed them almost exclusively on mosquito wrigglers. So it is fair to assume that it's mozzies that have the most to fear from mud-eyes.

Like our other friends the frogs, dragonflies lay an awful lot of eggs that never make it to adulthood as they too are part of the food web. The very few that make it to full term (which takes many, many moults, the larva growing larger each time) emerge from the water at night and go through the amazing process of splitting from their 'larval' cases into the flying adults. At emergence the Fiery Skimmer is anything but 'fiery' in appearance. Like many of the dragons in the family Libellulidae, this skimmer has a teneral (or 'immature') stage which is yellow. It takes several days before the fiery red is achieved. Madam never attains the really red colour but her yellow beginnings gradually make it as far as orange.

## Deeeeep End 5

During my daily travels to meet my 3pm appointment with the school gate, I have the pleasure of listening to Radio National's 'Deep End 5'. This brief item has one listening to the favourite 'things' of people from all over this little island of ours. The subject is usually a bit left field; one's five favourite Greek c,ods, printing fonts or Kylie Minogue's outfits, for example. So as my mind wanders (as well as concentrating on the next psychotic driver heading my way at $120 \mathrm{~km} /$ hour just a mere echidna's quill away) I get to thinking; "I wonder if they'd accept my five favourite frogs on the program?!" Rather than risk rejection, I thought I'd take the safe option of writing down my thoughts and seeing which publications are either sharing the same obsession or have a policy of accepting all incoming articles without question!

This is the time of year when, in my role as catchment officer with the Mary River catchment coordinating committee, I follow my ears and eyes up the tributaries of the Mary River to find and record our precions amphibious gems. Our catchment is home to some of Australia's disappearing frogs. Many other species remain although some are present in reduced numbers and some are declining still. The frog diversity of this catchment is fantastic with over fifty species. Ten of these are listed as vulnerable, Endangered or Presumed Extinct; possible causes include habitat destruction, disease, pest species, changes to flow of waterways and pollution. However, as 1 am privileged to study the preferred habitats of our endangered and vulnerable frogs, 1 am usually able to turn up a good set of records on a night (weather and energy level dependent of course). So here are my five favourite frogs: -

No. 1. Giant Barred-frog (Mixophyes
iteratus) - What a gem! What a monarch of the frog kingdom! To find one of these is the icing on the cake. The largest frog in our region, the Giant Barred-frog is stunning in its appearance and behaviour. Even though very well camouflaged to hide amongst the

Leaf-litter, it is hard to miss its large, gold eyes in the torch beam. Its call too is a dead giveaway that one is stoically parked along the creek bank awaiting the woman of his dreams. An Adam's apple is essential to mimic the deep, Rottweilerlike call, sounding much further away than it really is. Once in hand these frogs are docile and extremely cooperative to close inspection, unlike their restless, can't-have-me cousin, the Great Barred-frog (Míxophyes fasciolatus). Although the habitat requirements of these two species overlap I rarely, if ever, encounter them together. One of the other reasons that I like the Giant Barred-frogs so much is because I can see if they have nuptial pads without the assistance of a hand-lens (the over-40's will empathise)!


Míxophyes iteratus
Eva Ford

## No. 2. Clicking Froglet (Crinia sígnifera) -

Despite its name 1 don't come across this species very often but on those rare occasions I just delight in its call (about the only way of knowing that they are around). It is reminiscent of a game of ping-pong (the double bounce version). It is much more relaxing to listen to one than to spend hours trying to find the small, brown frog amongst a tangle of grass. It has a very big voice for such a small body; it does seem that the most penetrating frog calls come from the tiniest species - a bit like humans, I suppose! One great aspect of $c$. signifera is that they remind me that frogs rule' even during winter; the cold temperatures seem to stimulate them to get their bats and balls out and get to the ping-pong table.

No. 3. Southern Orange-eyed Treefrog
(Litoria chloris). These would have to be one of the more stunning of the treefrogs and for this reason are often pictured on cards and posters. Head out after heavy rain and you may be rewarded with a group calling and a visual feast. The immaculate emerald green skin, contrasting fire-red iris and their willingness to perch around human height amongst the vegetation, gives the budding photographer a proverbial banquet. Thank goodness for digital cameras with their inexhaustible picture cards and, of course, the delete function! Timing is all when seeking this species as they like to get down to business during and after heavy Spring and summer rains. Be prepared to get wet for the privilege.

