## PRESIDENT REPORT by Rod Pattison

Since the last frog sheet the winter months have arrived and with the exception of a few winter breeders most frogs have either dug down into the ground or found a cosy nook or cranny for shelter. I have spoken to many froggers about the past session and although I have been told of several good events, overall it was very quiet. I personally have ventured out on many nights over the session and only had a handful of good frogging nights. I often wondered if a rain dance in the backyard would do any good. (Making sure the neighbours didn't see me of course.) For the moment we froggers will just have to pull on a jumper or two and like our beloved frogs wait for the heat of summer to return. I certainly have high expectations with all the rain dancing I've been doing that there is going to be a monsoonal rain season across Qld this coming summer.

The Tugan bypass is still in the evaluation stage by both the Qld and NSW State Governments and it has again been brought to my attention recently that a section of old growth forest may have been cleared without approval. At least 450 hectares of bushland/wetlands will be destroyed in the construction of this road. The information to hand states that this area has an amazing range of diversity of both flora and fauna many species of which are protected under state and national legislation. Eighteen species of amphibians have been recorded within the proposed route .The hydrology of the last remaining coastal heath (Wallum) on the Gold Coast will undoubtedly be affected. The acid frogs (Crinia tinnula) and the wallum sedge frog (Litoria olongburensia) listed as vulnerable survive in the acidic water that this fragile and delicate habitat provides. Recently colonies of the Green Thighed frog (Litoria brevipalmata) listed as rare were also discovered.

## EXECUTIVE COMMITTEE

## PATRON

Dr Glen Ingram

## PRESIDENT

Rod Pattison - 32646391
VICE PRESIDENTS
Stefan Durtschi - 38916853

## SECRETARY

Jenny Holdway - 33661868
qldfrogs@bigpond.net.au
TREASURER
Karen Tibbits - 33590658
MINUTES SECRETARY
Jennifer Singfield

WEBSITE
www.qldfrogs.asn.au
POSTAL ADDRESS
Qld. Frog Society Inc. PO Box 7017
East Brisbane Qld 4169
NEWSLETTER
Leanne Marshall
(07) 54836938
landwmarshall@bigpond.com

## JUNIOR EDITOR

Katie Harris
QFS SHOP SALES
Jenny Holdway
(07) 33661868

INSIDE THIS ISSUE
Diary Dates 2
Area Coordinators 2
Coordinators reports 3
Article by Greg Czechura 4
Disease Watch 6
Secretary's Snippets 7
Report from Jodi \& John 8
O'Reilly's Trip Report 10

QFS Order Form Insert
By The Frog Pond Insert

## Area Co-ordinators

## ASHGROVE

Jenny Holdway - 33661806
BRISBANE CENTRAL
Stefan Durtschi - 38916853
comlab@onaustralia.com.au
CABOOLTURE/BRIBIE ISLAND
Pauline Fitzgibbon - 3886 9340 A/h
CENTRAL QUEENSLAND
Jodi Jardine - 49782630
jodi03@bigpond.com
COOLOOLA REGION
Leanne Marshall - 54836938
landwmarshall@bigpond.com
FASSIFERN/BOONAH DISTRICT
Rob Morgan - 54637010
GOLD COAST
Shane Ho - 55765462 (A/H)
shaneho@goldlink.aunz.com
IPSWICH
Ric Nattrass - 32884100
nattrass@ine.com.au
LOCKYER
Lawrence Pearce - 54279052
mowerwizard@hotmail.com
LOGAN CITY
Michael Kels - 32876752
Norma Hambling - 32876708
MOUNT GRAVATT
Janet Willoughby - 33433949
janetjeg10@hotmail.com
PINE RIVERS
Shelley Mills - 32854652
jacarandakitchen@aol.com
REDLANDS
Steve Homewood - 38240522
bhomewoo@bigpond.net.au
SUNSHINE COAST
Desley Fricke - 54930031 (Glasshouse)
fricked@bigpond.com.au
Patricia Espin - 54467908 (North Arm)
trish@accesstractorparts.com.au
UPPER BROOKFIELD
Phil Bird - email phil.bird@uq.edu.au
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

| Jul 10 | Mountain to Mangroves Festival at $7^{\text {th }}$ Brigade Park, Chermside. 10.00am to 3.00pm. QFS display and sales |
| :---: | :---: |
| Sept 3 \& 4 | Society for Growing Australian Plants Flower Show. <br> Toowong Botanical Gardens. QFS display |
| Sep 10 | QFS Annual General Meeting. Venue to be advised in the mail-out. |
|  |  |

New Members

The Queensland Frog Society Inc. welcomes the following new members:

Alex Koklas<br>Naomi Nebe<br>Cam McTavish<br>West Moreton Landcare Group<br>Skye Rymill<br>Jennifer \& John McKay<br>David Rogers<br>Abigail Makim.

