

Number 20

November 1995

THE FROG AND TADPOLE STUDY GROUP OF NSW INC.

P.O. Box A2405

Sydney South NSW 2000

The Next Meeting

Friday 1st December, 7:00 for a 7:30 pm start at the Australian Museum

SPEAKERS:

John Rice

Everybody

No \$2 door donation for paid-up members: Bring a visitor!

REGULAR FEATURES

(unless you're chicken)

News and announcements: Frog Week, NPWS, field trips, projects Refreshments, auction, discussions, arguments, gossip, welcome table

Slide show: Frogs of the Helensburgh area

My 5 froggy / taddy / eggy(?) slides

the Frog and

FAT



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The Last Meeting

"Frogs on the move" was Arthur White's main slide show of the evening. Arthur did a thorough frog survey at Myall Lakes N.P., long ago, before the sand dunes were mined. He found 15 species then, a thick forest cover on the dunes and a swamp below. Mining finished in 1984. Now the forest cover has gone, the swamp has dried out as a result, and ten of the frog species have disappeared. Only five species left, plus two newcomers one of them being Crinia tinnula, the endangered Wallum Froglet! Where did it come from, and how? Or was it hiding so well? (In North Coast areas it also colonised old sand mines. In 1994 it popped up at Wyoming and in September 1995 at Kurnell!) - The Whirring Tree Frog, Litoria revelata, once apparently no further south than the Border Ranges, is now also at Ourimbah and Wyong. - For the conspicuous and hard-tomiss Dainty Tree Frog, Litoria gracilenta, the Grafton area was thought to be the southern limit. Now it's spawning at Wyong!

"A Bell Frog update" was Arthur's second slide show. A major breakthrough a few days earlier, when the Premier announced the Homebush Bay Brickpit will become part of a huge park. The Brickpit (not its bottom, that's too saline) has Australia's largest population of Green-and-Golden Bell Frogs. Now 20 frog ponds have been built for them nearby, with another 20 coming. Some will be ephemeral; these frogs seem to prefer those. - Arthur's Rosebery frog update: ICI appears happy to have a relocated colony on their land, and a local community group has been established to help monitor the Bell Frogs.

A mad auction ensued. Ilze donated hollow logs and a shiny metal frog. Dannie a froggy calendar, I had some arum lilies and fish for the frog pond. FATS is now \$130 richer, a record so far!

David Millar brought in specimens of live Museum frogs: the Crucifix Frog, Barking Marsh Frog, Spotted Grass Frog, Green Tree Frog, Peron's Tree Frog and Desert Tree Frog.

LV.

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 (Feb., April, June, Aug., Oct., Dec.) at 7 pm. Visitors are welcome. We monitor frog populations and frog studies and produce a newsletter FROGCALL and the FROGFACTS information sheets.

In Memory of Shane Gow

It is with great sadness that we have to inform our members that Shane Gow passed away on 7th of November 1995. Shane was one of our very active members, particularly in the time he spent as Secretary shortly after the FATS Group started up. He published articles in *Herpetofauna* on his breeding successes with *Litoria alboguttata* and *Litoria infrafrenata* as well on the breeding behaviour of *Litoria lesueuri*. He was known, above all, as an accomplished keeper and breeder, with amazing knowledge based on a lifetime of frogging expeditions.

Shane's logbooks and notes will be filed in the Herpetology Section of the Australian Museum.

With Shane we've lost a dependable caring mate who'd be on the phone as the weather tensed up to a thunderstorm, enquiring as to who's going frogging. He was someone to bounce ideas off about any froggy matter. Above all, he was down to earth, with little tolerance for people who didn't just get on with their lives but who preferred to make life for themselves or others artificially difficult. In fact, one of his favourite sayings was "Get a life", bringing those around him to a painful awareness of how important it is to make the most of every bit of one's life.

Shane requested that there would be no flowers at his service but that instead donations could be made to the Bobby Goldsmith Foundation Inc (Level 4 / 376 Victoria St, Darlinghust 2010; tax deductible). We will be putting out a collection box at the next meeting. Lisa, Paul and Greg would like to thank all the froggy people who came to his service.