No. 4. Stony-creek Frog (Lítoría wílcoxii). Yes, its scientific name has changed! in the areas that 1 frequent, when all is quiet and frustration starts to set in, old faithful can usually be relied upon to appear. The stonycreek Frog, not often detected by its quiet call (although I have heard some pretty loud individuals), reveals itself by a rustle of the litter or a flash of movement in your torch beam. If you are lucky you might find a stunning male showing off his radiant yellow costume. More often though they are a fawn or chocolate colour, blending in with the sand and gravel bars that they favour. I like to keep a special eye on this species as, even though they are very common along our waterways, they are declining in other parts of their range.


Lítoría wílcoxíi

No. 5. Striped Rocketfrog (Lítoría nasuta). What an athlete! These are the ones that you need a whole tribe of kids to catch and then a firm grip in order to keep hold of the slippery subjects (that's why using a freezer bag as a glove is so good). I rarely get to size or sex these fellas as a quick glimpse is usually all they allow before being shot from an invisible bow to become at one with their surroundings. The challenge with this species is that, besides being difficult to find and catch, its call is frustratingly similar to the Broad-palmed Rocketfrog (L. Latopalmata). As their habitats overlap as well, am always reluctant to record one or the other without seeing as well as hearing the individual.

Those back legs of $L$. nasuta just impress me no end and I will continue my daily walkI jog in a quest to emulate them!

So there's the top five of the many frogs that 1 enjoy finding during my night-time escapades. But what of the frog's favourite five? Here's my guess:

No. 1. Water

No. 2. Food

No. 3. Shelter

No. 4. Mates

No. 5. Peace
of course! unpolluted and abundant (for most species) for living and breeding.
That means lots of invertebrates the essential element for most food chains.
Moist microhabitats, vegetation, leaf litter, logs, household debris for some. opposite sex of the same species preferred. Not to be eaten, captured, tortured, diseased, outcompeted, poisoned.
can we accommodate the frog's requirements into our own lifestyles?

Eva Ford (catchment Officer)

Please contact the Mary River
catchment coordinating committee
for catchment related enquiries on
0754824766 or
mrccc@ozwide.net.au

# TOADS HIT THE TOE AS LEGS GET LONGER 

Australia's hated cane toads are evolving growing faster, longer legs as they rampage through the nations' tropics.

Researchers have clocked the toxic pests hopping up to 2 km in a single night, or more than 50km a year - five times quicker than their predecessors travelled in the 1940's to 1960's.
"There is very clear evidence that the toads are evolving rapidly," says Professor Rick Shine, from the University of Sydney's School of Biological Sciences.

Scientists have been examining the warty pests at Fogg Dam, 60km east of Darwin, for a year, attaching radio transmitters to track how far and fast they can travel.

Their research, published today in the scientific journal Nature, found the first toads invading an area now have longer, faster legs which make up 45 per cent of their body length.

When the cane toad was first introduced in Queensland 70 years ago - in a disastrous attempt to control insects in sugar cane fields - its legs made up about 35 per cent to 45 per cent of its body length, Professor Shine said.
"Frogs and toads generally are slow moving little creatures but our toads are moving northwest, and they are just going as fast as they can."

He said it was possible toads were evolving to be faster because there was some advantage to being first to invade an area - either juicier grubs or less competion for food.

Cane toads have marched across Queensland, northern NSW, and the Northern Territory, poisoning millions of native animals including in World Heritage-listed Kakadu National Park. They now cover more than a million square kilometres of tropical and subtropical Australia.

The report came as the NT renewed its attack on the toad, which is fast approaching Darwin.
Locals are being urged to check their yards and nearby parks for cane toads on March 14 - the official "Not in my Backyard" day of action.

There has been fierce debate over the best way to kill a cane toad since federal MP Dave Tollner last year called on locals to smash them with golf clubs and turn the eradication of toads into a new blood sport.

The RSPCA has urged locals to wipe haemorrhoid cream on toads before humanely freezing them, and community group FrogWatch is mulching up carcasses into Australia's first toad garden fertiliser.

Karen Michelmore Courier Mail 16 Feb 2006

FREE BEER FOR TOADS

TERRITORIANS are being offered free beer in return for live cane toads. The RSPCA, Coopers Brewery and the Cavenagh Hotel have teamed up in the name of animal welfare and the result is that toads can be turned into beer.

Anyone over the age of 18 who captures a toad and delivers it alive to the Darwin RSPCA qualifies for a glass of Coopers beer at the Cavenagh Hotel - up to a limit of six a day.
"We want to encourage the humane treatment of animals," acting chief executive of RSPCA Darwin Lindsay Wilkinson said yesterday. "If you get a free Coopers out of it then it's a bonus."

