

NUMBER 23 - MAY 1996 PO Box A2405 Sydney South NSW 2000

THE NEXT MEETING

riday 7th June, at 7:00 pm (yes, 7 pm start this time!)

at the Australian Museum (William St. entrance)

Your membership renewal is due.

SPEAKERS:

7 pm - 8 pm

Tour of Museum's Frog Exhibit (free!)

Frank Lemckert - A frog of the Sydney region:

What goes "crick-crick" and is (probably)

not a cricket?

Everybody

My 5 favourite frog slides

The AGM

President's and Treasurer's reports

Election of new Committee

REGULAR FEATURES

News and announcements, field trips, projects, refreshments! Auction, discussions, arguments, gossip, welcome table! No \$2 door donation for paid-up members: Bring a visitor!



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We hold six informative, informal, topical and practical meetings each year at the Australian Museum (William Street entrance) in Sydney Meetings are held on the first Friday of every even month (February, April, June, August, October. December) at 7 for 7:30 pm. Visitors are welcome. We are actively involved in monitoring frog populations and frog studies, and we produce a newsletter FROGCALL and the FROGFACTS information sheets.

THE LAST MEETING (12.4.96)

he Hypothetical: Lothar Voigt was supposed to talk about Are we counting up the wrong tree?" but decided to preamble this at length by some more cheerful thoughts on the value of good field data, illustrated by how we got into this mess with the Cane Toad. Trouble is, the unsuspecting audience found themselves at the receiving end of a role play. One hapless victim had to become the indignant cane farmer riding down to Brisbane in 1935; then came cockies, townies, a bush ecologist, an aberrant truckie, spokespeople for CSIRO, for Chlorophos, for Forestry, for Cleanup Australia and from the distant future. A very authentic audience who did a great job! (A table of the milestones we covered is on the next page.)

"A frog of the Sydney region", our new series, was inaugurated by Arthur White who presented the Striped Grass Frog (or Striped Marsh Frog or Limnodynastes peronii). Stunning slides of foam nests, baby larvae greatly magnified and tadpoles shot from the bottom towards the surface - no camera is likely to remain dry after this weekend. A graphic illustration of a large taddie's dental ridges ("gently press its mouth against a glass plate"). But there was more: adult males with wrestlers' arms, black ones, brown ones and beige ones. And a handout sheet for everyone who was there. (For those who weren't, its text is reprinted hereunder.)

Frog enquiries which the Australian Museum gets were revealed by Martyn Robinson. There was the pretty little young thing that was brought in, a baby Cane Toad. And there was a large killed Cane Toad a dog brought in (not into the Museum, into its house in Baulkham Hills).

The Museum's frog exhibit will be its main attraction until September and will then become a travelling show. To mark the occasion, the Museum Society will front up weekly evening speakers during May (Tyler, Greer, Mahony, Ingram, not to mention Voigt who only leads people into swamps.)

Both the ruffle and the auction netted FATS a cool \$143. A beautifully painted frog (on a wooden toilet seat) fetched \$65! If we had only been given time to ring our bank manager, the bidding might have gone higher still. A heart-felt thanks to all who donated and to all who underwent Martyn's open-wallet surgery.

Arthur happened to have some Green-and-Golden Bell Frog (Litoria aurea) slides with him: pix of smooth looking ones from Rosebery and sharp-striped ones from the Homebush site. And the Kurnell population looks different again. Extremely good news: At the end of March a translocation of Bell Frogs (Rosebery offspring) occurred from Taronga to the Sir Joseph Banks Park in Botany! (Taronga's F1 generation is now becoming sexually mature.)

And we were treated to a slide of a dense feeding swann of aurea tadpoles. Being bacterial feeders when they're small, they seem to like stirring things up together. There is a large variation in their growth, even in the same clutch under the same conditions

The discussion went from Bell Frogs to New Zealand (where L. aurea is feral in the northern part of the North Island and L. raniformis in the southern part of the North Island), then to the Kiwi's third Australian introduced frog L. ewingi, the Brown or Whistling Tree Frog. From there it was only a short hop to Lithgow, the northernmost record of L. ewingi, as Arthur found. Not only that, at Lithgow it occurs together with both subspecies of the very similar L. verreauxii. (The one with the undivided dorsal patch, the double red groin and the harsher whistling trill is our welltravelled L. ewingi.)

