

President's Report by Rod Pattison

Just a reminder that membership renewals are due and once again our AGM is almost here; QFS survives by the hard work of its volunteers and like all organisations requires a committee to manage its affairs. New committee officers are welcome as they bring fresh approaches and new ideas to meetings. I know for most of us there never seem to be enough hours in the day to finish the 'must do' jobs let alone start on the 'never never' list. If you can find some time please join us at the AGM.

On a personal note, for years I have dreamed about a trip to the Simpson Desert. After years of talking about it with a group of friends we finally got ourselves

organised and did the trip this June. Although I had read a lot about the desert I have to say it wasn't quite what I expected. When you stand on top of a sand dune and look around you wonder how anything could survive in such a harsh environment. However, when you see the hundreds of tracks around the trees that grow on the clay pans you realise the desert is full of life.

Ten species of frogs are recorded in the Simpson; as a frogger I would have loved to see them first hand but, as a traveller, the thought of rain turning the desert into an impassable quagmire, and possibly being stranded for weeks, it was probably better that the opportunity didn't occur. The desert is not a place to be taken lightly and good planning is essential but I can highly recommend

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Jenny Holdway
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FROGSHEET BY EMAIL

We can send the Frogsheet by email (pdf of about 1MB) - or send you an alert by email 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.

AREA CO-ORDINATORS**ASHGROVE**

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Phil Bird **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**QFS AGM**

September 16th **QFS Annual General Meeting**
 Starting at 5pm at Downfall Creek
 Bushland Centre, 815 Rode Rd.,
 McDowall. (See insert).

CAMPS:

21st- 22nd October Rainbow Beach

18th - 19th November Springbrook NP

Contact Rod 3264 6391 or Stefan 3891 6853 for more information.

DISPLAYS:

October 29th Pine Rivers 'Outside & Alive'
 Kumbartcho Open Day, Bunya
 Pine Court, Eaton Hill.
 QFS display & sales.

BCC Green Days, from 10am - 1pm: (provisional dates and venues, please check with Jenny 3366 1868 before attending)

September 10th Robinson Park, Sydney St., Fairfield
 October 22nd Creekside Park, Creekside St., Brookfield
 November 19th Perth St Parkland, Perth St., Camp Hill

WORKSHOPS:

October 20th Frog Workshop at CREEC, 150 Rowley Road, Burpengary.
 Starting 7.30pm. Please phone 3888 8751 to book.

2007
 February 24th QFS Frog ID Workshop, Downfall Creek Bushland Centre, 815 Rode Road, McDowall. 1pm – 4.30pm. Please phone Jenny to book.

WORKING BEES:

Bowman Park: Sunday Oct 1st and Sunday December 3rd.

OTHER EVENTS:

November 4th Theca forum

**NEW MEMBERS**

Kerry Kerschhat, Juliet & Howard Parker,
 Jacinta Hamilton.

President's Report cont'd from page 1

venturing out there; the Simpson has a magic all of its own.

Just a quick update on the Joyner Brevi colony reserve. I recently discovered that before the original owner died (when it was passed onto the next of kin) he wanted to give the property to the council as a nature reserve. For what ever reasons this unfortunately didn't happen. We will just have to put it down as another 'if only' story. The new owners are proceeding with the current development plan and the word is that the machinery will be on site in the near future. It will be our job to monitor proceedings and to ensure the reserve site remains undisturbed. I will update you next frog sheet.

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

Rod Pattison.



CO-ORDINATOR'S REPORTS:

Ashgrove Report:

All is quiet around this area which is normal during winter although I did find a dead Striped Marshfrog in my pond which will go to Pearl Symonds for autopsy. I haven't had any phone calls reporting dead frogs during this season – hope that is a good omen.

The scheduled working bee at the Bowman Park habitat area unfortunately had to be cancelled in August due to Phil's work commitments and I double booked myself. Luckily it is not growing time for the weeds and by the next bee in October some rain might have fallen.

Jenny Holdway

Got a Green Spot on your Newsletter?

This is a gentle reminder that your membership is due and that this might be your last *Frogsheet*. Please ignore this reminder if you have posted your renewal recently.

The Society values your support and it is only through strength in membership numbers that we can continue the work to help our native frogs.

Thank you to the members who have renewed already.

