

**PRESIDENT REPORT** by Ric Natrass

We'd noticed them in a couple of supermarket fruit sections for a while but even though they were tagged 'eco-bananas' we weren't really sure what that meant. They are the ones with the red wax tips. At our supermarket we actually had to find an attendant and ask specifically what the red tips were all about. We were given a brochure which had the website information. I'd urge all members with access to the net to have a look at <http://www.eco-banana.com.au/photo1.html>. Although this company is not solely concerned with frog conservation they appear to be trying their best. The management committee discussed this issue at both the January and February meetings and decided we should write to the company and congratulate them on their efforts. One of the happy outcomes from what Pacific Coast Eco Bananas are doing has the benefit of reducing or eliminating the possibility of frogs being accidentally transported all over the country. This problem has plagued us for a long time. It is usually Secretary Jenny Holdway who gets the call to pick up the innocent stowaways and as QPWS frog researcher Keith McDonald pointed out at our second symposium – stopping the transportation at the source is prevention and prevention is always better than cure. We'll be on the lookout for more examples of responsible fruit growers and as we check them out we'll recommend you see for yourself and if appropriate you can support the more frog friendly businesses. At the Natrass house, we choose the Red Tips!

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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



**Mar 20** Frogs of the Brisbane Region. Join Ric Natrass and members of the Frog Society for an afternoon and evening activity. See details on page 8

### April 4

BCC Green Day at Banyo Memorial Park, next to the Banyo Railway Station, St Vincent's Road, Banyo. 10am to 1pm. QFS display and sales.

### April 24, 25

Frog Campout to Charlie Moreland Camping Grounds, Kenilworth State Forest  
Ph: Rod on 3264 6391 or Stefan on 3891 6853 for info.

### May 16

BCC Green Day at Parkland at Pioneer Crescent. Bellbowrie. 10am – 1pm. QFS Display and sales.

### Sept 4

Annual General Meeting. Venue to be advised.



## New Members

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

Porter Family, Eva Ford, Donald Yule, Kevin & Kay Stiller, Mark Harris, Audrey & Francis Harvey, Morris Family, Garry Meredith, Raewyn Simmich, Tim Booth, Julie Kelly, Trevor Collins.

# Coordinators Reports

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## Ashgrove

After a long wait, the rains did come and this area was quite noisy at night.

The Green treefrogs (*Litoria caerulea*) came out of their hiding places along with the gracefuls (*Litoria gracilentata*)– it was good to hear that they were still around.

I can still hear the Eastern Sedgefrogs (*Litoria fallax*) calling from my ponds and have spotted their spawn. The Striped Marshfrogs (*Limnodynastes Peronii*) and Tusked frogs (*Adelotus brevis*) have not stopped calling since last year.

I have begun school and group talks for 2004, which will keep me busy for a time.

Hope you have rediscovered your frogs this year.

Jenny.

## Cooloola

Following recent temperatures of 42 degrees and such high humidity, we were grateful to receive 130mm of rain in one night. This caused the creek and dam to flood, but definitely no complaints from this end, except that we can't gain access to one of our temporary waterholes to see what species of frog is frolicking there.

Our pool is deafening at night with the calls of the Ruddy Treefrog (*Litoria rubella*) and the dam sounds like a huge bowl of rice bubbles popping from the calls of the Striped Marshfrog (*Limnodynastes peronii*).

One downpipe was actually blocked up – not by leaves – but **seven** Green Treefrogs residing there. Other species we have seen and heard are the Broad Palmed Rocketfrog (*Litoria latopalmata*), Graceful Treefrog (*L. gracilentata*), Eastern Sedgefrog (*L. fallax*), Emerald Spotted Treefrog (*L. peronii*), Scarlet-sided Pobblebonk (*Limno. terraereginae*), Ornate Burrowing Frog (*Limno. ornatus*) and too many Toads to count.

Leanne

## Redlands

An introduction from Steve Homewood the new Co-Ordinator for the Redlands Area.