Phil Green, even in his absence, held us captive with well-aimed shots of various Barred River Frogs, of something that looks like (but may not sound like) a Revealed Frog (Litoria revelata) and of a very definite handsome little L. littlejohni, the recently described Heath Frog.

Trevor Quested came back from Madagascar with close-ups of bizarre tree frogs, Mantellas and the famous Tomato Frog.

Greg Little started off harmlessly enough with slides of Freycinet's Frog, the Red-backed Toadlet and the Red-eyed Green Tree Frog. And then he slayed us with three great shots, I mean spectacular: the Eastern Reed Frog, the Blue Mountains Tree Frog and none other than the Striped Marsh Frog!

LV.



Frog Feature: STRIPED MARSH FROG (Limnodynastes peronii)

Introduction: A frog most likely to be found by anyone. Wide-A spread in urban and natural areas. Distinctive species in looks and call.

Appearance: Medium to large, max. 6.5 cm S-V. Brown, longitudinal stripes on back; belly white. Long thin fingers and toes (unwebbed). Iris gold above, brown below.

Sexual differences: No colour or marking differences. Large males have inflated forearms. No distinct size dimorphism between sexes.

Mating call: "Tock"

Reproduction: Foam nests laid, 500 - 1000 eggs per clutch. Males often continue calling from spawning site.

Tadpole: Evenly dark, with no distinct dorsal markings. Lentic (still or very slowly flowing water). Herbivorous. Dental formula:

Distribution: Eastern Australia (Tasmania to N. Qld).

Conservation status: Common all states except Tasmania where species is declining.

Scientific name; Limno = marshes; dynastes = ruler of; peronii = after famous French herpetologist who described many of first frogs from Australia.

A.W.

ON THE VALUE OF GOOD FIELD DATA

The sequence of events that led to the last meeting's Hypothetical and to the eventual resurrection of the Cane Toad:

<u> </u>				
1935	Cane Toads are released near Mackay in Queensland as a biological control for Cane Beetles.			
1940	The toads are well establishes and expanding but without any discernible impact on the beetles.			
1960	Public concern is growing over native predators being poisoned by toads and over the toads' speed of expansion.			
1980	The toad has conquered all of coastal Queensland and is about to invade NSW and the N.T.			
1994	CSIRO announces that a toad virus has been found in Venezuela which they want to test on an off-shore Australian island. Researchers also publish that Cane Toads' diet consists to 90% of termites and ants.			
1995	Toads keep getting found in the Sydney Basin.			
****	******			
1996	Conservationists have begun to release Cane Toads throughout NSW as a means of controlling termites, to reduce the market for termite poison.			
1997	Stock market crisis, and chemical industry in turmoil.			
1998	Half the FATS Group participates in field trips to spread Cane Toads. Anti-pesticide groups join in. Minister commends them.			
1999	NSW Forestry and NPWS begin to realise that the collapse of termite populations has caused fuel levels to build up alarmingly.			
	Half the FATS Group now goes on trips to collect and destroy Cane Toads, to increase termites and reduce fuel buildup. Anti-burnoff groups join in. Minister commends them.			
2000	Homebush Bay is overrun by Cane Toads. In the infamous Toad Riots, the Olympic Village is evacuated amidst sheer panic. Parramatta Road is closed for the remainder of the year.			
2003	Progress is made very slowly this side of the Toad Fence. Following public pressure, NPWS reintroduce termites as a source of food and shelter for native wildlife.			
2005	CSIRO release the Virus.			
2030	Cane Toads have retracted to remnant populations in remote areas of Western Australia and Tasmania. The war is won!			
2031	The FATS Group announces in <i>Frogcall</i> No. 209 that mutated strains of the virus have been found in most of the remaining native frog species.			
2032	Global warming, long recognised, is now politically acknowledged. Much of Australia is declared a disaster zone.			
2033	Worldwide, all non-military industrial CO ₂ emissions are prohibited.			
2034	Old growth forests, identified as net CO ₂ sources due to termite damage and fires, are logge ockpiled. They are hastily replaced by new growth forests as CO ₂ sinks. Satellites confirm the high level of CO ₂ emission by termites feeding on forests and grasslands.			
2035	To combat termites & the greenhouse effect, a virus-resistant strain of Cane Toads is imported into Australia and released near Mackay			
****	******			
3035	Australia is being repopulated by bicycle riders across the new land bridge. They notice that the dominant life form's diet consists to 90% of termites and ants.			
****	******			
4035	The task of regenerating the extinct Cane Toad through reverse transcription of RNA from its co-evolved virus is completed. Just prior to the caretakers' departure, the species will be released in its former native habitat near the archaeological site of Mackay where there is an abundance of Cane Beetles			
.V.	20 10 10 10 10 10 10 10 10 10 10 10 10 10			