## President \& Coordinators Reports

## PRESIDENT REPORT (continued)

Recently it was said to me that "if the Government's agenda is to push this road through, come what may why spend millions of dollars on an environmental impact study? I know I am speaking to the converted but by destroying the natural world we will destroy ourselves. I would like to let the volunteers and members of all the nature conservation groups who are valiantly opposing this development know that I wish them success in their endeavours to protect this area.

In regards to the green thighed frog habitat at Joyner, I am pleased to report that progress has been made and is extremely positive. The planners and owners have bent over backwards to assist. After an on site meeting with the head planner where GPS and site measurements of the colonies position were obtained, the development plans have been changed so that not only the main breeding site but also a minor breeding area has been set aside as a frog reserve. This new plan has been submitted to Council and in recent talks it appears the proposal may be accepted. We cannot thank the planner and owners enough for their exceptional efforts to save this beautiful frog from the dozers. The cogs are now in motion and we will all have to wait and see if the final outcome is a success for the frogs.
Until next time keep those headlamps shining and good frogging to all.
Rod Pattison


#### Abstract

ASHGROVE There hasn't been a lot of frog activity around this area in the last 3 months unfortunately but by the phone calls I have been receiving, there have been new sightings in areas that frogs have not been seen for a few years. I am also receiving phone calls and emails regarding deaths or sick frogs and, as you will see, this is the time that Chytrid seems to affect the frogs.


This is a good time to attend to the ponds etc so that all is in readiness for the warm weather.

Jenny Holdway


Frogs Fall Victim to Inner City Living - from "The Australian"
Most of the frog species that once lived in inner city Melbourne have croaked
A survey conducted at 104 ponds across Melbourne found a total of nine frog species, but the southern brown treefrog was the sole inner-city survivor.

The study, conducted by Deakin University Scientist Kirsten Parris, found an important factor in the loss of other frog species from central Melbourne was the steep bluestone or concrete walls surrounding many ponds.
"Most frogs around Melbourne can't climb vertical surfaces so young frogs become trapped in these ponds and drown," Dr Parris said. "But the southern brown treefrog can climb, using its large sticky toes - that's what makes this frog so special."

She said a second reason for the decline of frogs in the city was that urban ponds were isolated from each other by roads, houses and factories. If a population died out, other frogs could not reach the area safely to start a new population, she said. "Frogs cannot cross busy roads without being squashed. I found that the number of frog species at a pond drops as the number of roads around the pond increase."
"There are two simple things we can do to bring more frogs back to central Melbourne - replace steep walls with gradual slopes, and use a carefully-designed program to reintroduce the tadpoles of some species that used to live there."

Male frogs especially spend part of their life-cycle in a tremendous effort to be conspicuous, or at least audible, but where do amphibians spend the rest of their time?

Frogs are very much 'now-you-see-them; now-you-don't' sorts of animals. During a wet spring and summer (or alternatively winter for some), you just can't miss them - what with all those croaking, popping, chattering, whistling, creaking and tapping noises emanating from watery places. Take a torch or spotlight out to one of these chorus lines and you will find the males strutting their stuff on branches, floating plants, the ground or tucked away under leaflitter and clumps of vegetation.
Fast forward a couple of months at the same place and it may be utterly devoid of frogs.
Nowhere is this more dramatic than in the Outback, where it is hard to image a more hostile place for frogs when the cruel heat and blazing sun of summer rest heavily on the landscape. However, just add rain and flood to the picture and it is miraculously transformed: frogs of all shapes and sizes suddenly appear in vast numbers, breed and then disappear when the waters recede.

