

FROG CALL



Number 18 - July 1995

THE FROG AND TADPOLE
STUDY GROUP OF NSW INC.

P.O. Box A2405
Sydney South NSW 2000

The Next Meeting

Friday 4th August, 7:00 for a 7:30 pm start
at the Australian Museum

SPEAKERS:

- JR, KT, LV How to dig a hole in the ground and pour water in
- Lothar Voigt How to feed an awkward frog
- You My 5 favourite frog slides

REGULAR FEATURES

News announcements
Refreshments
Project updates
Informal atmosphere and fun
Discussions
Visitors and neighbours welcome
No \$2 door donation for paid-up members



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The New Committee (and Telephone Enquiries)

Lothar Voigt	President, AAHS Councillor, <i>FROG CALL</i> ed., Public Officer	(02) 371 9129
Martyn Robinson	Chairman	(02) 320 6364
David Millar	Secretary	(02) 796 8526 (h)
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Harald Ehmann	ENDFROGS coord. & data, <i>FROGWEEK</i> (scientific)	018-257 585 fax (08) 270 3280
Giselle Howard	<i>FROG CALL</i> ed., Membership Sec.	(02) 897 5066 (h)
Philip Green	Schools	(043) 882 321
Frank Lemckert		(02) 487 4345 (h)
Michael Mahony	ENDFROGS consultant	(049) 772 773 (h)
Jacque Recsei	Catering	(02) 476 2853
Karen Thumm	Media	(02) 482 1017



As always,
Frogcall is recycled
(the paper, not the content)



The postage costs of
Frogcall are a present from
the Australian Museum this
year.



Current major
FATS Group ac-
tivities

Endangered Frog Survey:

A study of the habitat characteristics, present distribution and population sizes of 21 species of "at risk" frogs in NSW. Partly funded through the National Estate Grant Program.

Frog Week:

First week every November. Many activities take place to focus public attention and interest in endangered frogs. We encourage much public involvement.



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 *FROG CALL* and the *FROGFACTS* information sheets.

The Last Meeting (2. 6. 95)

Frogs of the Dorrigo was Frank Lemckert's slide show of the evening. He was involved in a Forestry Commission survey, to see how frogs are affected by forestry disturbance in the Dorrigo State Forest. Having surveyed 212 aquatic breeding sites and done over 100 road records, he grouped the 29 frog species he found in that area into various categories:

Very common

Crinia signifera

Litoria chloris

Litoria dentata

Litoria peronii - may prefer disturbed areas

Litoria verreauxii - in cleared areas

Litoria vilcoxi (?) - only in cleared areas

Mixo. fasciolatus - very common even in dry areas

More confined

Adelotus brevis - scattered throughout area

Lechriodus fletcheri - common in moist places only

Litoria fallax - in open forest

Litoria latopalmata - in dry forest

Litoria pearsoniana - in forest

Litoria phyllochroa - in cleared areas

Litoria revelata (?) - common in patches

Limnodynastes tasmaniensis - only in a few spots

Limnodynastes terrestrinae

Uncommon

Asa darlingtoni - in undisturbed forests only!

Litoria caerulea - only 1 seen, locals say common

Litoria jervisiensis - moist forests

Litoria subglandulosa - widely scattered, patchy

Mixophyes balbus - also calling around ponds!

Mixophyes iteratus - declining but common in Feb. in a limited stream area in a disturbed plantation with privet

Philoria sphagnicola - not covered by this survey

Not found

Litoria booroolongensis - declined

Litoria brevipalmata

Litoria gracilentia - too cold

Conclusions from the study are:

- The effect of disturbance (including how often / how recent / how much) vs. diversity of frogs did not show up. If anything, the diversity increases with disturbance.
- Whenever a disturbance-prone species (such as *Asa darlingtoni*, the Marsupial or Hip-pocket Frog) is found, a reserve should be erected around that site.

Karen Thuman gave us an update on the Land and Environment Court case against the Red-crowned Toadlets at Allambie Heights. It was a round fought under a tennis court, won by the frogs.

Philip Green put a slide show together to give nightmares to school kids. It started with a Green

Tree Frog in a jar, eyeing the long knife wielded by a drooping cook. Then close-ups of commercial frogs legs being prepared, deep fried and daintily eaten. (While the Americans are trying to breed Green Tree Frogs to resemble Magnificent ones, this murderous cock make them magnificent with garlic sauce. No breeding!)

Next, Phil went on to wielding the April 95 *Scientific American*, with its 6-page feature "The Puzzle of Declining Amphibian Populations". The article explores a number of known and possible causes. Then, Phil went on to produce a March 94 copy of *New Scientist*, implicating the ozone hole for much of a frog's misery. And if that were not enough, he waved in his other fist a fax, fresh from James Cook University, with more recent information on the virus causing regional environmental collapse. It is a water-borne virus, it seems, that is also raging on the other continents. It may have been dragged around the globe by the international trade in ornamental fish, and it spreads rapidly, possibly with birds as vectors. *More on that gloomy note another time - ed.*

Trevor Qwested, Ken Griffiths and Arthur White brought some intriguing slides along. Ken snapped a strange *Litoria verreauxii* and a *L. jervisiensis* with yellow armpits. Trevor saw a Crucifix Toad at Mootwingee (fair enough) but also a Banjo Frog with a marbled tummy in South Australia and a Corroboree Frog in the Brindabellas. Arthur spotted Corroboree Frogs in a hollow rotten log, some of them parasitised and badly crippled by fly maggots. We felt sick in sympathy, but then he showed us a lovely *Peripatus Velvet Worm* and told us about some Green-and-Golden Bell Frog sites.