WE WANT YOUR BODY...FOR DISPLAY



(From Strangezoo.com)

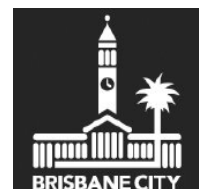
No, no - not like the above..

We need *help* with displays. You don't need to know anything about frogs - we just want your body!

Specifically we need help with **getting displays in & out of cars and setting up as Jenny has hurt her shoulder** and can't do this at moment without agony.

See diary dates for when you can help and phone Jenny on 3366 1868.

A BCC grant helped to
cover the printing
costs of this
newsletter.



WPSQ Fraser Coast Trip.

Carol Bussey, Secretary of the Wildlife Preservation Society Queensland Fraser coast, contacted QFS in April to see if we would give a presentation on the frogs of that area in June.

As QFS had just purchased the equipment to put together power point presentations, I jumped at the chance to learn how to do it. I must add here that I would be still working it out if it wasn't for Janet White whose help was invaluable. With the great slides belonging to Stefan Durtschi, Harry Hines and Ric Nattrass I was able to put together an hour of images to fit in with the area and, with the help of David Stewart's frog call CD, many of the audience started to recognize the frogs in their backyards. If the comments I had during lunch are anything to go by, the participants were pleased that QFS took the time to travel up there.

Carol put together a very interesting day and I understand there were 80 Wildlife Lovers there. Scott Burnett's presentation on the 5 species of gliders and 2 species of possums found in the Hervey Bay area was very interesting, especially on how easy it is to ID the gliders by their calls as, like frogs, they are hard to see. Scott took us out to spotlight the night before and found a koala in the tree looking very contented. I also heard a chorus of *Pseudophryne raveni* in the swamp across the road.

I enjoyed the drive to the North and my 'classic' car did very well. One observation I do have about travelling the highway is that if you keep to the speed limit you are all alone to enjoy the scenery.

Jenny Holdway

AWARD FOR FROG CROSSING

Wendy Morris recently received the FAT and ABLE award for services to frog road crossings.

We have pleasure in printing a photograph of the crossing and the letter announcing the award (together with the delightful drawing on the back of the envelope)



**FAT
+
ABLE**



Wed 28th June 2006

From:

FAT* & ABLE ☼

PO Box 3764 ★

Moonee Ponds

Vic. 3069

Note: This
PO Box may
be OOD due to
the incorporation's
need to be
constantly
hopping around!

Dear Frog Friends @ N° 25.

The Ferny Hills branch of
FAT* have nominated your
household for the annual
"Fine Friends of Frogs" award.

Your property is a local
landmark for frogs to safely
cross the road & as you
would no doubt be aware, 13.7% of all frog
'passings' happen at unsafe road crossings.

I have been 'swamped' by nominations but as the
enclosed photo's show, I flew in from Moonee
Ponds to check out your crossing. Note: These
photo's will be shown only in our bi-monthly "Frogs Forever"
magazine & aren't for general human viewing.

* Frogs Against Toads)

☼ Amphibians for a Better Living Environment)

Amphibiously Yours
Harold T Phrogg ↴
CEO of FAT* & Able. ☼

Monsoon Mouse

Photographed in the northern Indian city of Lucknow, a mouse perches on a frog in waist-deep (for a frog, anyway) floodwaters—a small sign of the early arrival of annual summer monsoon rains.

In drought-stricken areas some rural Indians are holding frog weddings in the hopes that the amphibians' bliss will inspire farm-saving storms. After marking the bride and groom with vermillion and turmeric—traditional adornments in human Hindu nuptials—villagers take the supposedly happy couple to a nearby pond to honeymoon.

"If we get the frogs wedded, the Varuna, the god of the oceans, will bless us with rains," said a farmer in the village of Khapa.

<http://news.nationalgeographic.com/news/2006/07/060705-mouse-frog.html>



Please send us a caption, story, poem or cartoon strip telling us how these two got together or what happened next – or both!

Well, looked more like a toad to us (look at those feet!) so we did a little internet sleuthing and contacted Harry Hines which lead us to decide that this is in fact a toad - probably the Asian Crested Toad, *Bufo melanostictus*.

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

ASCOT PRINT & DESIGN P/L
Ph 3266 6666

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



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 a couple of generous donations and "Fred" the donation bin the total at the end of the financial year was \$5758.86



Photo: Chris Harrison

Typhlonectes natans

Some caecilians lay eggs in damp holes near water. The larvae have gills and a tail and live in water until they have developed a lung and their tentacles (see below) have grown. Other caecilian species give birth to live young which are already adapted to life underground.