I have lived in the area for many years, am currently President Wildlife Preservation Society Bayside Branch.

I have been involved in Frog groups since they started many years ago with Glen and others. I regularly demonstrate how to build a pond in a frog friendly garden.

As a volunteer I manage a group that maintains a conservation area called the Glider Reserve 56 Hectares.

During recent rains we heard Pobblebonk for the first time in a couple of years.

With Greg Hannam who is passionate about frogs we have protected areas for breeding marked on the maps, there are some 10 species in the reserve.

The recent rains have been great for our green frogs, they used to be so desperate they would call on the noise of a Whippersnipper, meanwhile the neighbours brought over 2 Gracefuls because they were too noisy and kept them awake.

They joined the party over at our place and did not take long to be part of the chorus.

It has been a great breeding season this year, it is invigorating to hear the bush come alive at night with such a cacophony of sound.

Steve Homewood

The Queensland Frog Society welcomes you Steve and thanks for joining us as our Redlands Co-ordinator.

## People Profile

Welcome to "People Profile". Each edition we will introduce you to some of our hard working, dedicated executives and coordinators and find out a little about them.

**Name:** Rod Pattison

**Position:** Vice President

**Live:** Eatons Hill

**Work:** Part Time Unit Support Officer at Bunyaville Environmental Education Centre and self employed in the building industry part time.

**Hobbies:** Frogging and camping

**Favourite Food:** Seafood and Beer

**Favourite Movie:** The Gods Must Be Crazy

**What do you do to relax?** Go camping

**What do you like the most about QFS?** Going on frog camp outs and finding new species.

**Favourite frog:** *Notaden bennettii* Holy Cross Frog

**Favourite place:** Beaches on islands.

**If you had the power to change anything, what would it be?** I would go back to being 17 and have my wife earn more money so I could do more frogging!



### Trip Report – Harry’s Hut by Rod Pattison

It was Friday afternoon; Dan and I stopped in Pomona for some few last minute supplies. As I looked in the direction of where we were heading, all you could see was black clouds lit up by bolts of lightning. South East Queensland has copped some major thunderstorms this year and this afternoon was to prove no exception.

In my younger years I spent a lot of time in this area and memories of floating out of my tent on my air mattress reminded me of just how wet it can be. Unfortunately my memory of the road to Harry’s Hut had faded somewhat since my last visit, but after a slight detour we found the start of the dirt road.

In the pouring rain the four-wheel drive lever was locked in. In spite of the mud and water we reached Harry’s Hut. After setting up camp and a quick bite to eat we were off to see what frogs we could find. The camp area was surprisingly quiet. We could only find three species in the immediate area, so we took to the car and bunny-hopped back down the road.

The storm produced good frogging and by the morning we had found the following species: Green Treefrog, Graceful Treefrog, Eastern Sedgefrog, Laughing Treefrog, Ruddy Treefrog, Broad Palmed Rocketfrog, Striped Marshfrog, Great Barred Frog, Copper Backed Broodfrog, Beeping Froglet, Cane Toad, and the most notable finds were the Green Thighed Frog and Wallum Rocketfrog.

At some ungodly hour (probably 9.30am) the first of my fellow froggers arrived with many more to follow. After setting up camp and catching up with each other, the day seemed to quickly pass and night was upon us. So it was into the cars to see what we could find.

If there is one thing I have learnt about frogging you have to be lucky on the night. Even though the frogs had gone quiet, we still found more than half the species from the previous night. Adding to the many frogs discovered, Mark, our wildlife expert had found many species of snake, (Rough scale, Keelback, Blind) birds and skinks (Velvet tailed gecko and a young pink tongue).

Of course the next day is always the same. Pack up camp, say your good-byes and head home for work the next day. But it always brings a smile to my face when I see a frogger’s vehicle parked on the side of the road knowing its occupants are off in the bush again looking for that elusive plant or animal.

P.S. it was good to see the Fitzgibbon family joining us on our camp.  
Until next time keep those headlights shining and good frogging to all.