## Beyond the pond

Such spectacular comings and goings are likely to leave human bystanders scratching their heads in bewilderment, wondering where those froggy multitudes came from and where they went to afterwards. Lamentably, for those among us who regard the $X$-Files as a documentary, the frogs did not originate in some alternate universe. There is nothing weird or supernatural about these 'explosions' in frog numbers.
The key to understanding the phenomenon is water - an essential part of frog biology. Many, but by no means all, frogs begin life as fully aquatic tadpoles and some frogs never really leave water's embrace, even as adults.
Typically, an adult frog's life can be divided into a period of intense, conspicuous activity (breeding season) and a long period of inactivity in some safe shelter - and it is the latter period of their lives that is of interest to us here.
So where do frogs go when they are not serenading potential mates at some swamp? Broadly, there are two strategies that frogs employ to hide themselves away: they can seek shelter in some deep, dark nook or crevice, or they can dig deep into the soil. In both instances the frogs are finding situations where they lie inactive or 'dormant' and safely allow internal mechanisms and the prevailing microclimate to protect them from water loss and adverse conditions.

## Dig it

Let's start with the burrowers. These frogs have broad heads, a spherical body, short limbs, narrow cylindrical toes and hard little structures (tubercles) under their toes and larger spade-like tubercles under their 'heels'. It does not matter if the frog is an Australian scarlet-sided pobblebonk (Limnodynastes terraereginae), a plains spadefoot toad (Spea bombifrons) from North America, a Madagascan green burrowing frog (Scaphiophryne marmorata) or a common Eurasian spadefoot (Pelobates fuscus) - all burrowers share such features.
Burrowing is not a haphazard affair with frogs. Some burrow by digging-in in a circular motion (Notaden, Neobatrachus), others dig-in with their back feet and disappear into the soil rear-first (Cyclorana, Limnodynastes) and a few go at it head-first (Arenophryne, Myobatrachus). The latter, typified by the sandhill frog (Arenophryne rotunda), differ somewhat from other burrowers in that they have a small protective pad on the nose and their front feet are broad and spade-like.
Once the burrower has reached a safe depth, it may then cocoon itself in a veritable 'plastic bag' made by shedding outer layers of dead skin. This film of skin hardens and may reduce evaporative water loss by as much as seven and half times. The frog lies dormant until sufficient rainfall occurs and the soil moisture rises to stimulate the awakening of the frog at some point in the future. This explains the sudden appearance of many Outback frogs - although some are no doubt carried on flood waters.

## Frogs in spaces

Non-burrowers must seek shelter in any suitable natural or man-made crevice. These range from tree hollows, spaces under thick bark, rock crevices, the underside of large fallen trees or boulders, epiphytes, soil crevices, building cavities - and, of course, rainwater tanks and toilet water cisterns make good hiding places for a variety of frogs. Like many small animals, frogs can insinuate themselves into any space where their heads will fit. The hollow interiors of plants like bamboo are ideal shelter sites and they are used by a variety of 'treefrog' frogs worldwide. I have seen photographic sequences of the small Madagascan microhylid Platypelis pollicaris inserting themselves into miniscule holes in bamboo stems. Rainforests are rich in epiphytes and these plants make splendid hiding places for frogs; especially when the plants come with their own water reservoirs. Indeed, in the rainforests of central and southern America, there are treefrogs, glass-frogs, arrow-poison frogs (and others) that never really descend from the tree canopy simply because epiphytic bromeliads and other epiphytes provide both places to shelter, feed and breed!! In Australia, most treefrogs are climbers to some extent, but quite a few, such as the naked treefrog, do spend a lot of time on the ground. They are instantly recognisable by the presence of rounded discs on the tips of their fingers and toes. The bigger the discs, the better the climbing abilities of the frog.

Treefrogs will breed in just about any type of shallow water body: pools along the edges of streams, soaks, swamps, temporary marshes to wheel ruts, livestock troughs and plastic containers. During the non-breeding season treefrogs tend to shelter in thick vegetation, elevated nooks and crannies of all sorts: epiphytes, tree hollows, stumps, posts, under bark, down pipes, rock crevices, spaces in buildings.