Most caecilians are burrowers, living in loose soil or leaf litter of forests whilst some South American species live in water in streams and rivers.

The body shape and adaptations reflect the caecilian burrowing life style. They are slick-skinned, elongate and limbless; they do not even retain a trace of limbs or pelvic girdles as some snakes and legless lizards do. The bones of the skull are thick, hard and heavily fused which, together with the pointed shape, enables the creature to push its way through the soil.

Although caecilians do have eyes they are usually very small and well-covered by skin or bone. Some caecilians respond to light but they cannot detect movement with their eyes. This leads us to another interesting creature feature - the *tentacles* - which are found on each side of the head between the nostril and the eye. This organ, composed of nerves, muscles and glands, assists the caecilian to navigate and find prey, possibly by chemoreception. Prey are usually soft-bodied invertebrates but can include snakes, frogs and lizards.

The mouth is on the underside of the head and there are two sets of muscles used for closing the jaw, both adaptations which facilitate burrowing. (In fact, all other terrestrial vertebrates only have a single set of jaw closing muscles).

Caecilians

Not the subject of the Paul Simon song but the least studied and least understood of the three orders of animals classed within the Amphibia (the other two are Anurans (frogs) and Caudata (Newts and Salamanders)). Caecilians are scientifically known as Gymnophiona.

About 124 species of Caecilians have been found in the tropical and subtropical regions of Central Africa, Southeast Asia and Central and Southern America. Species range in size from about 10cm to 1.5m in length.



An interesting feature of the skin, given that the ancestor of all amphibians was a type of bony fish, is that caecilians possess scales beneath the skin. Like other amphibians, some caecilians do have poison glands in the skin.

J. White

Sources: www.gymnophiona.org
www.sandiegozoo.org

FROG GLUE

Deep in the outback, far underground, lives a small frog that could soon be hopping its way into surgical theatres around the country. The Holy Cross frog secretes a sticky substance from its back that orthopaedic surgeons are excited about – could it be used as a medical adhesive for muscular skeletal injuries?

The frog normally uses this glue to ensnare biting insects for food, but researchers have discovered that it's stronger than any non-toxic medical adhesive on the market.

Herpetologist Mike Tyler discovered the substance when he was out in the bush, handling a Holy Cross frog. It secreted an extremely sticky substance onto his fingers.

He washed with soap and then with abrasives but still could not get the substance off. He found the only way to remove the glue from his fingers was to cut it off with a knife.

There and then at the campsite, Mike began experimenting by gluing other objects together such as paper, cardboard and plastic and even full cans of beer. He found that it would stick things together whether they were wet or dry, cold or hot. He quickly realised that the glue could have significant potential in the field of medicine.

In nature, the frog uses the glue when

attacked by ants or termites. It exudes the glue, the attackers jaws become stuck together and the attacker adheres to the frog. When the frog changes its skin it swallows all the ants at the same time.

Orthopaedic surgeon Professor George Murrell did his first set of frog glue experiments with sheep knees and shoulders from the local butcher. He made

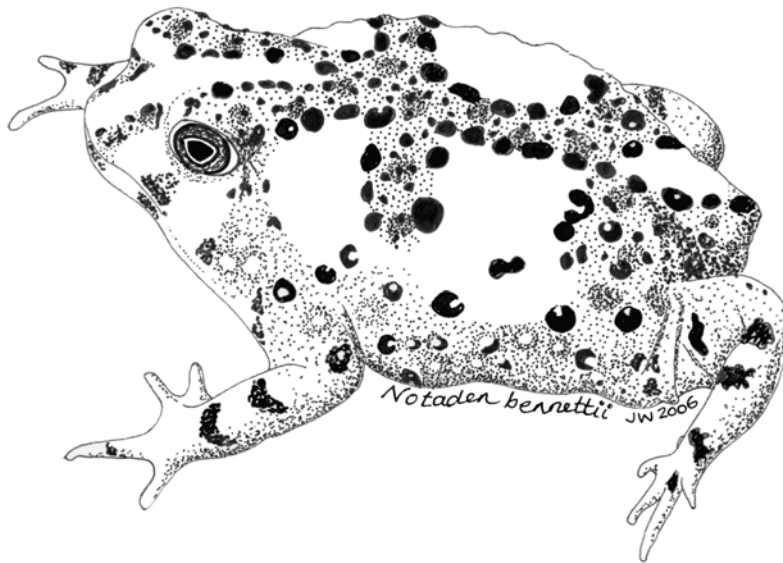
cuts along the meniscus (similar to those you would see in human knee surgery) and then glued these with either the frog glue, super glue or with fibrin glue. Each knee was then pulled apart in a machine to test the strength of the join. Other experiments were performed on sheep shoulders where the glue was