Glenn Shea reported on the recent licensing proposal offered by NP&WS, which was followed by a great deal of heated discussion by, it seemed, everybody at once. *(Another gloomy topic, best dealt with further down in this issue - ed.)*

There was no time left for the "frogfriendly garden" talk, which is re-scheduled for the next meeting.

The raffle again sported multiple prizes: a family ticket to Sydney Aquarium (donated by Lou Petrucco), fly pupae, pond plants, mealworms and fish that can be trusted with tadpoles. We raised \$69. If you have any donabilia, please bring them to the next meeting!

The Annual General Meeting followed, consisting of the President's report (hereunder), the Treasurer's report (\$806.57 in FATS kitty but quite a few claims not in yet, no claims made on ENDFROGS grant but one in pipeline), and of the election of office bearers.

All committee positions were filled unopposed, with the exception of the Treasurer position which remained unfilled at the meeting. (There were no nominations for this one, nor for the missionary position.) - The subsequent committee meeting then filled the vacancy with Arthur (as Treasurer) and

backfilled his vacated "ordinary" committee member position with Philip. The results are as per the list on the front page. Congratulations, everyone!

L.V.

The Outgoing President's Annual Report

(read out by Arthur White at the AGM
in Harald Ehmann's absence)

Adelaide, 2 June 1995

Welcome to you all, and thank you for staying for our first Annual General Meeting. My apologies that I cannot be with you, but I am thinking of you here in Adelaide even as this is read to you.

Despite the "difficulties of distance" (the "tyranny of distance" is inversely proportional to the thickness of our hip pockets!), it has been a pleasure to serve as your President in this our first year as an independent society.

Many hardworking members have heaved and shoved and strained (not unlike wrestling *Limodynastes*!) to move us forward. And fortunately there has only been the good kind of croaking. Although when it come to croaking some of us have at times even drifted a bit to the far side (or near side?)

Our informality, flexibility, lively style and spirit were again abundantly evident this year. I hope this will always be so.

MEETINGS

We have had six meetings this year, each one has been structured to involve as many members as possible and each has been informative. Thank you to the speakers and members who have contributed so generously. And thank you to the hard working members who have provided the welcome refreshments that generate all that useful discussion.

Committee meetings have been well attended and I thank the committee members for their fine efforts on our behalf. I especially thank Lothar who has taken the chair on my behalf on the many occasions I could not be there.

FROGCALL

Our newsletter continues to go from strength to strength. It is our lifeblood and is always a pleasure to read. It is made possible by an exemplary team: writers, keyboarders, envelope stuffers, copier jockeys and people with a lot of goodwill. Thank you to Lothar, Giselle, Deborah, Martyn and others.

We need more members to help with the newsletter. Please volunteer right now if you can spare some time!

FROG LICENSING AND THE NP&WS

This one is far from pleasing to report on. Negotiations have dragged on now for far too long (perhaps that has been their strategy!).

Recently we received the NP&WS' proposal. It is ludicrous. It completely negates the previous agreements reached between the Service's senior managers and the combined negotiating team from the AHS, the RKA and FATS. In fact, FATS isn't even mentioned as being party to the negotiations! Tadpoles are not even mentioned, despite senior management's decision to exempt them. Many of the frog species are given licensing levels that are absurd! And to top it all off, there is to be no taking from the wild, even of a totally exempt species. This development also flies in the face of the senior management's decision.

The impediments that are planned are serious for us and will choke off the contributions that amateurs can make to the conservation effort.

There will need to be ongoing negotiations, and we need to remain united with the AHS and RKA in this matter.

ANIMAL WELFARE

This is the other thorny one to report on, and after this it's good news!

Our request to the Royal Zoological Society has met with some success. Dan and I asked them to intercede to have the severity of controls relaxed.

The licensing costs are still far too high (\$100 per person per year) and the procedures for obtaining a licence and then for obtaining the authority to work are just beyond many people who do frog work out of a love for frogs. There are usually longwinded, frustrating and unnecessarily bureaucratic delays in getting a licence and the authority.

There are stirrings, however, to review the restrictions and to exempt some activities. My hope is that we will see more than two pamphlets per year about cat or monkey care for our \$100 each. In South Australia the cost is \$15 per year.

Earlier this year, Gerry Swan and I responded to a discussion paper from NSW Animal Welfare sent to the Australasian Affiliation of Herpetological Societies. A copy of these papers is with Lothar.

On this issue, we also need to stay together with the AHS.

FROGWEEK 1994

I was very pleased to see how much frog awareness has become "naturalised" out there in the community. We have done much to bring that about. And Frogweek last year was as successful as in the past, despite the drought. Thank you to all those members who involved themselves in as many ways as possible. The media attention was again excellent, especially in the regions, where it is important.

At a national level it went well too, with activities by local groups and individuals and institutions in every state and territory. The "Frogweek 1994 Resource Kit", which was put together by many mem-

bers (especially Lothar, Martyn, Karen, Giselle, Philip and myself) was instrumental in this national response.

Thank you for a superb effort!

ENDANGERED FROG SURVEY

There is only "mopping up" and last minute survey work to go now, specifically on the autumn and winter breeding species.

Those members who are preparing reports on select species are asked to complete them as soon as possible. Guidelines for report preparation were sent out to them in late March. I would like to get the Report out by the end of July.

We have good data on most species. Many members have spent a host of rewarding hours getting lots of good information and getting closer to frogs. Let us hope they will continue to be around to get close to!