Ground-dwellers are recognisable by the more claw-like tips to their fingers, or in the case of the rocketfrogs, tiny discs on their finger and toe tips. In addition, many ground-dwellers have hard, raised tubercles on the soles of their feet - a sure sign of a burrower. Like treefrogs, ground-dwelling frogs will breed in most types of shallow water body - pools along the edges of streams, soaks, swamps, temporary marshes to wheel ruts and garden ponds. Breeding males call from the bases of flooded vegetation, under rocky or earth overhangs, under leaf-litter or on the ground at the water's edge. During the non-breeding season ground-dwelling frogs either burrow or shelter in or under rocks, fallen timber, soil cracks and cavities, leaf-litter and similar artificial conditions.

## Frogs at home

The beauty of frogs is that they force people to look more closely at their gardens as habitat. It is not just a case of planting a couple of food rich trees to attract some lorikeets and honeyeaters.

Buildings also provide excellent froggy retreats. At my parent's home in the southeast Queensland highlands, I regularly find the following hiding in and around the house: bleating treefrog (Litoria dentata), emerald-spotted treefrog (Litoria peronii), laughing treefrog (Litoria tyleri), green treefrog (Litoria caerulea), graceful treefrog (Litoria gracilenta), eastern sedgefrog (Litoria fallax), tusked frog (Adelotus brevis), striped marsh frog (Limnodynastes peronii) and sandy gungan (Uperolia fusca) as well as the occasional rocket frog, whistling treefrog (Litoria verreauxi), clicking froglet (Crinia signifera) and great barred frog (Mixophyes fasciolatus).

My parents had an old-fashioned tin rain gauge and I used to pop the lid for a casual check whenever I walked past. There were commonly three or four species of frogs in residence on a summer day. Laughing and emeraldspotted treefrogs seemed particularly fond of this location, and on one, but only one momentous occasion, I found representatives of all six treefrog species clustered in the gauge's damp sanctuary. Bleating treefrogs were our most common 'house' frog at that time, wedging themselves into weatherboard door and window frames and also into sliding glass door frames, where they sometimes met an unhappy end. They also adored fenceposts, finding security in the many splits, cracks and holes of our old wooden fence.

Those were the days when, if you turned over a rock in your garden, you were pretty sure to find a tusked frog. It's more likely to be a striped marsh frog now. Tusked frogs are, unfortunately, susceptible to the chrytid fungus implicated in the disappearing frog syndrome, but they do seem to be making a comeback. Clicking froglets and great barred frogs usually lived out by the duckpond, but in really wet weather, we would find them in the garden leaf litter.

It was these discoveries - as I became familiar with where to find frogs when they aren't in breeding areas or calling to attract a mate and then later, as I began finding frogs outside their breeding season - that made me realise there is more to a frog friendly site than a pond. The availability of retreats is of crucial importance for local frog diversity, even in your backyard. If you are keen to attract frogs to your garden, don't just focus on the frog pond - make sure that many of different shelter sites are included in your landscaping plans as well.

Greg Czechura works in the Queensland Museum Inquiry Centre (e-mail: gregc!qm.qld.gov.au). Many of his interests are reflected in his regular Scratchings \& Rustlings column for WAM; for this issue, he has foregone the column to concentrate on frog shelters.

This article originally appeared, with full-colour photographs, in Wildlife Australia magazine V42N1, Autumn 2005, pp 10-13. Text reprinted with permission.

Firstly I would like to thank all those observant members of the Frog Society and the general public who I dealt with last year (and 2003) in regards to sick and dying frogs. From that work we know that a disease like Frog Chytrid is alive and well and living in the "burbs.

As part of my research I am still interested in investigating any sick or dying frogs and where humanly possible finding a cause /causes. So if you have any suspicious deaths or a number of ill frogs please contact your local co-ordinator and they will get in touch with me. Obvious cases such as trauma may be dealt with at that level for example: frog just needs a little TLC. But cases that may be frog chytrid for example, knocks over apparently healthy frogs very quickly so if we want to have any chance of working out effective treatments for them, we need to hear about it fast. So far no known treatment works on Australian frogs.