used to reattach tendons.

Although the superglue proved to be strongest, its toxicity renders it unsuitable for surgery. Compared to the remaining surgical glues, the frog glue was impressively superior in strength and other properties.

Another advantage is that the glue sets both in air and aqueous environments. As water is used in knee surgery glue that will set in water is obviously a big advantage.

Don't panic about frogs being harvested for glue - the next step is to make a synthetic version. It is likely to be about 10 years before glue like this gets used in humans.



Edited from transcript of Catalyst:
Frog Glue - ABC TV Science
<http://www.abc.net.au/catalyst/stories/s1705318.htm> 3 August 2006

FROGS ARE FADING OUT, AND FAST

Predicting a mass extinction of the world's frogs, toads, newts and salamanders, 50 international amphibian experts are sending out an unprecedented SOS calling for an urgent global mission. The plea, published in this week's edition of the journal *Science*, is meant to be a wake-up about threats to the Earth's amphibians, considered canaries in the coalmine for all of nature.

"For the first time in modern history, because of the way that humans are impacting our natural world, we're facing the extinction of an entire class of

organisms" Conservation International herpetologist Claude Gascon said.

"This is not the extinction of just a panda or rhino, it's a whole class of organisms."

Amphibians are more susceptible to changes in the environment because they have a permeable skin that absorbs water and oxygen.

Almost a third of the 5743 known amphibian species worldwide already are threatened.

Scientists are calling for a five-year, \$400 million project to pluck certain susceptible species out of harm's way and put them in safe regional breeding and research centres.

John Biemer, McClatchy-Tribune news service in Courier Mail 8 July 2006.

Fungus threat to rare frog species

FROG experts fear a highly contagious disease with the potential to wipe out rare and endangered species has spread to coastal areas of tropical north Queensland. The deadly chytrid fungus has already decimated six frog species in other parts of the country and now threatens several rainforest species, including the white-lipped green tree frog.

Cairns Frog Hospital founder Deborah Pergolotti said the disease was probably carried to Cairns and surrounds from inland areas during the wet season. Several frogs have been sent for testing to determine whether they have chytrid fungus. Ms Pergolotti said the lack of sick frogs being brought to the hospital by locals was a worrying sign that the disease had spread to the north.

"We would rather have a lot of sick frogs coming in the door that can still be saved than not to go through the labour and experience and find out there is nothing to save," she said. "We normally get lots of people ringing up and bringing in frogs but we have heard nothing, and I would consider all frogs to be under threat in Cairns. We already have several other new diseases that have been knocking around the local population for the last eight years, so this is most unwelcome."

Chytrid first attacks the frog's skin and then moves to its nervous system, eventually shutting it down. The disease was officially discovered in 1998, but is believed to have killed Australian frogs for decades.

Ms Pergolotti said diseased frogs needed to be washed in solution and kept in a room with a temperature of at least 37C.

Chytrid threatens to destroy the local populations of the Australian lace lid, common mist and waterfall frogs.

The Cairns Frog Hospital is the only organisation in the country that collects sick frogs from the wild and nurses them back to health. It has so far discovered five frog diseases the federal Government did not know about. However, Ms Pergolotti said the hospital had little money to handle an outbreak of chytrid disease, and was on the verge of financial collapse.

"We ran out of money after the tsunami and donations never recovered," she said. "If this is confirmed as chytrid, I don't know if we will be able to operate. Our electricity bill is going through the roof."

Ian Gerard, THE AUSTRALIAN 19/6/2006

Are you wondering how YOU
can help frogs?

The answer is to join us at **BOWMAN PARK** for the next working bee where we will be maintaining and improving the frog habitat. It'll just take a few hours, it's a lovely park with a great example of creek restoration, you'll meet some nice people and one of them is a great home baker...