Some members were able to participate in the recent workshop on the Green-and-Golden Bell Frog held at the Australian Museum. It is very pleasing to see this level of interest in frogs. I'm sure Arthur, Michael, Martyn, Shane, Liz, Karen, Jacqui and others will have more to say about the workshop.

And my thanks to Lothar for again acting on my behalf locally to stir up survey action when the drought did break.

CONTACT WITH OTHER GROUPS

Networking. What a lot of it there has been! And in all directions, again by so many of us.

The Frogweek mailouts went all over the country, the guest speakers we have done, the displays, the awareness stands and the personal contacts. All of this is very pleasing and encouraging.

FROGFACTS are still our widest contact medium of all. I am concerned about one aspect: the way we are being used by other organisations. Some outside publications have blatantly plagiarised both our FROGFACTS and our other products. I have seen four unacknowledged major slabs of our information published elsewhere; in two cases authorship is claimed by others! They should know that plagiarism is a form of theft.

I will be writing to them to express our concern. In the meantime further issues of FROGFACTS and other information we produce, already include an acknowledgment requirement clause in our "copying permitted" waiver (see FROGFACTS 5).

I hope those of us with the knowledge and skill can find time to write more FROGFACTS in the near future. They are widely read and well received. A credit to the authors, contributors and the FATS Group!

AND TO THE FUTURE

Meetings, *Frogcall*, negotiations with NP&WS and Animal Welfare, Frogweek and FROGFACTS are already on the agenda.

The next Big One is of course FROGWEEK 95. This year it cannot be a national week - some states have chosen weeks that suit their local conditions. That was expected. I'm confident it will be as effective as it's the last two years. It is bound to be different, because each year new opportunities arise. Aren't we so much like frogs? Opportunism is alive and well!

I wish the incoming committee well. I hope the members continue to applaud your fine efforts.

I believe this coming spring - summer will be a ripper season. All the long-range weather indicators point to a bumper frog season!

I look forward to seeing you all when I'm next in Sydney. It won't be too long and I'm sorry it wasn't tonight.

Keep croaking!

Harald Ehmann
President



A Letter to the Minister

The following letter was sent to the Minister for the Environment. Appended to it is a copy of a letter sent to her department. At the date of this issue going to print (12.7.95), no reply to either letter has yet been received.

Ms P D Allan 15.6.1995
Minister for the Environment
Level 9, St James Centre
111 Elizabeth Street
Sydney 2000

Dear Minister,

- Children who collect tadpoles are currently breaking the law.
- Catching and keeping tadpoles to watch their development into frogs is a long-established community practice. It is for many a cornerstone activity in their development of biological, ecological and environmental awareness.
- It is impossible in most cases for the public and for NPWS to identify the tadpoles they may find.
- It is legal to buy a frog field guide but illegal to pick up a Schedule 12 frog to identify it.
- The public cannot take common frogs into or out of their own gardens (although important frog swamps can be drained!)

- **There is much community interest in the plight of frogs but the law disempowers them from helping.**

The Frog and Tadpole Study Group of NSW Inc is a society of amateurs and professional biologists who are concerned about frog conservation and about the present shortage of basic knowledge and of community education on frog issues.

Our 300 members are engaged in making their gardens or properties frog friendly, in frog keeping and other practical frog studies. We stage an annual Frogweek and an ongoing Australian Frog Count with wide public participation and media coverage; we are conducting an Endangered Frog Survey (for which we received a \$31,000 DEP grant); we are the inheritors of the Frogwatch programme and are implementing a frog component into Streamwatch.

For these activities we need the ability to enthuse school children and to involve the public at large. And licensing requirements as currently proposed by NPWS are not helping with it. We feel they have gone right back to square one.

We are particularly alarmed over, as we see it, a sudden haste by the Service to finalise licensing for birds and to throw frogs in with them, with little consideration for anomalies such as the examples highlighted above.

A meeting of our representatives with you would be most appreciated.

Yours faithfully,

Lothar Voigt
President
(Tel: 371-9129)

encl

15. 6. 1995

Mr Alastair Howard
Executive Director (Operations)
National Parks & Wildlife Service
PO Box 1967
Hurstville 2220

Re: Licensing Proposal for Frog Species

Dear Mr Howard,

I am writing to respond for the FATS Group to your letter of 19. 5. 95, which you had addressed to Mr Gerry Swan of the AHS and of which he forwarded a copy to us.

As you may be aware, the FATS Group was until October 1994 a Special Interest Group of the Australian Herpetological Society Inc but has since then been incorporated in its own right, with a membership of over 300. We have an excellent working arrangement with the AHS, and the FATS Group will be commenting on aspects of your proposal relating to amphibians.

You may also recall that the FATS Group has been involved in discussions with your Service, along with the AHS, RKA and with individual professional herpetologists. A joint proposal to your then Acting Director General, Dr Shepherd, was formulated about one and a half years ago.

Whilst we appreciate that you have now recommenced steps to remedy the present confusing and unsatisfactory situation, we would like to see that licensing does not become counterproductive by impeding public and amateur participation in frog conservation. However, your present draft gives us reason for concerns in the areas of collecting frogs and tadpoles, of handling for identification in the field, of species in your exempt and licensing categories and of the reporting and fee structure for licensing. We hope that you will see our input as constructive and as assisting in the development of a rational working system.

Collecting of frogs: In our view there has been a most significant improvement in the legal protection afforded to endangered frogs since the habitats of Schedule 12 frogs have become protected in December 1991. I am sure you will agree that the other measure taken at the same time, making the collecting of all frogs and tadpoles illegal, had no discernible effect on population densities. We cannot point to a single species where non-commercial collecting would have reduced population densities, either prior to that date or now.