FATS and the Cairns Frog Hospital use malachite green and iodine, and you can no doubt get more details from their websites. I am wary of using those as "White Spot" treatment is teratogenic and toxic and lodine (at very low doses) has been reported as toxic to Poison Dart frogs. It is a good idea to talk to your co-ordinator what you can do in the short term. 1\% lodine has been used in repeated treatments on the large big greens with no ill effect (Cairns frog Hospital), and ARC uses it sparingly on skin trauma. Chlorinated tap water is OK too- that's why we use it in drinking water. You can now purchase "Aquacycline" from the pet stores which is a tetracycline antibiotic and is also very safe to use in frogs at the recommended fish doses, an anti bacterial treatment needs to be used concurrently with sick frog chytrid cases as multiple normally harmless bacteria invades the damaged skin.

If you have a suspect case of chytrid and cannot get it to me quickly I personally recommend keeping the frog on a damp chux that has been smeared thickly (bit like buttered toast) with topical clotrimazole or "Canesten" cream. The frog usually moribund will not move off and this method covers all the ventral surface which is the area usually infected, a small amount can be smeared on the dorsum of the feet. The logic is that even though we can't kill the chytrid lurking inside the skin cells, we can at least kill any free released zoospores and stop them spreading.

Clotrimazole is still one of our most effective antifungal compounds (one or two treatments for 1 hour cures nasal aspergillosus in dogs which usually requires lifelong systemic drugs like Itraconazole), it can only be used topically as only $0.3 \%$ is absorbed through the skin and $3 \%$ through mucus membranes (i.e. gut and nether regions). It therefore has what we call a very high safety margin and is even safe enough to use in pregnancy. If we think of a frogs skin as absorbent like the gut is, then it is unlikely to be taken up in large enough amounts to be toxic, however I would not recommend covering the whole frog in it. I have used this treatment twice a day for 10 days straight on a Big Green with no ill effect, this frog unfortunately did not end up having chytrid but that is another story! The other advantage of course is that one treatment only is required for 24 hrs and you can buy it over the counter.

It appears also that even though frogs sick with frog chytrid are often dehydrated, placing them in a water bath may actually accelerate the infection. Most chytrid including this one that kills frogs are stimulated to release zoospores on contact with water. If possible try to avoid placing frog in a water bath and just keep them in a moist environment.

To be on the safe side with any sick frogs -handle them with your hand in a bag - like you are picking up dog poo. Afterwards discard or clean containers with hot ( $>508$ C) water or household bleach and dry in the sun. Keep sick frogs separate from any healthy ones you may have around. Meanwhile enjoy the what;s left of the summer rain and keep alert for any froggy friends that need help.

## CONGRATULATIONS Pauline \& Mark Fitzgibbon

(Pauline is our Caboolture/Bribie Island Co-Ordinator)

## On the birth of Jake Born April 17

(weighing a healthy 3.310 kg )


## It's renewal Time!

A reminder to members that membership renewal is due at the end of June.

If your membership is due there will be a renewal slip in this issue.
Direct Debt can be arrange through the Treasurer is you find that easier.

To save postage, you will receive your receipt and membership card in your next Frogsheet.

Thank you all for your continuing support to the Society and the frogs - it is only with numbers that we can do some of the good work and help our native amphibians.

## It's renewal Time!

## Frogs Australia Network

are inviting any Waterwatch, Landcare or similar groups to place the details of their groups on their site:
www.frogsaustralia.net.au
Visit the site and see what other groups have registered.

The wonderful colour heading on the Frogsheet has been printed for QFS free of costs by ASCOT PRINT \& DESIGN P/L Phone 32666666

QFS Trust Fund

Balance remains at is $\mathbf{\$ 4 , 9 7 6 . 1 9}$


## Part I - The size of the problem

An international team of more than 500 scientists has compiled the first ever Global Amphibian Assessment (GAA), evaluating the conservation status of every species of amphibian in the world. The assessment was instigated and coordinated by the International Union for the Conservation of Nature (IUCN) and the World Conservation Union. Amphibians, the group of animals that includes frogs, toads and salamanders, have been in rapid decline since the 1970s. There are around 5743 species in the world and almost one third of these are threatened. This is much higher than birds or mammals and amphibian declines are happening much faster. To make matters worse, almost one quarter of amphibians are too poorly understood for their status to be assessed. The worst affected groups are the frogs and toads. In Australia we have about 215 native species, all of which are frogs. Of these, 50 (or almost one quarter) are globally threatened with extinction. Queensland is home to about 121 species of frog and 32 of these (or just over one quarter) are globally threatened.