Sunday October 1st and Sunday December 2nd. 8am - 11am. Phone Jenny 3366 1868 for more information.

GIANT BARRED FROG & COMMUNITY EDUCATION

At only 115 mm in length it's not exactly gigantic but the Giant Barred Frog is significant. This species - listed as endangered under the *Commonwealth Environment Protection and Biodiversity Conservation Act 1999* - was once found along the eastern seaboard from the Conondale Range in the south east of Queensland to the south coast of New South Wales.

Alarming, its range has contracted from its southern and northern limits and today it's found only in small populations in south east Queensland and northern New South Wales, along shallow rocky streams in rainforest, wet sclerophyll forest and farmland.

Why such a drop in numbers has occurred to this species and other frogs of south-eastern Queensland is unclear, though impacts include habitat disturbance, development pressures, water quality deterioration, pollution and disease. In some instances declines have occurred in undisturbed and disturbed rainforest. Scientists are pointing the finger at the fungal disease chytridiomycosis. Queensland's James Cook University is using \$1.6 million from the Natural Heritage Trust to help understand the ecology of the disease, chytrid fungus, and its relationships with host frog species.

At a local level, the Maroochy Catchment Centre in Nambour is helping with habitat restoration, monitoring and education using a \$17,700 Threatened Species Grant under the Natural Heritage Trust.

There are currently six sites in the Mooloolah River and Maroochy River Catchments that are being revegetated to enhance the Giant Barred Frog's habitat. At two sites in the Mooloolah River Catchment local resident Jan Kesby has planted 100 seedlings and local business Readymix Holdings has put in 50 seedlings. In the Maroochy River Catchment local couple Tom and Brenda Townen have been staking, planting, watering and mulching to prepare a site for 250 native seedlings.

Project officer Sandy McBride says the group's identification and monitoring



protocols were developed thanks to the Queensland Frog Society, which shared their knowledge and experience.

"By attending the Mary River Frog forum with local frog experts we learned about identification skills and impacts on frog population," Sandy explains. "We also accompanied Queensland Parks and Wildlife on three of their monthly surveys for the Giant Barred Frogs in Mapleton Forest where we learned monitoring protocols."

All participants who have received training have also gained a sound understanding of what threats are endangering the species and what actions need to be taken to help reverse the decline. This knowledge is being applied to the properties of those people trained and passed on to the community. Sandy says laminated fact sheets on the three threatened frog species were developed and distributed along with a popular Giant Barred Frog puppet - a huge hit with the kids.

"As part of the group's education campaign we have held six education workshops attracting 300 people, field days, talks and school visits," she says. "Our shop-front now has a range of posters, books and information on the threatened species and we frequently play the CD of Frog species of subtropical Australia."

The exposure the Giant Barred Frog has received has been wide-reaching with the community educated via local radio segments and the local newspapers. Ten community Jobs Plan trainees have received training and visitors attending the Nambour Garden Expo have learned all about the recovery effort.

For more information contact 07 5476 4777 or email waternet@optus.net.com.au

From NHT Journal N0 28 Winter 2006 <http://www.nht.gov.au/publications/journal/pubs/nht28.pdf>

LITTLE AUSSIE BATTLER

I have a frog that was burnt in a drain by dishwasher water. He was in not good condition as his hind leg was black from gangrene.

We were told to have him put to sleep but, being a lover of frogs, I was not ready to give up on him so I brought him home to my green house and kept a close eye on him.

He lost the skin off the leg so the bone was exposed and it was not very pleasant. However, he did not lose too much weight and he was still getting around.

The next time I looked the bone had dropped off. We have had quite a bit of rain here and he would go out at night and return in the morning.

Twelve months on he has a little stump and little pads growing out of it!

We have called him "Little Aussie Battler". I do not know much about frogs - is this rejuvenation is normal?

Maureen Jackson – Jansen, Nth.
Townsville.

AN INCONVENIENT TRUTH

If you only see one film this year make it 'An Inconvenient Truth', general release mid September, voted No 1 documentary at Brisbane International Film Festival this month. Take a friend, spread the word.

Despite the topic (global warming) this is NOT a miserable film and the message I took home was:

We needn't move straight from Denial to Despair, we can stop in between and DO something!

If you can't get to the movie visit www.climatecrisis.net to see what you can do.