Karen Thumm

Obituary - John Barker

1947 - 1995

John Barker is a name known to many New South Wales herpetologists. John, whose zoological interests included most vertebrate animals, unfortunately passed away recently after an unsuccessful lung transplant operation. For frog enthusiasts, John is most remembered for his "A Field Guide to Australian Frogs" written with Gordon Grigg and published in 1977. This field guide was revolutionary at the time. It rationalised the various frog species into species groupings and presented keys that represented these lineages. The field guide was also accompanied by a cassette recording of typical mating calls of many of the species covered in the text. This emphasis on call is now a feature of most frog identification guides. The frog call tape was also prepared in collaboration with Gordon Grigg and first came out in 1973. This tape was updated on several occasions and is still available for sale.

I first met John in 1975, when he was working at Sydney University. I was aware of the Barker and Grigg team and was initially surprised to discover that John was not a university academic. He was the collector in the Zoology Department and had extensive field experience with various animal groups, but had a real fondness for frogs. I was able to go on a few field trips with John and it was he who taught me the value of developing my listening skills to the noises of the night and to learn to sit still. He regarded me initially as a rampaging frogger who scared more animals away than I was ever likely to find. His approach was one of minimal impact, sometimes only involving

winding down the car window and sticking his head out to listen. But he didn't miss much.

In 1980 John joined the NSW National Parks and Wildlife Service. The first years in the Service were spent measuring the impact of woodchipping on the wildlife of the southern forests. Frogs and reptiles remained high on his list of special animals. In his later years he developed an additional interest in bats and bat ecology, and most recently was involved in koala management.

John's death is a great loss to the Australian herpetological community. He was an inspiration to keen amateurs and proved that good field skills counted more than having umpteen degrees after your name.

Arthur White

Adventures of a Frog Stall Sitter

Part I Water Week - Darling Harbour

Sunday 22nd October marked the beginning of Water Week with Lothar bringing all his frog paraphernalia for the FATS display. Water (pronounced What a) Day it was - rain, rain, rain.

The cross section of the public was varied, enquiries many. "Can we have some bubble pipes?" - do they really believe frogs came from bubbles? Sorry, guys, wrong tent. A solution was offered to the Cane Toad plague. It entailed all of the people in Australia consuming Cane Toads and the true visionary would come forward with the solution. Could this also solve the human plague problem?

One particular manifestation of the human plague problem kept demanding "What good are frogs?". His question was rhetorical; answers did not impinge on him. What good, did he think, was he?

Just about everybody else though immediately warmed to the intrinsic goodness shining out of the displayed frogs' beady little eyes. Although caged and surrounded by little bits of nature, they were of necessity only museum casts. By far the biggest contention was whether the frogs were 'real'. After a while Lothar and I sounded like mechanical machines.

Lothar's container of blow flies (hidden behind the inscription "What would the world be like without frogs? - Lift flap to find out") caused some discomfort. One teenager thought they were the most revolting, disgusting things she'd ever seen and spent at least five minutes intensely studying them.

The tanks containing the White Clouds and the Gambusia were a cause for concern. As one mother was telling him all about these 'tadpoles', the (looks about)

ten year old was shaking his head and rolling his eyes. Mothers have learned to ignore these gestures, as she paused for breath his moment came. 'But Mum, they're not tadpoles, they're field."

Part II Streamwatch - Homebush Bay

Friday 27th October was the Streamwatch School Presentation Day. Lothar had decided to lighten his load of frog paraphernalia - he arrived with new displays but minus his flies. Cameron Webb, Lothar and I spent the day talking to people and watching the awards. We even managed to score free food. I offered

to hold the fort for Cameron to have a frog painted on his face but he politely declined with some excuse of having to go back to work.

Part III Frog Week - Taronga Zoo

Lothar and the new Frog Week display were on exhibit at the zoo on Monday, 30 October. He then took the display down and re-set it on Friday. Late that afternoon Michael Pennay arrived to take over. As the day drew to a close, Michael sat, all alone, thoroughly relaxed, wondering why nobody was around. Then the realisation hit him, the zoo had long closed! Saturday morning shift was attended by the two Barbaras (Bird and Harvey) and Lothar. Giselle Howard and Arthur White did the afternoon; with Arthur strategically installed inside the Serpentaria and Giselle outside at the main display.

Sunday was my day, and not having listened properly I managed to arrive half an hour before opening time. Not good for a Sunday, but at least the rain had stopped. Upon viewing the frog display I came to the conclusion that Lothar had spent hours in deep and meaningful contemplation. Not only had he once again reduced the frog paraphernalia, he had also managed to solve people's other problems.