## Litoria chloris

### Red-eyed Treefrog

© Mark Sanders 2002 (<http://members.optushome.com.au/faunacorner>)

#### Description

(Barker *et al* 1995; Meyer *et al* 2001) A favourite with the photographers this stunning moderately large frog spends most of its time in the trees. They are generally a rich green above, sometimes with yellow spots or blotches with a white to yellow ventral colouration. The dorsum is smooth. As the name suggests, one of the most attractive features of this is the rich red to orange colouration of the iris which has the deepest colour on the outside. The posterior of the thigh is purple, particularly when breeding. The hands and feet have very large discs and well-developed webbing. The tympanum is distinct.



#### Size

Males = 54-62 mm; Females = 58-68 mm

#### Similar Species

*Litoria chloris* is similar to both *Litoria xanthomera* and *L. gracilentia*. However its distribution overlaps only with the later species from which it can be distinguished by the lack of a pale strip from the nostril to (and sometimes beyond) the eye (present in *L. gracilentia*).



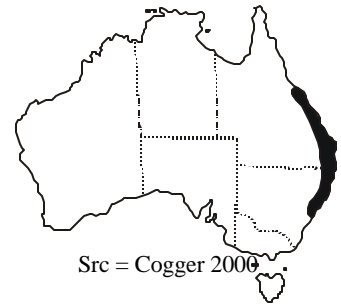
#### Habitat

An inhabitant of wet sclerophyll and rainforest. It is generally an arboreal species that can be very difficult to observe outside of heavy rainfall. During heavy rain, this species assembles in large numbers around permanent and semi-permanent water including dams, shallow pools and in lentic portions of streams.

*Continued page 6*

## Distribution

This species has a patchy distribution from Ourimbah in NSW north to Proserpine in Qld (Anstis 2002). It can be found in both lowland and highland areas.

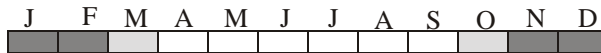


## Call

A series of long drawn-out moans that are often followed by a soft trill. It is thought that the moans are the advertisement call of the species and the trills are an aggressive call to warn off other males (Morrison *et al* 2001).

Calling occurs between October and March with the peak of calling activity usually around November to February (Morrison *et al* 2001). Calling occurs from low vegetation and overhanging branches near to water. Recent studies on this species (Morrison *et al* 2001) have shown that females select smaller males within the species as these call for longer periods.

Calling period:



## Breeding and Larvae

(Anstis 2002; Meyer *et al* 2001) Eggs are laid in several small clusters, often amongst or entwined in submerged vegetation. Larvae emerge from the eggs three days after they were laid take between approximately 40 and 50 days to metamorphose. The larvae are deep bodied, ovoid in shape and have a rounded snout. The eyes are positioned dorsolaterally. The tadpoles tail is long, almost twice as long as the body and has low translucent fins that has dark flecking. The spiracle is sinistral and opens laterally. Labial tooth row formula 2(2)/3(1).

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## ***Mutant frogs make scientists jumpy***

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Source: The Australian

By Amanda Hodge, Environment writer  
January 23, 2004

THEY look like creatures cooked up in Frankenstein's laboratory but, alarmingly, the common green tree frogs that are turning up on the Cairns Frog Hospital's doorstep with too many arms and not enough eyes are occurring in the wild.

The small hospital has seen several severely deformed species in the past week.

One juvenile frog had two right arms and another had one normal eye and one large hollow lump where the other should have been.

What is causing the strange mutations in the creatures is not known but it is not the first time it has occurred.

Last summer three different batches of tadpoles and juvenile frogs were brought to the hospital suffering spinal and leg deformities.

Hospital wildlife carer Deborah Pergolotti believes the same as-yet unknown and unnamed virus pinpointed as the cause of the spinal curvatures last year is responsible for many of the problems this summer.

But that does not explain the serious deformities now being seen and she fears that the problem has accelerated this year.

"I've been doing frog conservation work for 10 years and before that I did endangered frog monitoring and I have never seen frogs like this before," Ms Pergolotti said yesterday.