You never know when you'll need earplugs..

Frogs croaking near the team hotel in Potsdam contributed to Ukraine's crushing World Cup defeat by Spain, players told Ukrainian media yesterday.

The squad didn't get a wink of sleep the night before Wednesday's game, defender Vladislav Vashchuk was quoted as saying by the daily *Donbass*.

Some players were so annoyed they threatened to go and put a stop to the offending noise, the newspaper reported. Vashchuk was red-carded in the match, which Ukraine lost 4-0.

Transplant hope leaps ahead

Transplant organs may be able to be stored for days or months, rather than hours, in the future, thanks to studies of a tiny Canadian wood frog.

Molecular scientist Ken Storey believes the frog, which freezes for several months during winter, then thaws and leaps into action in spring, is providing clues into how human transplant organs may be stored for longer.

Professor Storey said the frog, scientifically known as *Rana sylvatica* was able to survive with ice in its veins. "Their organs fill up with ice, their cells shrink down and they freeze" he said. "They're in a state of suspended animation"

Professor Storey, of Carleton University in Ottawa, believes that understanding how the frog is able to turn off its organs, then switch them on again when conditions improve, will provide new insights into how to keep human organs alive outside the body for longer
Janelle Miles. Courier Mail – 12/08/2006.

More information at
<http://http-server.carleton.ca/~kbstorey/>
You can download the powerpoint presentation on this topic given by Prof Storey recently at the Intl Congress on Human Genetics in Brisbane.

Plotting the toad's demise

AUSTRALIA'S best and brightest toadbusters gathered in Brisbane yesterday to plot ways to wipe out Queensland's most notorious export once and for all.

Genetic sterilisation, microbes found in wombats and even the toad's own armoury of poisons were all on the agenda, but no one was making promises of an easy solution.

"The community wants more done about the continuing march of the cane toad," Invasive Animals Co-operative Research Centre head Tony Peacock said. "The solutions aren't easy. For example, myxomatosis was first proposed as a control for rabbits in 1908. It finally appeared in 1950 and it's a much simpler problem than this."

CSIRO scientists were working on two approaches, one involving a genetically engineered virus which stopped tadpoles turning into adult toads and another idea which would use a version of the toad's own toxin to kill it.

After several years of research a list of promising proteins and genes had been identified which would be inserted into a virus carrier, CSIRO principal research scientist Tony Robinson said. The challenge now was to find a virus which would spread the genes only to toads or related species, as well as altering the genes so they did not harm native frogs.

Dr Robinson said it might also be possible to find a chemical which shut down a key energy pathway found in toad cells. The pathway, known as a sodium pump, was not affected by the amphibian's own toxins. But if a slightly different toxin was found which could block the toad sodium pump it should knock out toads while leaving other animals unharmed.

Meanwhile, researchers at Brisbane's Institute for Molecular Bioscience have started a one-year pilot project aimed at genetically engineering toad embryos so that only male toads are born. Project leader Professor Peter Koopman said the IMB's work on embryos in other animals showed it might be possible to engineer a toad which laid eggs which could not turn into females.

"The great advantage of this daughterless strategy is it's absolutely species-specific. You can only spread this to other toads which the (altered) toad mates with," he said. "The other advantage is the toads don't die a miserable death. But you would never get rid of every toad. This couldn't be used on its own - it must be part of a multi-pronged strategy."

Even the innocuous wombat could hold the key to halting the march of the warty invader, according to South Australian biologist David Peacock. He was pinning hopes on a chance observation made in 1925 when it was noticed toads died after exposure to a microbe responsible for Chagas disease, a serious human ailment in South America.

"There's no way known we want Chagas disease in this country, but similar trypanosomes (microbes) exist in the common wombat and the platypus as well," Dr Peacock said. "Trypanosomes are very species-specific, so if we look in South America where cane toads aren't found, but ought to be, we might find one which attacks them."

The toad conference, organised by the Invasive Animals CRC and the Queensland Department of Natural Resources and Mines, continues today at Rydges South Bank hotel.

Brendan O'Malley, Courier Mail 6/6/2006

*Thanks to all who sent articles. Please note EVERYONE welcome to submit items. By email (subject line: frogbiz) or post. **Deadline for Summer issue is December 1st**. Janet White*

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

Frogsheet - Spring 2006
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