Cavenagh Hotel general manager Brett Simmonds said: "It's all about the toads, not about the beer." But the toads must be alive. He was keen to make it clear he wasn't starting a roadkill collection. "Healthy, live, no squashed cane toads," he said.

The RSPCA will euthanase the toads with sodium pentobarbitone, an overdose of barbituates administered with a few drops on the skin that kills toads immediately.
(Edited version of story by Ben Langford from Northern Territory Newspaper 20 Mar 06)
Mixophyes fasciolatus Research

The wonderful colour heading on the Frogsheet has been printed for QFS free of charge by

ASCOT PRINT \& DESIGN P/L Ph 32666666

Thanks to Samford.net for hosting our website free of charge.


## Hawaii Fights Caribbean Coqui Frogs

Hawaii has allocated $\$ 4.9$ million and fifty-eight additional quarantine inspectors to fight invasive species including coqui frogs, the amphibian accused of threatening Hawaii's fragile ecosystem.

Three species of 'Caribbean' frogs have been spreading throughout Hawaii's islands. The dull coloured amphibians had gone unnoticed until their loud, piercing calls got concerned officials to take a closer look.

Experts believe the first coqui frog - or frogs came to Hawaii in a plant shipped from Puerto Rico or Florida. The movement of infested plants has further expanded their range and a lack of natural predators has prevented anything from keeping their numbers in check.

While frogs may be viewed as indicators of ecosystem health in other parts of the world, HAWAII HAS NO NATIVE FROGS, therefore, no niche for them to fill in terms of natural ecosystem functions. In Hawaii coqui population densities exceed anything seen in their Caribbean homeland. Eleutherodactylus coqui, E. martinicensis, and E. planirostris are tiny frogs with huge appetites: studies conducted indicate that an infested acre ( 8,100 frogs) could consume as many as 46,000 prey items every night! In a native forest setting, their diet could be Hawaii's endemic insects. Native plants that depend on pollination from particular insects could be indirectly affected, and a disruption to the food chain could impact rare forest birds.

Currently, their known population on Maui is limited to more than 30 sites, and efforts toward containment may halt the otherwise rapid spread of these frogs from turning into epidemic proportions.

However, the immediate economic concern these creatures pose is not in native forests, but rather in world famous resorts. The frogs' repetitive, deafening "whistles" measuring 100 decibels, have been the source of noise complaints from hotel guests and local residents. In addition, these frogs could also threaten Hawaii's agricultural export industry: shipments of tropical flowers or live plants that might have hitchhiking frogs will certainly not be accepted by other states or countries!

The chemical mixtures of citric acid or hydrated lime used for control only kill 80 percent of the coqui in heavily infested areas, and survivors can return to former densities in as little as two months. Officials are looking for other ways to control the frogs. A team of researchers will head to Puerto Rico in August to look for parasites they might be able to bring to Hawaii, said Kyle Onuma of the state Department of Agriculture. Releasing sterile males* to break the reproduction cycle is another possible way to control the frogs, said University of Hawaii-Hilo biologist Bill Mautz.
(Compiled from stories in: Associated Press May 17, 2006; Pat Bily, Invasive Plant Specialist, The Nature Conservancy website (undated))
(* Comments for next issue please. Ed)

## Sick Frogs

If you find sick frogs:
Contact your local QFS co-ordinator, then: -

* Simple cases - TLC or pass onto your local vet (along with our "Basic Care for Injured Frogs" booklet - see page 3).
* Cases that we suspect may involve Chytridiomycosis (for example, if you find more than one sick frog) will be passed on to Dr Pearl Symonds (UQ Vet School) who is researching the epidemiology of this disease.
Please note Pearl can only get the best information from dead frogs if the specimen is recently dead and has been kept refrigerated.

Specimens may have to be frozen or preserved in $70 \%$ methyl alcohol if there is a time delay in getting them to the University.

Sick frogs will be given antifungal and antibiotic treatment as well as supportive therapy.

Taking a photo of the sick frog and emailing it to Pearl with observations is also useful. Address clearly as QFS related email (or it will be deleted) and send to: pearl66@bigpond.com.au

## Frog Jok

Oldies are the best.. I think we have had this before but for anyone who has not heard it here it is again. Thanks Trish (I love it).