Again, the flies were not there; they were too repulsive. The fish were gone, no more stress as to whether they were tadpoles. The frog tanks were clearly marked, "Yes, these are museum casts". This time Lothar constructed a small pond - a frog bog with the intent of children putting their hands in, thus having a hands on experience. All set to go...

At 10 am about 30 Japanese children arrived and promptly sat in rows for a roll call, all facing me. I quickly busied myself folding hundreds of FATS application forms.

At one stage a lively betting procedure took place, Lothar's careful labelling evidently having had little effect on two overseas tourists. "One hundred dollars!", I heard in English - they looked at me, "Real?", "No", I said. The loser shook his head and made a run.

Michael Pennay and Kylie Manning arrived around noon and at 1 pm was the Keeper's frog and reptile talk. As Michael and I were holding jars of zoo frogs (even Poison Dart Frogs) I spotted a woman bending behind the frog display partition, paranoia set in, my handbag was there, she was stealing it! I raced over, frogs and all, grabbed her shoulder and rudely demanded, "Excuse me, what do you want?". I don't know who was more surprised, Barbara Bird or me...

Barbara sat down, still recovering from my assault, when someone else pushed her way behind the partition. A mother lost no time changing her baby's nappy there, close to Barbara's nose, close to my handbag, and I'm still in paranoid mode. Only a little tadpole, we calmed ourselves, a future frogger no doubt, having been laid before us for Frog Week blessings and to christen the Frog Bog.

We settle down and there's an enquiry about a Growling Grass Frog. I look at Michael, he says "Litoria aurea". Ok, I give out Frogfacts No. 5 on the Green-and-Golden Bell Frog. I'm happy, Michael's happy, he and Kylie later go home. I tell Lothar at closing time, he laughs, "You're close, it's a Litoria raniformis".

We spent a few enjoyable days talking to many interested and often interesting people. The farmer from Goulburn who has seen frogs on his property for the first time in years. The city people who had never seen a live frog in their lives. The kids who had already heard of the loss of frog diversity and wanted to know more. And the many people who wish they could do something about it...

The life of a frogger is never dull.

fize Krumins-Sadarkis

THE FIRST WEEK OF NOVEMBER WAS Frog Week!

Back to Taronga:

- Our display outside the Serpentaria was lovely. Pity the blue tack kept falling off the damp brick wall. Swarms of kids kept diving for the posters before they touched the ground!
 All was fixed for Friday and the weekend. Water Resources had lent us three upholstered display boards, and then everything stayed up (well, apart from that one nappy).
- Taronga's Marketing had put Frog Week posters on their 'possum boards' throughout the zoo.
- Between their Information Kiosk, their Education Section and us, 300 sets of Frogfacts 1-5 were handed out - all of them printed by courtesy of the Department of Land and Water Resources.
- Education staff and keepers gave talks. FATS gave impromptu performances and took the occasional bet.
- Ledora Watergardens had sponsored materials for a small frog pond in the Education area - pump, liner, plants and all. Kids from Manly High School put the pond together, with the local press attending. (Totally Wild TV was meant to be there too, but they must have gone too wild to find the way.) Anyway, the school now wants to do a similar frog pond for themselves!
- Next year, Taronga said, we'll make it even bigger! Frog Week, not the pond necessarily.

And Frog Week at the Australian Museum:

- Having already lent us some of their casts, the Museum had to make do with live frogs: I had dragged in a 1.2 m tank and tons of rocks, gravel, plants, Boab nuts and life support systems. Before our eyes, a Kimberley tank took shape (and before our feet, a puddle). A Kimberley tank is not like a Wendy house, it is a tank full of multi-coloured escarpment and plants from the Kimberleys, with a little waterfall and large tropical frogs. (That some of the frogs were from Cape York instead did not seem to stress the visitors unduly. They were all polite about it.)
- Michael Harvey, a surprisingly strong Information Officer at lower-case search and discover, did most of the dragging and rock-carrying for me. He also pinned up lots of our posters and FATS sheets, all laminated by Water Resources for us. For symmetrical reasons, Michael had set up yet another set of frog displays at the far end of search and discover. Nobody could have remained unaware of the plight of frogs or of those bearing heavy rocks for them.
- Nerdy looking visitors were intercepted by Michael and sat in front of one of the PCs with frog content. One has the Internet froggy home page winking at you, one the new Hal-Cogger-demonstration-strength version of Endangered Frogs

of NSW (a CD-ROM where you point at whatever part of the NSW map to get a list of frogs there, then you point at the species name to get not only its photo and text but also its call erupting into the stillness). They also have the Multimedia-Experience CD-ROM on reptiles and frogs and on the shelves a useful reference library with froggy books.