Globally, some species have declined due to loss of habitat, others due to harvesting for human consumption (especially in Asia). Of greatest conservation concern, however is the large number of species that have suffered 'enigmatic declines’. In other words, the reasons for their decline are not clear. Australia’s frogs are among the worst affected by enigmatic declines. In central Queensland the Eungella gastric-brooding frog, Eungella dayfrog, Kroombit tinkerfrog and cascade treefrog have all suffered enigmatic declines. The Eungella gastric-brooding frog is probably extinct while the Eungella dayfrog and Kroombit tinkerfrog are classed as Critically Endangered, which means they are on the brink of extinction. Several causes have been suggested to explain the enigmatic declines, including disease, increased ultra-violet radiation, chemical pollutants and climate change. In all likelihood, the declines are due to some or all of these (and perhaps other as yet unknown causes) acting together.

Despite these declines, many central Queenslanders have noticed an increase in the number of frogs around their houses this spring and summer - what's going on?

## Part II - Not all frog species are declining

If frogs are declining so badly, why are central Queenslanders seeing so many frogs around their houses this spring and summer? The reason is that some species of frog have not declined (or have declined in some areas but not others) and live quite happily alongside humans. In CQ, the most obvious of these is the green treefrog. Numbers of green treefrogs may have increased since the reasonable falls of rain last summer. Generally, frogs became progressively less visible with each passing year during the prolonged drought. In the case of green treefrogs, most of them probably went into hiding in tree hollows, hollow logs, rock crevices, wall cavities and the like. Some probably died (usually the weakest) and certainly some local populations disappeared as a result of the frog fungal disease chytridiomycosis. Overall, though, most survived to reappear when we received decent falls of rain. The occasional showers that have fallen so far this spring and summer have been enough to keep the frogs active. Green treefrogs are not the only species doing well around town at the moment: graceful treefrogs, eastern sedgefrogs, Roth's treefrogs and striped marshfrogs can all be heard calling on warm, humid nights.

Another amphibian that is doing very well in central Queensland is the cane toad. Introduced in 1935 in an illconceived attempt to control the cane beetle, cane toads continue to expand their range and will soon have reached Darwin. Their spread from Queensland to New South Wales and the Northern Territory has resulted in the decline of many native animals, especially quolls (native cats), goannas and some snakes. Because cane toads are highly toxic, native predators can be killed by just 'mouthing' a toad. Once the predator has died and released its grip, the toad often hops away. To make matters worse, toads breed 'like rabbits'. A female cane toad can lay up to 25,000 eggs at a time and will often breed more than once in a season. Even if $90 \%$ of the offspring die, that equals 2,500 new cane toads!

So, many frogs are in decline but not all and the introduced cane toad is running rampant - what can we do about it?

## Continued from page 8

## Part III - Frog declines - what can be done?

In part 1 we learned about declines in the world's frog species and in part 2 we looked at native and pest species that are doing well. So, what can we do about frog declines in central Queensland? The fate of the most endangered frog species will depend very heavily on the amount of funding committed to research and management of the populations that remain. We also need to make sure that no more of our frogs become endangered. Some species of frog can do well in our back yards. This is good for the frogs but also good for us. They are excellent natural pest controllers as they eat large quantities of cockroaches, locusts and spiders. We can do several things at home:

1) do not move frogs, tadpoles or eggs from one place to another - this will spread diseases and interfere with the frogs' genetic diversity;
2) if you want to handle a frog, wear a freezer bag over your hand, and use a clean bag for the next frog - this reduces the chance of passing disease from one frog to another;
3) create frog friendly habitats in our gardens by providing plenty of shrubs, logs and mulch;
4) if you have a pond, stock it with native fish such as Pacific blue-eyes, which happily co-exist with tadpoles but eat mosquito larvae; plant lots of ground-hugging vegetation around the edge to encourage frogs and deter toads; regularly check for, and remove, cane toad eggs in spring and summer you can also catch and kill the adults (by freezing) if you like - but don't spray them with Dettol as it's cruel and often results in native frogs getting hurt;;
5) keep pets away from the frogs in your yard - if they learn not to touch frogs they're also much less likely to be poisoned by cane toads;
6) avoid using chemicals in your yard as much as possible, don't use them at all near ponds; and,
7) get to know what your local frogs look like - many native frogs are mistaken for toads and killed.