A frog goes into a bank and approaches the teller. He can see from her nameplate that her name is Patricia Whack.
"Miss Whack, I'd like to get a $\$ 30,000$ loan to take a holiday."
Patty looks at the frog in disbelief and asks his name. The frog says his name is Kermit Jagger, his dad is Mick Jagger, and that it's OK, he knows the bank manager.
Patty explains that he will need to secure the loan with some collateral.
The frog says "Sure. I have this," and produces a tiny porcelain elephant about 2 cm tall, bright pink and perfectly formed.
Confused, Patty explains that she'll have to consult the bank manager and disappears into a back office.
She finds the manager and says "there's a frog called Kermit Jagger out there who claims to know you, and wants to borrow $\$ 30,000$, and he wants to use this as collateral."
She holds up the tiny pink elephant. "I mean, what in the world is this?"
The bank manager looks back at her and says ...... "It's a knick-knack, Patty Whack. Give the frog a loan. His old man's a rolling stone."

# Butterflies 乡other Bugs in Brisbane 

A community education program

This project will involve a series of workshops and field trips introducing Brisbane residents to the variety of butterflies and other invertebrates in their local area. The aim is to get the Brisbane community to enhance the biodiversity of local habitats, parks and gardens.
The program will comprise the development, promotion, delivery, evaluation and documentation of a range of activities led by highly knowledgeable community members and educators. It is intended to be fun and will take the form of a combination of presentations, day and night time local field trips 乡, activities in parks and bushland in Brisbane throughout 2006. It is aimed primarily at adults and older children.
Next workshop: -
Beetles and Ants
EITHER Brisbane West, in The Gap ward, Sat 24/6/ 2006, 10am-12 noon
OR Brisbane East, in Wishart Ward, Sun 9/7/2006, 10am-12 noon Exact venues will be advised on registration. $\$ 10$ to members of the general public free for BCC Bushcare, Habitat and Catchment group members
For more information about activities or to find out how you can support or be involved with this project contact: -
Helen Schwencke, Director / Secretary community Learning Initiatives Inc.
Phone: +61 738448069
Email: cla@dovenetq.net.au


## THREAT ABATEMENT PLAN FOR CHYTRID

Chytridiomycosis is an infectious disease affecting amphibians worldwide. The disease has been recorded in four regions of Australia, namely the east coast, southwest Western Australia, Adelaide, and more recently Tasmania. This highly virulent fungal pathogen of amphibians is capable at the minimum of causing sporadic deaths in some populations, and 100 per cent mortality in other populations.

This threat abatement plan has two broad goals: * to prevent amphibian populations or regions that are currently chytridiomycosis-free from becoming infected by preventing further spread of the amphibian chytrid within Australia;

* to decrease the impact of infection on populations that are currently infected.

The full report is available in pdf form at http://www.deh.gov.au/biodiversity/threatened/ publications/tap/chytrid/index.html
For hard copies contact the community Information unit : ciu@deh.gov.au or 1800803772

Members - can you give us some comments on this threat abatement plan for the next frogsheet?

## QFs PUBLIC TRUST FUND

The Queensland Frog Society inc. may receive tax deductible donations of $\$ 2.00$ or more, property and bequests. Your donations will assist in research, education and helping to save our frogs. Cheques may be made payable to:

Qld Frog Society Public Trust Fund.

> Thanks to 'Fred', our donation lin, the total is now $\$ 5039.88$

## Stowaway Gambian toad hitches a lift

The richly scented refuge of a training shoe was just too tempting for a stow-away from Gambia. So the African toad hopped in and unwittingly hitched a ride with a British tourist returning home to Birmingham.

Fanes Powell, 40, from Small Heath, was startled when he unpacked his bags after a winter break at Kotu and the globe-trotting amphibian waddled out. "I had just taken a bag of souvenirs out of the suitcase. I was chatting with my partner about how good the holiday had been when we heard a rustling and looked down to see this toad emerge.
"We couldn't believe it - it was the same toad we'd seen on the hotel balcony the night before while we were playing cards. At the time we thought that was his home - we didn't think we'd be bringing him back to ours. We shook everything for creepy crawlies but I never checked my trainers as they were the last things to go in."

As Terry the toad made his crawl for freedom, Mr Powell caught it in a bowl. "He was heading towards the washing machine. I knew I couldn't put him outside as it was too cold, so contacted the animal centre."

Ray Dedicoat of the Hollytrees Animal Rescue Trust collected the toad. It is now acclimatising to an English winter and a diet of worms. "It was $40^{\circ} \mathrm{C}$ when they left the Gambia so we've got him on a heated pad," he said. "We're hoping someone will offer us some advice."
(Edited version of story from the Guardian, UK. 3 Jan 2006 by Patrick Barkham)


Photograph: Trevor Roberts

## RAYS AND MILD CLIMATE <br> DEADLY FOR FROGS

A striped marsh frog finds it tough going when exposed to prolonged ultra violet radiation in mild temperatures. A Brisbane scientist has discovered that even small doses of ultra violet radiation during mild temperatures can be fatal for frogs.