"If we don't find out what's going on soon, if these deformities are caused by a disease pathogen as opposed to environmental pollutants, it will spread and it might become too late to contain it."

As an important bellwether of environmental health, the decline in frog numbers across Australia and worldwide due to viruses and fungal disease is causing heightened concern among scientists and wildlife carers.

The Cairns region is a particular hotspot for frog disorders.

James Cook University associate professor and amphibian diseases expert Rick Speare said yesterday the incidence of disorders and infections among the region's frogs was particularly worrying and a number of them could be linked.



## Secretary's Snippets

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### **Beenleigh, Gold Coast, Logan, North Qld and Sunshine Coast Members We need your help!**

We require the services of Co-ordinators for the above mentioned areas.

No experience is necessary. All we ask of you is that you will be willing to hold posters for new members and act as contact person for your area. Any tricky emails or phone calls can be easily dealt with via the QFS Committee. If you would love to help us out, please phone Jenny on 3366 1868

### **Join Ric Natrass for an afternoon and evening of "Frogs of the Brisbane Region"**

Ric Natrass will be bringing you this afternoon/evening activity at Brisbane Forest Park on the 20<sup>th</sup> March.

Learn how to identify frogs by their calls and features, then travel by bus to Jolly's Lookout for a BBQ dinner before going frog spotting.

This is a NatureSearch Activity and costs \$22.75 (includes dinner).

Phone BFP on 3300 4855 to book. Limited spaces.

### **QFS Trust Fund**



Balance remains at  
\$4,581.99

### **Donations Accepted**

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**



### ***Interesting Websites***

If you're unsure what frog is calling in your backyard, visit the Queensland Museum website at [www.qmuseum.qld.gov.au](http://www.qmuseum.qld.gov.au) This site lists the common frogs of Brisbane and includes their calls and photographs.

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Frogsheet has been printed for QFS  
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by Pearl Symonds

In this issue of Frogsheet I am going to discuss bacterial disease, next issue-our winter Frogsheet I will cover the most appropriate subject for the season –our favorites of course- fungal disease, but you will have to wait until then!

It is well known that frogs carry on their skins a chemical armory of which scientists are only just discovering the potential. Many of these chemicals are considered to be antimicrobial, the extent and range of microbes they are active against has not yet been studied in detail. I myself have not yet read enough of the massive amount literature that is available on the subject. These chemicals are produced by numerous glands in the skin-collectively called “granular glands”, and no doubt each individual species of frogs has it’s own special form of granular gland secretion and hence chemical armory. It may explain why some species are more prone to disease than others.

As well as a chemical protection from potential microbial disease, frogs possess immune cells very much like those in other vertebrates, they produce antibodies, and have macrophages that phagocytose-gobble up, offending organisms if they penetrate the skin. Of these microbial organisms the best known to us are the bacteria. These differ from the cells in our bodies in that they are unicellular organisms that do not possess mitochondria or an enveloped nucleus with chromosomes and are hence described as prokaryotes.

Most bacterial infections normally affect captive frogs and are most likely linked to a husbandry issue as they are can be most frequently cultured from the aquarium environment. Just about any bacterial species can be involved but of these the following are of most significance.

**Mycobacteria** is a fascinating bug affecting a wide range of animal species and is most familiar to us as the bacterial species responsible for diseases such as tuberculosis and leprosy. It is typically associated with an ulcerative or nodular dermatitis in frogs, and will cause similar wounds or lesions in many other aquatic fauna- turtles and fish. It is a fastidious or fussy grower in culture and as its’ name implies is a fungal like bacteria, in humans it has a tricky way of hiding inside macrophages and avoiding the immune system, only the toughest antibiotics can deal with it. It is generally considered that frogs become infected via an injury, or the animal is stressed or weakened by other disease, the lumps/ nodules are a result of the frogs immune system waging a long and protracted war against the offending organism, forming a granuloma. The main sites for infection are the skin, respiratory system and the gut however these granulomas can be found affecting any of the animals internal organs including the brain. The captive colony of green and gold bell frogs (*L ranaformis* ) at Taronga, have been affected by a wide range of mycobacterium species over the years, with individuals only affected at any time.