If we can reverse the declines and prevent any more species from disappearing, our grandchildren will also have the pleasure of listening to a chorus of calling frogs on warm, humid nights.

## Further Information

Further information on the Global Amphibian Assessment project can be obtained from the GAA website http://www.globalamphibians.org

Information about creating frog habitats and ponds can be obtained from the Queensland Frog Society's web site http://www.qldfrogs.asn.au/

For further information on the Global Amphibian Assessment, frog declines, threatened frogs research and management or assistance with frog identification contact John Clarke at Queensland Parks and Wildlife Service, 61 Yeppoon Road, Parkhurst (Rockhampton). Tel. (07) 49360511 or email John.Clarke@epa.qld.gov.au

This information was compiled by John Clarke (Queensland Parks and Wildlife Service) and Jodi Jardine (Queensland Frog Society).
4 December 2004
Media contact: John Clarke
Resource Ranger
Queensland Parks and Wildlife Service
Rockhampton
Tel. (07) 49360596
email: John.Clarke@epa.qld.gov.au

Authorities have captured a large cane toad in Darwin's central business district but do not believe the find signals a large-scale invasion of the pests.

The male toad was found in a garden of a city residence, Parks and Wildlife said.
"The toad found is what we call a hitchhiker." Wildlife conservation officer Keith Saalfield said. "It's more likely the toad arrived in town by stowing itself away on a vehicle and hitching a ride into Darwin."

Cane toads have marched across Australia from Queensland where they were introduced in the 1930's to kill pests in the cane fields, to northern New South Wales and across into the Northern Territory.

The front line of toads is near the town of Adelaide River, about 100km south of Darwin. They are expected to arrive in Darwin this wet season, he said.

The poisonous toads have already ravaged the world heritage-listed Kakadu National Park and east Arnhem Land, killing everything from crocodiles to quolls as they head north to Darwin.

## O'Reilly's trip report - March 19/20

## by Lawrence Pearce

It was great to see so many new faces this camp with members from all over Brisbane, Boonah and Toowoomba arriving for our last camp for summer.

The weather was overcast and the forecast was for showers. The camp ground was in the middle of an upgrade with individual tent sites and 6-8 campervan sites (not camper trailer or caravan).

We found 3 species of frogs in the resort's pond: the Whirring Treefrog Litoria revelata, Eastern Sedgefrog Litoria fallax, and I think the Striped Marshfrog Limnoodynastes peronii as well as hearing a Barred frog calling from a dam back down the mountain.

A walk down to the creek revealed a friendly possum and some beautiful glow worms; but not a frog to be heard. On the hike back to camp some lovely gecko's were found on trees and they blend in so well with their surrounding it is so easy not to spot them.

A quick drive down the road to a dam known to produce plenty of frogs and only a couple of barred frogs calling as it was just too cold.

As we were heading back to camp an old empty barn loomed in the head lights and one of the passengers said "that barn's haunted" well with that the driver pulled over and said "lets have a look". Well you have never heard a more deafening silence...... and suddenly "lets head back to camp" 'not tonight maybe next time" so that barn will have to wait for the next camp!!

Till next Spring
Cheers Lawrence

Without a doubt one of the most spectacular Australian amphibians is the splendid or magnificent treefrog (Litoria splendida). In most respects it resembles its common relative the green treefrog (L. caerulea), only everything is amplified. It's like a frog on steroids: bigger and more colourful, with a pair of bulbous parotid glands that would do a cane toad proud.

Surprisingly, for such a conspicuous-looking frog, it was not described until 1977. Confined to the remote Kimberley region of WA, it spends much of its time in the relatively cool microclimate of caves and crevices where it is known to feed on insectivorous bats. How did this frog come out of the closet? Therein lies a tale.

Do you remember the television series 'In the Wild with Harry Butler'? Apparently, so story goes, one night the show featured Lake Argyle and the eastern Kimberley, and Harry appeared with his usual entourage of unusual beasts, including something he referred to as a 'Spotted Green Tree Frog'. Sitting at home watching the show was Dr Mike Tyler, Australia's foremost frog researcher, who promptly recognized the frog as an undescribed species. He traveled to Lake Argyle, collected specimens and the formallydescribed magnificent treefrog came to be.