University of Queensland zoology and wildlife biology honours student Vincent van Uitregt has shown that exposure to UVb rays, the sun's most harmful rays, in temperatures as mild as 20 degrees celsius, kills tadpoles in 15 days.

Mr van Uitregt said tadpole growth and swimming ability declined dramatically as the mercury dropped below their ideal temperature of between 25 and 30 degrees. "Results so far strongly suggest that UVb effects on survival and development of amphibians are dramatically exacerbated at low temperatures," Mr van Uitregt said.

To prove the link between temperature and UV radiation, Mr van Uitregt collected 500 striped marsh frog tadpoles from the St Lucia Golf Links. Marsh frogs are common brown frogs found around Brisbane which are sometimes mistaken for small cane toads. Mr van Uitregt exposed the tadpoles to low and high doses of UVb radiation at temperatures between 20 and 30 degrees.

The tadpoles exposed to high doses of UVb rays at 20 degrees died after 15 days while the tadpoles at the same temperature without the UVb exposure survived.

A high dose was 30 minutes under UVa and UVb lamps which was equivalent to about half the radiation from the midday sun on a clear summers day.

Mr van Uitregt said many frogs had built-in defence mechanisms for UV rays which fixed damaged DNA but those repair processes were impaired at low temperatures. He expected UVb and mild temperatures would also harm adult frogs, particularly those living in higher altitudes or in colder environments.

The results correlate with decline patterns in some natural populations at high altitudes.

The 23 -year-old from Loganlea said his research was significant because he had proved that UVb effects on amphibians worsened at lower temperatures.

From University of Queensland media 15 May 2006. More info Mr van Uitregt (0405 504 722, 073365 2516) or
Miguel Holland at UQ (3365 2619)

## DRAGONFLIES OF SOUTH EAST QUEENSLAND

AField Guide by Pic Nattrass

> This is a beautifully presented and welldesigned book and should encourage lots of froggers to get better acquainted with these elegant creatures. All 86 Queensland species are clearly illustrated in colour and magnified views show particular distinguishing features where necessary. The introductory pages explain how to get started, necessary equipment (which is simple), how to use the book and where and when to go exploring. If it wasn't 7 pm on a bitter June night |'d be inspired to try my hand at identification right now! Once you have found your critters the identification keys seem clear and straightforward. To cap it off the book is printed on waterproof paper and has a waterproof cover - very practical.

The book is only available direct from Rice Matrass. Price $\$ 40$ ( $\$ 45$ inc $P \& P$ ).
Ph 32884100 or email nattrass@ine.com.au

## CENSUS FINDS <br> EIGHT FROG SPECIES

A frog census, commissioned by the Victorian Government last year, found eight species of the amphibians across 158 sites around Melbourne. The data provides a snapshot of Melbourne's frog population and will be used to assess the health of habitats and recommend courses of action to better manage the environment and protect important habitats for frogs and other native animals.

Frogs identified in the census include the eastern common froglet, Victorian smooth froglet, pobblebonk, striped marsh frog, spotted marsh frog, southern brown tree frog, whistling tree frog and the eastern dwarf tree frog. Bibron's toadlet was identified in separate surveys and has been listed as a threatened species.

The census is undertaken by more than 1000 volunteers who will be joined by students in a new initiative to take the program into schools. (Edited version of story by AAP in The Australian April 12, 2006)

How wonderful to live in the Brisbane region where we have 36 species...

Ducks "banned "from pond for eating frogspawn
The mallards have been branded a menace by officials because they are eating the frogspawn in the village pond. The community council in Creigiau, near Cardiff, has ordered the birds to be relocated to another pond. Council secretary Alec Davies said: 'There are almost no frogs, newts and stickleback in the pond this year. The ducks are destroying the habitat and we have made a decision to relocate them.' ... A RSPB spokesman said: 'There are lots of other reasons why frogspawn has been delayed this year, including the fact that it has been particularly cold. The main problem with ducks is that if you relocate them there is nothing to stop them from flying back.'" (04/19/06) (Edited: full version at www.ananova.com)

> Thanks to all who sent articles. Please note EVERYONE welcome to submit items. By email (subject line: frogbiz) or post. Deadline for Spring issue is $\mathbf{2 5}$ August. Janet White

If undeliverable, return to Quid Frog Society Inc PO Box 7017
East Brisbane Old 4169

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