LOST ON THE D DRIVE?

It appears that a few of our members may have missed out on their *Frogcalls* recently, and possibly also on their *Herpetofauna*. Please let Jacquie (phone [02] 476 2853) know if you are one of them or if you know of anybody we have lost contact with.

We had to move the membership database between computers and between people looking after it, and we're worried some data got spun off the edge of the disk. Sorry if it was yours.

On a clear disk, as they say, you can seek forever!

L.V.



DARKES FOREST FIELD TRIP

A Darkes Forest on the evening of Friday the 15th of March 1996. The group had been informed of the high frog diversity of the area and peculiarity of some of the frog species that occur there. The group consisted of Arthur White, Robyn Sym, Ken Gover, Pat Bell, Ken Griffiths, Sam Avery and Michael Lee. This excursion was made possible by the consent of Sydney Water to go into catchment areas. Darkes Forest lies on a watershed for three drainage lines; streams flowing north enter the Woronora River, those flowing west enter the Nepean while those flowing south enter the Cataract.

The night was cool, the previous weeks had been dry. So there was some apprehension that few frogs would be seen. First stop was at some detention ponds near the Darkes Forest mine. The group practiced triangulation techniques on calling Verreaux's Tree Frogs, the more ambitious attempted to find Red-groined Toadlets in the grass nearby. Surprisingly, two Heath Frogs were heard calling from the dam; this is the first record of this species for five years at Darkes Forest.

The expedition headed deeper into the Woronora catchment area but spent some time along O'Hare's Creck in search of tadpoles and the odd frog. Frogging along the creeks proved to be fairly disappointing and few animals were seen.

Sad to admit, but the highlight of the trip was not a frog. The group was treated to a good view of an eastern pygmy possum, a shy and difficult to see creature at any time.

A minor hiccup at the end of the trip when we tried to retrieve the parked vehicles from a locked up area, but otherwise it was fun. The group tried to give Arthur vast sums of money and trinkets in repayments for this experience but he modestly refused.

A.W.

THREATENED SPECIES CONSERVATION ACT 1995

In December 1995, the NSW Government passed the Threatened Species Conservation Act. This Act was brought in to supersede the existing Endangered Fauna (Interim) Protection Act, that was appended to the National Parks and Wildlife Act in 1991. The new Act formally ratified elements of the old bill, but also introduced some major changes. The biggest change implemented by the new Act was the inclusion of endangered plant species. Below are some general comments about the old and the new Acts and their implications for threatened frog species in NSW.

The Interim Act recognised a number of threatened species and these were divided into two categories under

Schedule 12 (Endangered Animals). The two categories were:

Threatened Species, and Rare and Vulnerable Species.

Four frog species were listed in the prior category while 15 species were placed in the latter category. Threatened species were those that had undergone a substantial reduction in range and population size; rare and vulnerable species were those that had either lost part of their range or shown diminished populations in certain areas or had critical habitats under threat. When the new Act came into effect, these 19 species remained on the endangered species list, now grouped as Schedule 1 (Endangered Species) and Schedule 2 (Vulnerable Species). Each schedule was divided into four parts. Part 1 being the species lists. Part 2 being lists of endangered populations, Part 3 being lists of endangered ecological communities and Part 4 being a list of species presumed to be extinct. These schedules may be revised and species may be moved in and out of the schedules. Schedule 1, parts 2 and 3 have no entries listed whereas Part 4 lists various bird, mammal and reptile species that are extinct but no frog species is currently listed.