Michael leads a double tife and is really a journo for 2SER FM. Before I knew it, I was taped by him and aired for his Frog Week special. Revenge came when Andrew Ollie caught him for a Frog Week interview on ABC 2BL, in Michael's capacity as a FATS member. A triple life?

Some of the other mad media moments:

- Jacquie Recsei, Karen Thumm and Michelle Christie were the hard core of an SBS documentary on - surprise! - Giant Burrowing Frogs, Red-crowned Toadlets and Green-and-Golden Bell Frogs. Nicely timed for Frog Week!
- Like last year, Penny Ferguson wrote in to the Illawarra Mercury. The good Penny, bless her, also put my phone number in, and I then sent 27 Frog Week kits down south, mostly to schools. Good work, Penny!
- Frog Week kits and posters also went up at other schools, at libraries, at the Homebush Bay -Bicentennial Authority, Featherdale, a Leura restaurant, Barren Grounds, Coffs Harbour Zoo, at most Australian Geographic shops and no doubt at various places I never found out about.
- One rascal, who shall remain nameless for reasons of anonymity, even wrote to John Laws. John had a field day: He poured plenty of vitriol over the Establishment for not even letting kids collect tadpoles and for not seeing the wood for the trees. Amazingly, he read the fax out only 15 minutes after I had sent it to him (cops!). The airways were still ringing from his outrage when my phone started ringing too. I think the first call was from a Queensland Land Care group wanting frog information.
- Lots of people rang in, having seen Cameron Webb's Frog Week article or David Tyrell's article in their local papers. They described David to me as having a frog firmly attached to his forehead, but that was just the way the front page photo was taken. Others saw the Taronga-frog-pond-building article in the Manly paper and rang in. A South Coast paper picked up on a Frog Week interview a local radio station did with me. Many people rang in asking for or having frog information, not stating or me not catching where they read about Frog Week, and I soon lost track altogether! The main thing is, you wonderful FATS members you, you did very very well! You did write to the press, you did stir up the media and you told them that frogs need help! Many thanks to all our members who helped make Frog Week 95 such a success!

And thanks to Karen who mailed out the press releases, to David Millar and before he went on leave to Martyn Robinson for photocopying stacks of stuff, and to Barnardos for copying more when supplies ran low. Thanks to our volunteers who did the stalls and to all those who offered to volunteer and we couldn't all call on.

A special thanks to Taronga, Ledora Watergardens, Australian Museum and to Land and Water Resources!

LV.

Burrowing in the Bowels

In the course of my study of the Giant Burrowing Frog I have looked at the historical papers filed away in the bowels of various libraries. You may want to try enlisting the help of the Australian Museum library staff to find historical facts about a species that interests you.

Specimens collected by various people over the years have ended up in museums and other collections all over the world.

In January 1912 a young person named T. Steel found five specimens of the Giant Burrowing Frog Heleioporus australiacus at Leura (T.P. Steel 1912). These specimens were exhibited at a meeting of the Australian Naturalists. When examining the specimens in the Australian Museum collection I could only find four of the five frogs. The missing specimen has ended up in the Museum of Comparative Zoology in Cambridge, Massachusetts (A. Loveridge 1935), where it has no doubt been examined often!

Heleioporus australiacus has undergone a number of name changes since its 'discovery' by Europeans, and somewhere the spelling has changed from Helioporus to Heleioporus (Gray 1841).

Notice there is a gap of 88 years between the papers by Schneider and Fletcher on the subject of the Giant Burrowing Frog.

Rana australiaca 1795 Shaw & Nodder Rana spinipes 1799 Schneider 1887 Fletcher 1887 Fletcher 1893 Fletcher 1898 Fletcher 1898 Fletcher 1898 Fletcher 1915 Fry 1940 Parker

The 'type' specimen (the first specimen collected and described) of the Giant Burrowing Frog is actually based on a drawing sent to England from 'New Holland'. This was one of the first frog species described in Australia, along with the Green Tree Frog Litoria caerulea. This is ironical since it is one of the harder frogs to find now.