The reasons we nevertheless support a ban on collecting (but not on handling for identification) of rare and endangered frogs are simply to err on the safe side and because it may assist you in enforcement of habitat protection. Rare frogs in NSW are too difficult to find to have ever attracted a level of collection that could compare with natural mortality losses. Because of the FATS Group's ability to engage in scientifically supervised licensed captive breeding and in non-captive breeding programmes of rare and other frog species, licensing requirements should not have the effect of discouraging such activities.

Recommendation 1:

That frogs on the exempt list can be collected from the wild (for non-commercial purposes) without a licence, and that frogs on the Class 1 and Class 3 lists can be collected by holders of such licences.

Recommendation 2:

That frogs can be caught, identified and immediately released in the field without a licence. (This is an important component of the Frogwatch, Streamwatch, Australian Frog Count and Endangered Frog Survey projects, for which broad community and school involvement and volunteer participation are required.)

Collecting of tadpoles: There is an obvious practical reason why collecting tadpoles cannot effectively be banned: children will continue to do so anyway. Furthermore, they should be supported

in this, with guidance, to allow them to experience an educational aspect of nature to which they will readily take and to develop an early interest in wildlife conservation.

As you are well aware, the non-commercial collecting of tadpoles is of no ecological consequence, as all commonly encountered frog species are explosive breeders which produce far more tadpoles than can be sustained. Where the environment remains intact, it is often the biomass of tadpoles that drives whole ecosystems. Any tadpoles collected then will - imperceptibly - reduce the food availability to scavengers and predators, rather than the size of the adult frog population.

Whether a "bag limit" would have a positive practical or educational effect is not clear to us. We are however certain that ecologically it would also be insignificant. We would be happy to assist by providing educational material on tadpole rearing, which could include any topics of concern to you.

Tadpoles of Schedule 12 species cannot be treated differently as they can't be recognised by the public, or by Service staff for that matter. They are not likely to be encountered.

Of the two issues, licensing after metamorphosis and preventing translocations, we view the second problem as the more important one. We would therefore not support a requirement that froglets be either licensed or released immediately after metamorphosis. As a batch of tadpoles will never metamorphose at the same time (it is more typically over a period of six months depending on a range of circumstances), it would be counterproductive to require too many trips for release at the site of origin. Added to this is the poor resemblance of very young frogs to the adults described in field guides, so that in many cases neither the public nor NPWS officers will be able to ascertain whether the frogs are exempt until they are three to six months old.

Recommendation 3:

That all tadpoles are exempt from licensing, and that they can be taken from the wild.

Recommendation 4:

That juvenile frogs be exempt until they can be clearly identified, and that up to six months after metamorphosis should be allowed.

Recommendation 5:

Where tadpoles and frogs are released, this must be done at the site of origin if it still exists, otherwise at a suitable site as close to the site of origin as possible.

Exempt species and species for Class 1 and Class 3 licences and prohibited species: We do not understand why so many frog species proposed for the exempt list by us, the AHS, RKA and independent senior scientists, were moved by you to Class 1, and from Class 1 to Class 3 or the pro-

hibited list. We are not aware of any ecological or other concerns that would justify this action, and we feel your proposed list is counterproductive. It would inhibit public and amateur involvement in frog conservation; it would drown out the species requiring monitoring with a morass of others; it would continue to give the impression the Service is antagonistic to public and amateur involvement in frog studies and it would needlessly increase the burden of paperwork for both sides.

Needless to say, for any frog species that could not be legally obtained from the wild, it would be impossible to undertake captive studies or captive breeding by amateurs altogether, as no captive-bred frogs of any species other than the two or three most common ones are at present available. Amateur involvement in frog studies has been and should continue to be an essential major element in the collective effort being made to gather the necessary ecological data to manage frog populations.

At the June FATS Group meeting our members have expressed much concern and distrust of a situation where in the end very few suitable frogs are obtainable from the wild, with the list of frogs available on licence uselessly swelled by species that are unavailable in practice. There is much potential bitterness amongst our members on this issue that would need to be addressed.

Recommendation 6:

That the list of frog species for exemption and for Class 1 and Class 3 licences and for prohibited species, as proposed by the AHS, RKA, FATS Group and independent senior herpetologists (and not the list proposed by NPWS on 19. 5. 95) be used as a basis for discussion of a final list, and that such a discussion take place as soon as possible.

Reporting and fee structure for licensing: In order to generate public and membership enthusiasm in frog studies and frog conservation, we would prefer an annual instead of a six monthly return for Class 3 licences. It would equally assist the Service in concentrating resources where they are most effective, in particular if the list of frogs requiring licences is kept manageably small. With frogs, we also expect there is too little activity outside the breeding season to make six-monthly reporting relevant.

We assume that your reason for preferring six monthly reporting is for monitoring purposes of frogs taken legally from the wild. As the losses of frogs through natural causes is totally unknown (though vastly larger than any figures available for monitoring), we suggest that such fine tuning is not feasible.

Recommendation 7:

That annual reporting by Class 3 licence holders should be sufficient.

Unless your fee structure is intended as a discouragement for studying those frog species that need it

the most, we suggest a uniform low fee for all licence holders. We find the voluntary work of the younger and the retired sections of the community of particular value to our conservation programmes and rewarding to themselves. It is precisely these less affluent sections that would be singled out and disproportionately demotivated by high licence fees.

Recommendation 8:

That fees for Class 3 licences should be no higher than for Class 1 licences.