Under the old Act any development that impacted upon an endangered species required a Fauna Impact Statement (FIS) to be carried out. In this statement a detailed site survey and assessment was made as to the likely impact of the development on the survival of the species in the local area, and recommendations were made about how to reduce these impacts. If the development was likely to result in the loss of habitat or result in the death of endangered animals, a Section 120 licence (Take or Kill) was sought after the application of a seven point test. Many of the components of the seven point test have been queried and the test has been replaced by a revised eight point test. The FIS is replaced by a SIS (Species Impact Statement) since plants are now covered by the Act.

One of the more significant changes under the new Act refers to the role of the NSW National Parks and Wildlife Service in issues relating to endangered species. Under the old Act the Service had the power to intervene and stop work in cases where an endangered species was threatened. Under the new Act, these powers have been substantially reduced. Stop work orders still exist but it requires the consent of the Minister.

The emphasis of the new Act is on negotiated settlement. Developers still have to apply to the NSW NP&WS for requirements of the Director-General for that particular work. The NP&WS is also committed under the Act to prepare management plans for all of the endangered species, a truly monumental task.

The Act is still in its infancy and its running is still being tested. How effective the Act will be in protecting endangered species is unknown; only time will tell.

A.W.

COMMITTEE POSITIONS

As you will remember from our last issue, a new committee will be elected at the AGM on 7th June. If you wish and if you haven't done so yet, you can get a nomination form from David Millar, the Secretary (phone 796 8526). For positions that are still open one week prior to the AGM, you can still put your name down at the meeting itself.

You can only vote or be nominated if you are a financial member; ie if you have renewed your membership by 7th June. Remember to bring your money along.

Our Rules of Association require the committee to consist of 4 office bearers (president, chair, secretary, treasurer) and 7 ordinary members (field trip coordinator, exhibition [Frog Week] coordinator, librarian, publicity/media officer and an editorial panel of 3). In addition, we can appoint subcommittees, scientific advisers and others to assist the committee. Here is a brief outline of their functions:

President

- spokesperson for the FATS Group
- presents the views and policies of the FATS Group following endorsement by committee
- FATS liaison officer with other organisations, where no specific liaison officer has been appointed by the committer.
- presides at general meetings and at committee meetings
- organises time and venue of committee meetings and compiles agenda for committee meetings
- is one of the 3 trustees

Chairperson

- in the absence of the president or as delegated by the president, presides at general meetings and at committee meetings and acts as vice president
- organises time and venue of general meetings and speakers and equipment for meetings
- is councillor to the Australasian Affiliation of Herpetological Societies

Secretary

- keeps minutes of all proceedings at committee meetings and general meetings and arranges for these minutes to be signed by the person who chaired the meeting
- keeps minutes of appointments and contact numbers of committee members
- receives and ensures appropriate distribution and action for all incoming correspondence
- · ensures outgoing correspondence is handled as required
- is one of the 3 trustees

Treasurer

- receives all incoming monies
- receipts all incoming monies and forwards receipts to the membership secretary for action
- ensures that all payments authorised by the FATS Group are made
- ensures that correct books and accounts are kept, including receipts, expenditure, assets, credits and liabilities
- prepares and annual financial statement and financial statements for each committee meeting

- ensures financial records are audited
- is one of the 3 trustees

Functions that are distributed among committee members:

Membership Secretary

- maintains membership data base
- · ensures data entry of new member details
- ensures an up-to-date record of current members and their financial status
- provides labels print-out for newsletter envelopes
- ensures mailout of membership receipts with newsletter mail-outs
- key contact for membership enquiries

Field Trip Coordinator

- organises field trip venues and schedules
- organises appropriate leadership of all FATS Group field trips
- · key contact for field trip enquiries

Frogcall editorial panel (3)

- procures or provides content of interest to members
- compiles bi-monthly newsletters by due date
- following agreement on draft, completes layout and organises printing
- coordinates mail-out

Media Officer

- provides media coverage and publicity for FATS
- encourages and provides guidelines for members to seek media coverage and publicity for FATS

Catering Officer

· arranges for refreshments at general meetings

Project Coordinator(s):

Frog Week
Frogfacts editor
individual conservation projects
individual community education projects

School Liaison Officers (2)

- · coordinate all school projects
- key contacts for schools

Public Officer

· provides an annual return to the government

Other positions, not necessarily held by committee members, include:

Scientific Adviser(s)

 input to all key decisions and policies likely to affect the FATS Group's scientific integrity

Membership of subcommittees

· as the need arises and as delegated by the committee

Giselle Howard and Lothar Voigt





LUXURY FROGGING AT O'REILLY'S

Atouse in February and, judging by the success of the event, it will go on to become another of O'Reilly's yearly gatherings in the vein of their long running Bird Week. As a pilot event, Frog Week was held from February 4-9th. About 25 guests signed up with most staying the full length of the program and others catching a day or two. Participants staying all five nights were given a free copy of Grigg, Barker and Tyler's new book and Gordon Grigg autographed everyone's copy.