As a Harry Butler fan, I have the book of the series and, sure enough, on page 26 is a photo of $L$. splendida described as a 'Spotted Green Tree Frog'. In the accompanying text, Harry mentions that 'when he [the frog] gets really annoyed he oozes poison, a white sticky slime'. More recent research on this 'poison' describes it as a cocktail of 30 compounds, some of which are known to slow the growth of infections such as golden staph bacteria and the herpes simplex virus.

Since its discovery, most specimens have been collected in public toilets, structures which must to some degree replicate the cool, damp ambience of caves. Captive females have laid large quantities of eggs: up to 2000 in one case. This has resulted in a number of these treefrogs making their way into zoos and wildlife parks around Australia. The specimen in the photograph is no exception: along with others belonging to Geckoes Wildlife Presentations, it regularly visits schools and other venues in an initiative to better acquaint young Australians with their 'magnificent' wildlife.

Martin and Fiona Fingland operate Geckoes Wildlife Presentations in southeast Queensland (e-mail: geckoeswildlife@yahoo.com.au)

This article originally appeared, with full-colour photographs, in Wildlife Australia magazine V42N1, Autumn 2005, pp 10-13. Text reprinted with permission.

Help help help help help help help help help help help help help help help help help

## Frogsheet Editor Wanted

- Do you have a computer?
- Have access to emails and internet?
- Can you spare a day every quarter (approximately)?
- Are you familiar with Microsoft word or even better, Adobe Pagemaker?
- Want to be a great asset to QFS?

Please phone Jenny on 33661868
Most of the hard work is already done and emailed to you. All you need to do is put it all together and email it back - if you need help, the pro's are just a phone call or email away. Yes, it's that easy. We'd love to hear from you.

Fact or Fiction...... "Exploding toads mystery"

BERLIN: Hundreds of toads have met a bizarre end in Germany in the past few days: they exploded.
According to reports from animal welfare workers and veterinarians, as many as 1000 toads have died after their bodies swelled to bursting point and their entrails were propelled up to 1 m .
It is like "a science fiction film" according to Werner Smolnik of a nature protection society in the northern city of Hamburg, where the phenomenon of the exploding toads has been observed.
He said the bodies of the toads expanded to $31 / 2$ times their normal size.
"I have never seen such a thing" said the veterinarian, Otto Horst.
Explanations include as unknown virus, a fungus that has infected the water, or crows which, in an echo of the Alfred Hitchcock movie The Birds, attach the toads, literally scaring them to death.
-Agence France-Presse- Printed in the Courier-Mail Apr 15 ${ }^{\text {th }} 2005$

## Rainforest Rescue News

Hello Everyone,
I am extremely pleased to advise you that another milestone has been reached in the Daintree Buy Back and Protect Forever Project. Last week our project partners, The Daintree Rainforest Foundation successfully negotiated the purchase of a 5.16 hectare ( 13 acre) property in the Forest Creek area (immediately north of the Daintree River). The rear boundary of the property adjoins the Daintree National Park (World Heritage Area) and the southern boundary is across the road from a State Reserve. The property, and immediate environs, is habitat for a variety of filmy ferns, palms and other rare species and regional ecosystems. The property is also known Bennett's Tree-kangaroo habitat and will provide a valuable corridor from the National Park to the Forest Creek wetlands. As with all of the other acquired properties, the Foundation will arrange for the property to be declared a Nature Refuge, removing all development rights in perpetuity.

Rainforest Rescue would like to thank everybody who has made a donation in the past or in any way assisted with the project.

The seventh property was purchased for $\$ 82,000$, which has significantly reduced the funds available for purchase of the next property. We therefore again invite you to make a tax-deductible donation and help to ensure this important and successful project continues. Please phone 0266291305 or visit www.rainforestrescue.org.au
Kind Regards
Kelvin Davies
Executive Officer
Rainforest Rescue Phone: 0266291395 Mobile: 0427662913

If undeliverable, return to Qld Frog Society Inc
PO Box 7017
East Brisbane Qld 4169
Frogsheet - Winter 05
Print Post Approved
PP424022/00619


POSTAGE PAID AUSTRALIA