Many of you who have read about frog diseases will have come across a disease called “Red leg”. In these texts they will refer to a ubiquitous aquarium bacterium –**Aeromonas**. The name Redleg comes from the hyperemia and haemorrhage of the abdomen and legs, and as I mentioned in the first issue is a general term in frogs for septicaemia. This bacteria causes systemic disease i.e. you will see pathology in many other organs, and is again considered an infection of stressed/ immune suppressed frogs. I am yet to read of any wild cases. Please note that the clinical sign of “redleg” is not confined to this one disease, and will be seen in viral disease as well.

**Chlamydia** (*pneumoniae*), is a more primitive prokaryote, in that its cell membranes are less complex and it is intracellular in that it survives inside other cells, it has been the cause of a few small outbreaks of disease in wild and captive frogs. The disease is multisystemic -can affect any part of the animal and typically causes a characteristic fluid build up- oedema (or edema if you are American), in the abdominal cavity and under the skin. In the frog it can cause an inflammatory reaction similar to that caused by mycobacteria and the fungus mucor, multiple small nodules. Chlamydia has family members famous in wildlife disease for their impact on koalas, as the cause of eye disease in indigenous people and respiratory disease in birds. How it can infect new species especially frogs is intriguing.

In summary bacterial disease can come from any source and it usually requires a stressed/ injured or immune compromised animal to infect. Once it gains a foothold the bacteria can then invade numerous parts of the body usually via the bloodstream. Most if not all diagnoses of bacterial disease needs to be made on identification of the organism in the diseased tissues.

# **AUSTRALIAN BANANAS ARE GOING 'GREEN'**

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from the website of **PACIFIC COAST ECO BANANAS**

As a family owned Australian banana farming business we are marketing an exciting and very different banana product that the Australian public wants to see in the marketplace.

The fruit, known as the 'Wax Tip Eco-Banana' is both the creation and passion of banana farmers Frank and Dianne Sciacca of Pacific Coast Produce, located near Innisfail in the heart of Queensland's banana growing region.

As progressive farmers we questioned how and why we were farming the way we did and how could our farm (the soil) be commercially viable in twenty years time. For the past 5 years we have strived to achieve biological control in our farm production systems thus improving the environmental health of the farm. To achieve this biological control it has meant a significant reduction in the use of Synthetic Fertiliser and Agrichemical inputs, thus leading the way to producing an environmentally friendly banana.

This has also meant that our farm is no longer production driven but achieves eco outcomes set down in our Environmental Management System. Although the changes to our production systems were long, slow but carefully planned ones, there were never any guarantees that these newly implemented environmentally friendly systems would be economically viable. Ultimately it is the consumer who will determine this.

After the satisfactory production of Pacific Coast Eco-Bananas had been achieved, the product needed to be identified. The Pacific Coast Eco-Banana needed to look 'different' from other banana products so that buyers could easily recognise the fruit. To achieve this a distinctive trademark <sup>TM</sup> identification, or the 'Red Tip' was developed.

Pacific Coast Eco-Bananas are dipped in a bright red, green and blue food grade wax at the time of packing on the farm. This gives the ripened product a very distinctive and attractive appearance. Buyers fascinated by the look of the fruit are then able to access point-of-sale flyers and promotional material, which describes the environmental aspects of how the product is grown.

Where to buy in Qld: Brisbane; Fruity Capers – Toowong, Oasis Juice Bar -Upper Queen Street Mall, Samford Village Greens, Village Place – Samford, Woolworths - Selected Stores Townsville: Coles, Emerald: Woolworths, Cairns: Mt Sheridan Shopping Centre, White Rock, Coles – Cairns Central, Cairns City, Toowoomba: Coles Grand Central, Gold Coast – W'Worths Surfers Paradise, Coles Broadbeach, Sunshine Coast: Coles Maroochydore