The guests covered a diverse cross-section ranging from mature couples with a curious interest about the frogs in their yards to dedicated "frog junkies" representing a few groups including the Brisbane Frog Society, Taronga Zoo Friends, RANA and FATS (in the form of Frank Lemckert and myself). Neville Coleman was there part of the week busily adding to his already vast collection of frog photographic material. A TV crew from Brisbane Extra also came by to film and interview organisers about the plight of frogs.

Activities included daytime tadpoleing and night frogging as well as presentations and lectures from researchers of the calibre of Gordon Grigg and Glen Ingram. The itinerary was full-on from 9:00 am to almost 11:00 pm with social activities mixed in with lectures, field excursions and great meals and conversations in the dining room or under the stars at night BBQs. The group was expertly guided and catered to by Dr Ian Gynther from Nature Search (the community data collection program run by the Queensland Environment Department), Michael Cunningham from the University of Queensland and Peter O'Reilly, a knowledgable frog enthusiast himself.

lan and Mike are experienced field people and Ian's enthusiasm for bounding into muddy billabongs looking for that highly venomous snake we saw just a minute ago was most impressive. Not content to retire after each night's frogging, Mike and Ian would sneak off (1 tried to invite myself along but they shrewdly evaded me) to explore more remote spots and lay pit traps until 2:00 am. (Not much fell in generally, but a Red-backed Toadlet (Pseudophryne coriacea) turned up on Wednesday morning.)

Ian and Mike were limitless in their energy and enthusiasm, had a sense of humour and were always prepared to answer questions. Ian set the tone for a fun week during his introductory lecture when he singled me out of the crowd. Apparently, my obsession with Barred Frogs preceded me and when Ian mentioned we might see Mixophyes fleayi that evening, I squirmed in my chair, giving myself away. He immediately pointed to me and said quite seriously, "YOU can't go!" which drew from me a dropped jaw followed by a red face and almost hysterical laughter from the room.

The week itself turned up some valuable statistics and some interesting species including quite a few Mixophyes fleayi tadpoles and adults (creating for me a personal struggle to keep from sneaking them into my bag!). Although others were more interested in Pearson's Green Tree Frog Litoria pearsoniana, the Marsupial Frog Assa darlingtoni or the Masked Mountain Frog Philoria loveridgei, I was thrilled to have a "conversation" with the calling Mixophyes fasciolatus (WARK!). They and seven other species were calling at a small dam on top of Rose and Joe's Lookout. There were enough frogs calling there, including the toadlets Uperoleia fusca and U. laevigata, and the tree frogs Litoria fallax, L. peronii and L. latopalmata that you had to be rather careful where you walked.

The end of the week was particularly exciting for potential research hounds like myself as serious researchers started arriving for the Frog Recovery Team meeting to be held the next day. I relished in the opportunity to catch up with the likes of Mike Mahony and Keith McDonald and was invited to sit in at the meeting as an observer. Unfortunately, Frank and I had to avail ourselves of the only transport out of Lamington that afternoon so we missed out on some interesting discussion.

A summary of O'Reilly's Frog Week wouldn't be complete without more than a few words of praise for O'Reilly's guest house. Unlike the "cold" or sometimes snobbish attitude I've experienced at some Australian resorts, the treatment by O'Reilly's staff is warm, genuinely friendly and first class. O'Reilly's family members are actively involved in management and service to guests and they are keen on enjoying the surrounding wildlife and rainforest. The food is good, plentiful and diverse to include special diets and vegetarians. The dessert table is visited by all for good reason.