The FATS Group would also appreciate your confirmation that licences will, or will in most cases, be available "over the counter", as a matter of right (such as with drivers licences) unless a defined impediment exists, rather than subject to discretion by issuing officers.

Recommendation 9:

That criteria for issuing licences should be pre-defined and publicly available.

As you will understand from the above, we have serious concerns that your proposed draft licensing structure will continue to impede the study and the conservation of frogs. **It may fit birds, but it does not fit frogs.**

Our concerns are heightened over our perception that you may now be working to a tight deadline and may not be in a position to give frog licensing considerations the separate treatment they deserve. Our frog conservation work (such as the Australian Frog Count, the Endangered Frog Survey, Frogweek, the Frogwatch programme with the Australian Museum and the planned frog component in Streamwatch) relies heavily on generating community participation, and we are also working to a tight deadline: The 21 declining frog species in NSW cannot wait for the Service to eventually get it right.

Representatives of the Frog and Tadpole Study Group of NSW Inc would be pleased to meet with yourself and other senior officers of the Service, perhaps at the Australian Museum as a venue. We would also be inviting independent senior herpetologists to that meeting.

Sincerely,

Lothar Voigt
President
(Tel: 371-9129)

PS: A copy of this letter is also appended to a letter sent to the Minister, Ms P D Allan.



The Serpentaria Search

On Saturday the 10th of June, 20 keen FATS Groups members headed off to Taronga Zoo for a "behind the scenes" tour of the Serpentaria, courtesy of Terry Boylan, the Divisional Manager.

After a quick trip through the zoo's back lanes we could look down on to these new enclosures, built at a cost of \$3 million! The Serpentaria's fitout alone cost \$500 000, but isn't it magnificent!

We had a quick inspection of all the Green-and-Golden Bell Frog tad in outdoor containers. Their parents had been rescued from the doomed Rosebery site, and the tad will start off a new colony once a suitable release site is found. Luckily they are easy to breed in captivity (Bronx Zoo even has adult ones on their surplus list), and the tad are quite hardy - twice weekly they get poured through a sieve at water changing time, apparently with no ill effects.

In one of the back rooms, at the bottom of a large tank with chilled water there lives a monster of a Japanese Giant Salamander. This fellow is BIG! The other holding and quarantine rooms we were shown through were nicely warm. All reptile cages there are portable, so the inmates can be taken outside for real sunshine: rows and rows of timber cages with carry handles, tops of fine wire mesh and glass only on the door in front. When indoors, each cage stands partly on a thermostatically controlled heat pad. Attached to the cages are special instructions ("Crickets and maggots only"; "Not to be opened by Work Experience students"), cards with feeding records and, where the inhabitant can't be trusted, antivenene.

Among the animals that caught our eyes were Fijian Banded Iguanas, varanids, chameleons, marine turtles and a large number of assorted reptiles that had been seized by NP&WS and by Customs.

Then to the back of the public exhibits, where Terry opened endless rows of access doors to the displays. The younger FATS Groupers were busy finding and counting the frogs and also waving at the public behind the glass. It was a bit hard to tell who was on show and must have confused the frogs no end.

Compared to the reptiles, only a few frogs are shown, and they are not easy to find in their naturally landscaped cages. (And, we understand, the Zoo couldn't get a permit to catch the quite common Blue Mountains Tree Frog *Litoria citropa* for its display.) Two display cages were exceptions though: The Dyeing Poison Arrow Frogs *Dendrobates tinctorius* were always on the move and holding wrestling matches Amazon Indians supposedly use them to dye parrots feathers with. The ones at Taronga are startlingly black-and-yellow (but look at the current issue - vol. 9 - of *Aqua Geographica* for the vast range of colour forms of this variable species).

The other remarkable frog display is in the atrium, with large palms, ferns, watercourses, Diamond Pythons, Green Pythons, "Painted Turtles"

(*Limnodynastes subglobosa* from Cape York) and - wait for it - Green Tree Frogs, all living together without eating each other!

There are also large rainforest and mountain stream displays for the really big reptiles, there are caves of realistic artificial rock and deserts with spinifex. All are very realistic looking and truly beautiful.

The Komodo Dragon has a great indoor-outdoor enclosure, the indoor part being a room-sized cross-section through its underground burrow. The poor devil has been alone without a suitable partner for many years now. Dear President Soeharto, if you want to send us an ambassador we would truly love, you now know what we are looking for!

We were hard pressed to come up with ideas to improve the exhibits any further, and the feel of the landscaping is just right. Taronga is to be congratulated for having done the job superbly well. Just look at the public's smiling faces on the other side of the glass!

If you haven't seen the Serpentaria yet, it's surely worth it. Thanks three million, Terry, for having shown us through and for having made this experience possible for us.

Giselle Howard, Lothar Voigt

For Your Calendar

Frogweek, according to tradition, is the first week in November. If you can help, please donate some of your time, either before or during Frogweek. We need to set up and staff displays, explain to groups, talk to schools, talk to the media, hang leaflets up, send resource kits out and much more. The next issue will get down to business.

The Ku-ring-gai Wildflower Festival is on the 2/3 September weekend. If you'd like to be one of a team to look after a FATS table display and membership drive, please give me (Lothar) a call on (02) 371 9129.

The Study and Care of Frogs and Reptiles course will start on Wednesday, 6th September in Rose Bay. Ten evenings, once a week outside school holidays, \$80, hands-on fun. Ring Lothar on (02) 371 9129.