Accommodation is at two price levels and tariff includes a comfortable room - many with fine views to spectacular Mt Lindsay - all meals and all guided tours. Guided bird and mammal walks are provided by staff and there are plenty of tracks of different expertise levels for the independent bushwalker. Even diners are treated to the sight of visiting bower birds at the dining room's feeding station.

To say the least, a good time was had by all. Make your booking for the next O'Reilly's Frog Week early or you might miss out!

Deborah Pergolotti

COOKS TRIG STATION

(east side of Grosvenor Street, North Wahroonga)

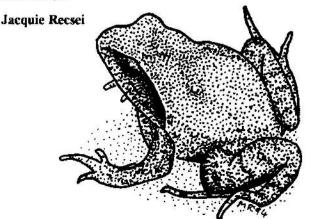
Dr Geoff Ford, a resident in this area, has requested that we let our readership know about concerns for a proposed development site on the Cooks Trig (which dates from the 1880s). Local residents have nominated the site for a Heritage Order under a Local Environment Plan. The Council "would like to hear from bodies supporting this proposal".

The area contains endangered plant species Tetratheca glandulosa, Darwinia biflora and Lomandra brevis. The Red-crowned Toadlet Pseudophryne australis has been found on the site as well as below the site on the fire trail leading from Barton Crescent. (The Ku-ring-gai Council recently dug up six out of the eight sites for Red-crowned Toadlets along this track under the "Bush Fire Control Act".) The resident states that the area supports bushland "not represented in other locations nearby". He also says that there are "remains of Aboriginal rock engravings observed on the site".

The resident has asked the FATS Group to run a field trip in this area. We would like to remind our members that the FATS Group cannot trespass on private property without permission of the owner, however areas in nearby Crown Land can be visited. The Species Impact Statement will be on public display and will list frogs and their habitat found during the course of the study for the SIS.

Frogs found in this area include Uperoleia species, the Wallum Rocket Frog Litoria freycineti, the Striped Marsh Frog Limnodynastes peronii and the Red-crowned Toadlet. The Emerald-spotted Tree Frog Litoria peronii and the Leaf-green Tree Frog Litoria phyllochroa have been found in the lower creekline. The resident also states that the Brown Toadlet Pseudophryne bibronii and the Dainty Tree Frog Litoria gracilenta were found in the area. He says as there are no fruit shops locally, that this record is important as the southernmost record for the Dainty Tree Frog. The "banana frog" assumption for it cannot be ruled out at this stage. An ecologist, Ken Graham, had also encountered P. bibronii, a species that has become increasingly hard to find. A Uperoleia species was found during surveying, which bears a strong resemblance to P. bibronii.

Dr Geoff Ford can be contacted on ph 489 8035 for more information.



FROGBITS & TADPIECES

The Native Animal Keepers Consultative Committee is a new ministerial committee. The FATS Group is represented on it (Arthur and I), along with two umbrella avicultural organisations, the Pet Industry Joint Advisory Council and the Aust. Herpetological Society.

Channel 9's Midday Show: Pandemonium in the studio on 15th March. as Kerri-Anne took flight from Green Tree Frogs and White-lipped Tree Frogs leaping at her. Every time the anchor woman steeled herself to climb down from the chair she had scrambled up on, another frog would dart at her and send her up the chair again. Her other guests, Allan Greer, Nicole Bannister and Kevin Casey, somehow still managed to get a word in for the frogs. Channel 9 did flash the FATS Group across the screen though (yielding 17 phone calls).

Attracting Frogs to Your Garden is the name of Kevin Casey's new book (Kimberley Publications, \$14.95), the book Kerri-Ann used to shoo the frogs away with.

A western Sydney Council. or rather their contractor, was caught by a resident spraying a creek line with Roundup against the bulrushes. Nice to see that the Council was terribly apologetic about the incident and that they now told the contractor to leave froggy places alone.

Marrickville Council, as Dannie was able to announce at the last meeting, has made a grant available for building a new Green-and-Golden Bell Frogs site at the Adderson Road Community Centre!

Mt Annan Botanic Garden will have a World Environment Day on Sunday, 2nd June. Food fair, native plants, beekeeping, over 6 000 visitors, free admission and - but only if you can help - frog posters and frog leaflets. Would be a shame if FATS had to cancel it. Please ring Sue Mossman on (02) 605 8039 or me on (02) 371 9129 very urgently.