The Herp Readers' Club will start off later this year at the Australian Reptile Park in Gosford. Regular informal meetings, free loan of lots of books on frogs and reptiles for the purpose of giving each other a summary on them. That way one can go through a lot of material without having to read them all. Starting date not yet fixed. Ring John Weigel at the ARP on (043) 284 311 if interested in the idea.

L.V.



Froggy Happenings

The Heath Frog (*Litoria littlejohni*) is one of our Endangered Frog Survey species. It was found at two sites on the same day.

Ourimbah State Forest:

- Saturday, 24th June (yes, in winter)
- 17:15, 10.5°C, clear and calm
- Fawcetts Dam Road. There is a small man-made dam at the end of this track. A cement wall has been built across a running creek. The depth ranged from about 75 cm to 5 cm, with sand and leaf litter base.
- Gosford sandstone formation; the soil type in this gully is predominantly clay.
- Wet sclerophyll forest with rainforest understorey elements. The King Fern *Todea barbara* overhangs the edge of the dam on two sides.
- A single *Litoria littlejohni* was calling from an overhanging King Fern, 80 cm above the water.

Karen recorded the call at a distance but as we got closer the frog shut up and was more than a little reluctant to continue calling. The recording was played back to the frog which was still reluctant to call but did manage a few vague noises. Karen spotted the frog perched on the fern. It had large dark brown nuptial pads. The bright orange groom colour extended all the way to the orange under the arm, and the upper surface of the front and hind feet were also orange.

Large Brown-striped Marsh Frog (*Limnodynastes peronii*) tadpoles and Yabbies (*Cherax destructor*) were also in the dam.

Olney State Forest:

- 22:35, 8.5°C, clear, slightly windy
- Sawmill dam - Watagan Forest Road
- Open forest, *Pteridium esculentum* and *Lomandra longifolia* understorey vegetation
- Hawkesbury / Gosford sandstone geology

Two *Litoria littlejohni* were calling, one from emergent vegetation at the end of the dam about 10 cm above water level. Three *Litoria verreauxi* were also calling, making recording very difficult. The *L. verreauxi* call started after the *L. littlejohni* and finished before the *L. littlejohni* call. The two *L. littlejohni* also staggered their calls.

Three types of tadpoles were also in the dam: two tree frog species and one ground frog species.

The Giant Burrowing Frog (*Heletoporus australocicus*) is another ENDFROGS species. On 8th July we found its large black tadpoles at Marramarr National Park, together with tadpoles of the Brown-striped Marsh Frog and of a *Pseudophryne* and a *Uperoleia* species.

Jacquie Rersei, Karen Thumm

Red-crowned Toadlets, now 3 years and 2 months old, have produced their third clutch. This after a break of only 52 days. They laid 27 eggs, in three separate clumps. As both males were after the female at the same time, we may end up for dozens of paternity suits!

Karen Thumm

Harold Cogger has retired as deputy director of the Australian Museum. He is now simply an institution in his own right. Best wishes from all of us, and a special big thanks from all us amateurs for having kept herpetology alive for us! After October, when Hal is back from Sumatra, he may just have a few slides to show us of his latest expedition!

Konica will soon be adorning bus sides in Sydney with a riot of beautiful frogs and tadpoles. Tadpoles swimming into a packet of film and frogs hopping out on the other side. Do they get processed in there or do they develop? Let's hope the buses will still be dressed up for FROGWEEK, especially the City Hoppers.

Tinda Creek is free!!! The mushroom compost manufacturers eventually withdrew the development application because it was getting too hard for them. The place is smack inside Wollemi National Park and right next to Gibba Swamp which is a frogs' paradise. We're doing a joint frogging pilgrimage there with the Hawkesbury National Parks Association to celebrate the victory.

Cockroach traps sell for \$13.95 at the "Pet Centre" in 127 York St., near the QVB in Sydney. No poison, no glue, just biscuits or peanut butter for bait, so the dear little roaches stay lively and nourishing. Martyn now dangles them down stormwater drains.

Green Tree Frogs are forever. There is a European bred one that came into Jan Nedved's care as an adult 29 years ago. It still lives in Prague, at a friend's place. Barbara Bird, on hearing this, did a quick calculation. Hers also came into care as an adult, 29 years ago! And is still going strong. In Pittwater.

The Internet is frogging up! Barbara Harvey discovered the Internet version of *Froglog* at the address amphibiandecline@ucdavis.edu. *Froglog* is the newsletter of the World Conservation Union (IUCN), Species Survival Commission, Declining Amphibian Populations Task Force.

Martyn found a 5 page article of 22. 5. 95, under gweiker@mail.lmi.org on amphibian disappearance. The title is "New perspective on loss of species".

Rob McNaught from the Anglo-Australian Observatory, well, he observed an entry of 6. 5. 95 by a Donna Logan: "No handsome princes: To combat a drought, farmers in the Rangpur province of Bangladesh are catching frogs and marrying them to each other to encourage rain. Both Islamic and Hindu

wedding ceremonies are being used, and the hitched croakers are then released back into the ponds where they were caught. 'I've done it before and it worked', one farmer said. At least 12 frog wedding ceremonies have been performed in the region in recent days." (A case of the tail wagging the dog, which, if you try it, does work too. The dog becomes happier.) - I assume the "each other" refers to the frogs and not the farmers.

Rob has also observed that there is good frogging around Coonabarabran only after the heavy rains in January. Hope to see you then, Rob.

Green-and-Golden Bell Frogs were the subject of the June AHS meeting. Michelle Christie talked about radio-tracking them with transponders.

Herpetofauna is now being subscribed to by 120 FATS members, which is about 10% of its entire circulation. The current issue is a very froggy one.

Practical Aquariums and Water Gardens may have caught your attention at newsagents. It runs an occasional frog column and it lists the FATS Group in every issue.

The North Coast has sent us action-packed minutes from their first frog committee meeting. Congratulations, the North Coast needs you! Contacts are Tracey Allen on (066) 211-783 and Lance Tarvey on (066) 283 897.

The **Sharp-nosed Day Frogs** (*Tandactylus acutirostris*) at Melbourne Zoo have all died. They were the only known survivors of this Queensland species, and the zoo was hoping to save the species through a breeding programme. The tragic news of their loss comes from the Victorian Frog Group's newsletter.

L.V.

Disease Information Needed

Does anyone know of a disease affecting juvenile and adult frogs which has the following symptoms?

- Loss of appetite and lethargy
- No attempt made to shelter, just sits out in the open day and night
- About three days later, legs go weak and tend to stretch out
- Arms grow weak and frog dies, usually in the position of lying on stomach with arms folded down alongside the body and legs stretched out parallel together
- No external signs such as skin problems or gasping

If you have any experience with an illness that fits these mystery symptoms, please give me a ring on (02) 637 2557.

Deborah Pergoletti



Claude Explodes a French Letter

Hi, Claude! That's an awkward fly curtain in your doorway. I nearly got stuck in it.

That, my lady, is the French flag. It is only blocking the doorway because it is on half mast. I cut it into ribbons so people can get through.

My, we are being grim today, aren't we? And where is your moustache?

It is down the sink. And I am no longer French.

What?

I am Chinese now.

But why, Claude?

Because I am so disgusted! Here, look at these newspapers: "Frere Jacque, bombez-vous? Pourquoi les francais sont des grenouilles nucleaires..... condammee par les pays du Pacifique les Miserables are frogs fighting dirty?"

I don't see at all ...

Atoll? No, one can't see the atoll. It is getting blown to bits. A bad example, especially at a time when other governments are slowly becoming more civilised! It may of course be a long march, now that I am Chinese.

Did you say wrong march?

Yes, long march.

But you'll still go frogging, Claude?

I will go flogging. Maybe I will become a flagellant.

Gosh, I couldn't do that.

In that case, my lady, if you can't join them, beat them.

But how? How can one beat something like that?

I am sending Jacque Chirac a French letter. It may be the only thing he understands. Would you like to see it?

Well no, I really ...

Here it is. An open French letter. I will translate it:

"Dear Mr Chirac,

I regret to inform you that I have decided to become Chinese, and that I hereby invite all other French in the Pacific area to do the same. The Chinese government will then surely claim Chinese Polynesia as theirs and

you will be obliged to let your bomb off at home.

I also feel compelled to expose to the public certain underground testing results involving the frogs. These results will make your planned tests redundant and they may also serve you as a valuable eye-opener:

- The Northern Banjo Frog (*Limnodynastes terraereginae*) and the Giant Burrowing Frog (*Heleioporus australiacus*) keep their eyes wide open in their underground chambers. This was tested using the Deep-V-Cage, a device invented by the FATS Group's President himself. It has a sloping glass pane right behind the front glass, almost touching the front glass at the bottom of the cage but about 10 cm away from the front near the top. The space between the front glass and the sloping pane is filled with appropriate soil, and the frog will dig down as far as it will fit and will make its chamber against the front glass. Tape a sheet of black cardboard to the front of the cage, along the top only so that you can lift the cardboard flap to see that the frogs are watching you, Mr Chirac. (I believe Mr Deep-V also wants you to know, from one President to another, that this is what Frog-watch is really about.)

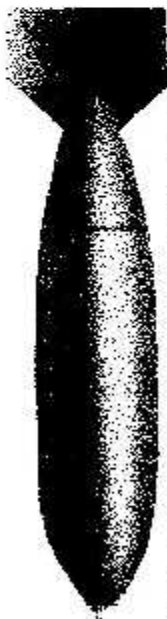
- The Turtle Frogs (*Myobatrachus gouldii*) have their eyes tightly closed underground. Ebrmann's famous test apparatus, as big as an upright piano, was filled with a critical mixture of sand and turtle frogs. It was not detonated, but nevertheless the frogs had kept their eyes firmly shut. (Mr Upright-Piano also wishes you to know, from one immediate past President to hopefully another, that keeping one's eyes closed is no defence for any frog.)

- The Waterholding Frog (*Cyclorana platycephala*) could not see through its layers of cocoon-skin, whether its eyes were open or not. But when dug up and squeezed firmly it performs a true public service, just like any government administration. In this country, Mr Chirac, we don't eat frogs. We drink them. They are our friends.

I wish we could say the same of you, Mr Chirac. What are you, a Banjo Frog or a Turtle Frog or a Waterholding Frog? Why are you digging yourself in, just at a time when the world is trying to give up the bomb altogether? Who do you want it for, anyway? It doesn't hold water. Stop being so irrational and we may even give you a squeeze!

Yours etc etc

Claude"



There! And I will enclose the last eight issues of *Frogcall* and send it all to Monsieur Chirac, President de la Republique, Palais de l'Elysee, 55 rue du Faubourg-Saint-Honore, 75008 Paris, France. You may wish to do the same, of course.

Well, that is a French letter if I ever saw one! I thought for a minute ...

Surely, my dear lady ...

I did. Because you always transport flies around in them. Why do you do that, and how do you get them out of there?