Urban releases: The whether or not of lending recolonising frogs a helping hand across local distances - seeing that in many places they can't get from pond to pond by themselves any more. This is going to be a hornet's nest, with opinions still coming in. Are you a pragmatist, a purist, a virologist, a developer, an impatient water gardener? Is it better to research them ad infinitum while they're blinking out, or to start stuffing around now? And if so, with a teaspoon or with a bucket? Send your pros and cons to *Frogcall*, and we'll make a rich stew.

Last Frogcall's quick kids' quiz - Here are the answers:

1b, 2a, 3b, 4b, 5 a or b*, 6a, 7c, 8c, 9a, 10g

L.V.

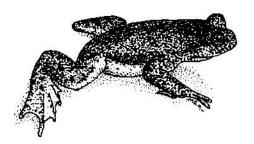
^{*}Poison Arrow tadpoles can catch mosquito larvae, but do you know of any taddies in Australia that can get hold of them? None of mine can. Let us know if yours are any better at it!

Virus is ruled out as threat to frogs

By GREG ROBERTS

Theories that a disease is causing the decline and extinction of Australian frogs have been set back by the failure of scientists to find a virus in tissues from dead amphibians.

Exhaustive tests by the Australian Animal Health Laboratories in Geelong have been unable to identify any known virus in tissues from North Queensland frogs.



In the fastest extinction rate in the recorded history of Australian wildlife, seven frog species in Queensland and two in NSW have not been seen since the late 70s. The populations of another 12 have declined sharply over the same period. This reflects similar declines in frogs overseas, often in pristine environments and usually at high altitudes.

Experts have speculated that this has ominous implications for other life forms because climatic changes caused by the greenhouse effect or the destruction of the ozone layer may be responsible.

However, researchers have increasingly suspected a virus because frog populations being studied in North Queensland in 1993 were decimated within a few weeks and showed signs suggesting disease. In an attempt to solve the mystery, the Geelong laboratories have been examining tissue from these frogs over the past 18 months.

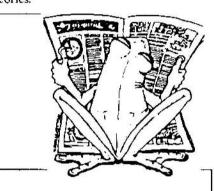
Dr Alex Hyatt, a research scientist at the laboratories, said the frogs did not appear to have died from a known virus. Further studies may determine if an unknown virus is the killer.

The dead frogs have not had a common pathology — symptoms vary between individuals. "We haven't picked up a clear pattern of disease that could be caused by a single organism. It is unclear whether disease is a contributing factor or the sole cause of the decline," Dr Hyatt said.

If a virus is implicated, it could be triggered by an unrelated factor, such as increased ultraviolet radiation due to ozone layer depletion.

ozone layer depletion.

Dr Marc Hero, a research fellow in zoology at James Cook University, said the failure to identify a virus and the absence of a common pathology "blows a big hote" in the disease theories.



IN THE NEXT ISSUE:

- The froggy cologists. What did the heavies say at the Australian Museum? A potted version of Tyler/Greer/Mahony and Ingram, for those who missed out on the real thing.
- Roundup. What you always wanted to know about the report "Acute toxicity of a herbicide to selected frog species".
- The Tadpole Page and Claude will be back. (They seem to get bumped off the end when we run out of space just like
 the frogs themselves.) And more readers' letters. And the first of a series of science reports!

The Committee		phone	fax
Lothar Voigt	President, AAHS Councillor	(02) 371 9129	(02) 371 9129
	FROGCALL ed., Public Officer		
Martyn Robinson	Chairman	(02) 320 6364 (w)	(02) 320 6072 (w)
David Millar	Secretary	(02) 796 8526 (h)	(02) 320 6069 (w)
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Harald Ehmann	ENDFROGS: coord. / data / ed.	018-257 585	(08) 270 3280
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Philip Green	Schools	(043) 897 059	(043) 883 909
Frank Lemckert	Field trips	(02) 487 4345 (h)	(02) 871 6941 (w)
Michael Mahony	ENDFROGS consultant	(049) 772 773 (h)	(049) 216 923 (w)
Jacquie Recsei	Catering	(02) 476 2853	(02) 476 2853
Karen Thumm	Media	(02) 482 1017	(02) 482 1017



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If you can, photocopy it for your friends. Make them feel really guilty about the plight of frogs and of the FATS Group.