Because flies spread disease. But they can't escape from these inflated gadgets. Neither can they escape while you whoosh them into your frog cage, because you don't have to take the whole cage lid off. Always keep a very lightly inflated one with freshly hatched house flies in the fridge, and another with blow flies. At feeding time, blow them up, let the flies warm up until they can fly again, and then give each cage a little whoosh.

Is it hard to get them into those wretched things?

No harder than anything else. Your fly pupae, from your friendly frogware store or FATS Group raffle, get put into a small open container inside a plastic cage with a clip-on lid. After several days at warmish room temperature the flies will hatch. Then put the plastic cage into the fridge until the flies fall down onto the cage floor. While they are still too cold to move, simply funnel them into one of these balloonny things. Inflate very lightly, close off with a clothes peg and put back into fridge where they will keep for about two weeks.

Claude, there's an awful lot of flies in your shop. I thought you said they couldn't escape?

House flies can escape from the lid of the plastic cage, unless you stuff some paper into the fingerhold of the clear window in the lid. I just found out myself. And I once popped an over-blown, well, er, balloon, with a few hundred blow flies in it.

And now they can't get past that French flag in your doorway?

No. They'd rather risk getting eaten by the frogs than becoming French Flies! But they are rapid bleeders. Explosive bleeders, just like the frogs. Both kinds of floggies.

L.V.



A Gentle Reminder

Membership fees were due at the end of May. Thank you to all those who have paid so promptly. If it's slipped your mind, there is a renewal form in your last *Frogcall* issue. Should you have lost the form, please ring me on (02) 897 5066 (h) and I'll send you another one. Many thanks!

Giselle Howard

Rare frog signals end of drought

By Environment Reporter
SIMON BENSON

AN Aboriginal legend tells of a fat young frog appearing from under the desert earth to be a sign of impending rain or flood.

Many might see it timely then that a rare species of desert burrowing frog, not seen before in NSW, has appeared on the drought-stricken western plains.

Previously only found in South Australia and drier parts of western Victoria, the Mallee Spadefoot or Painted Burrowing Frog has emerged in a private conservation sanctuary. The frog grows to a length of 6cm and stores its own food and water like a camel.

Its find has excited scientists and conservationists because the frog is one of only 20 vertebrates out of 40,000 which are "nature's own examples of genetic engineering".

Evolution has allowed *Neobatrachus pictus* to double its number of chromosomes to 48 — two more than humans — to adapt to Australian deserts.

Dr Michael Mahoney from the University of Newcastle admitted scientists were still uncertain of what the doubling of chromosomes actually means.

"They are a natural biological laboratory," Dr Mahoney said.

"They can live underground for



Ready for rain ... a Mallee Spadefoot emerges from the desert

up to three and six years between droughts. If they do appear on the surface it usually a sign that there is sufficient rain for breeding and feeding."

The assistant manager of the 160,000ha Scotia Sanctuary near Broken Hill, Catherine McQuile, said the emergence of the frog had coincided with the first rain since January.

"I discovered it outside our accommodation quarters when

the hoses were on," she said. "I went outside and there was this frog. It might have thought the hose was rain and so it came up."

The frog is the first amphibian to be found at the sanctuary.

The National Parks and Wildlife Service has also launched a search for the rare Green and Gold Bell Frog on the central NSW coast as part of its endangered species recovery plan.

TELEGRAPH MIRROR, Thursday, June 1, 1995

Subdivision puts toad colony at risk

AN environmentalist has criticised Hornsby Council's handling of a proposed subdivision which may affect a colony of rare Red-crowned Toadlets at Berowra.

Safe Australia coordinator Scott Cardamatis has accused council of environmental neglect after it failed to display a Faunal Impact Statement (FIS) concerning the loadlets.

NSW National Parks and Wildlife Service (NPWS) prepared the FIS after receiving an application from Lemlock to create 19 lots in Evanda St, Berowra at the end of Dabachava Rd.

The document addressed the development's likely effect on the loadlets, listed as vulnerable and rare in Schedule 12 of the NPW Act.

It was displayed at several locations in Sydney from May 17 to June 14.

Council's development manager Ric Beers said the impact statement was not exhibited in Hornsby because council did not receive a copy.

"It was couriered to us (by the NPWS) but we never received it," he said.

Pestilent foreign armies strip the land as they advance through Europe, reports Julie Read

The European, 14. 5. 95

EUROPEAN scientists are stepping up their war against hordes of invading creatures which, they believe, are threatening the devastation of both town and country like a modern-day plague of locusts.

Locusts still swarm in Africa and the Middle East. But scientists say that the greater threat to Europe now comes from rapidly multiplying strains of other pests which are increasingly resistant to traditional control techniques.

The scientists believe that today's culprits are such seemingly inoffensive species as the crayfish, the turtle and the frog, as well as the more obviously noxious terrapin, rat and cockroach.

The guilty frog, for instance, is a large American variety called *Rana catesbeiana*, which a French breeder unwittingly imported to the Dordogne region. But this is no ordinary frog: it reproduces at an alarming rate, laying 20,000 eggs a year, and devours everything around it, including smaller amphibians.

Now, said Anne-Marie Otlet, a specialist in amphibians at the Museum of Paris, they are a serious threat. "It takes only a few tadpoles and the cycle starts," she says. "Someone bought a hatch of fish for breeding in the Paris region. Two tadpoles, a male and a female, had inadvertently been slipped in with them. Within a few weeks the pond was swarming with frogs."

Rana catesbeiana is now found all over France and has spread to the Po river plain in Italy.



Bodysnatcher: *Rana catesbeiana*, the large American frog, multiplies at an alarming rate and devours all, including smaller amphibians. It was introduced by a breeder to the Dordogne