In the 175 years from initial description to 1970 only 71 records of specimens collected or observed - and 23 of these records are a tadpole series from Victoria - can be found from the following sources: literature records, the Australian Museum, the Museum of Victoria, the NP&WS Atlas of NSW Wildlife, the Atlas of Victorian Wildlife - Victorian Department of Conservation and the American Museum of Natural History. The species has no doubt been found many more times, this is just a summary of what can be found when looking up the historical records.

In 1795 Dr Shaw remarked on Rana australiaca: "This animal certainly cannot be numbered amongst the most beautiful of its genus: it is a species, however, which has never before been described, and is more particularly interesting from the circumstances of its being a native of the distant regions of New Holland, which has added so many zoological treasures to the cabinets of Natural History."

Maybe not a boutique frog, but it's not that bad looking!

Jacquie Recsei





FROG AND TADPOLE STUDY GROUP - FIELD TRIP DATES

Royal National Park - 2nd of December 1995

For those who missed the first trip due to the short notice, there will be a repeat of the search for the infamous Red-crowned Toadlet and Giant Burrowing Frog in the Heathcote East area. We will meet at 7-30 PM on the eastern side of Heathcote Station (not the Princes Highway side!) and head down the Karloo Pool Track. This will be followed by supper at the residence of my parents in Heathcote.

Really keen people may also be able to look at the local swamp for other species. Please contact me be the time of the FATS meeting (1/12/95) so I can get an idea of numbers.

Smiths Lake - 8th and 9th of December 1995

A trip to the University of NSW Field Research Station on the beautiful Smiths Lake near Bulahdelah (3.5hrs drive north of Hornsby). This trip is to be lead by the redoubtable Arthur White (at least he said he would do it) who has an intimate knowledge of the frogs of the area. The frog spotting will be as easy going as desired, but you have the chance to see the endangered Wallum Froglet and Stuttering Frog and perhaps even a Golden Bell Frog. Numbers are limited to a maximum of 40 and it is \$5 per night per person. There is bunk accommodation and cooking facilities and is a very comfortable setting. Could those people wishing to attend please notify and pay me by the FATS meeting on the 1st of December so that I can ensure you have details of the field station and its location and payment can be rendered.

Also note that there will be a camping trip to Olney State Forest (90km from Hornsby) in February and Mike Mahony has offered to provide a guided tour of his property (a rainforest encrusted site near Newcastle) sometime in the new year. Details of these trips will be provided in the next newsletter.

My contact number is (02) 487-4345 or (02) 872-0159 (work). Please call me if you have any questions.

Frank Lemckert (Field Trip Co-ordinator)

SMITHS LAKE BOOKING FORM

I will be attending the Smiths Lake field trip and will have __ people accompanying me. I will require __ beds for Friday night and __ beds for Saturday night. (Please note that there is no charge for day attendance).

Name: Contact Phone Number: Total number of bed nights @ \$5 each = \$__

Payment can be sent with the booking form (cheque or money order payable to Frog and Tadpole Study Group) or paid at the FATS meeting on Friday 1st December.

Please send forms to: F. Lemckert. 11 Homewood Avenue, Hornsby, NSW. 2077.

Tadpole Page word finder answers



Here's the answers to the word puzzle in our last issue.

Did you find all the hidden words?



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I	R	M	Y	В	L	D	S	R	Y	L	В	Ü	T	X	В	G	L
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From Karen's Field Book

On 11.11.95 several of our members went on a "Shane Gow Memorial Frogging Session" to an area Shane liked in particular - the Watagans State Forest. We saw 10 species, in spite of the dry conditions, including Litoria littlejohni tadpoles. We found some Uperoleias (is anyone brave enough to guess the species?), Tusked Frogs (Adelotus brevis), Bleating Tree Frogs (Litoria dentata), Blue Mountains Tree Frogs (L. citropa), Eastern Dwarf Tree Frogs (L. fallax), Leaf-green Tree Frogs (L. phyllochroa), and the tree frogs L. peronii, tyleri and lesueuri - the latter with males in their yellow breeding colours. We ended up at "The Basin" camping site, for a real frog "hit".

Saw a very photogenic Fletcher's Frog (Lechriodus fletcheri) calling from a little pool formed among tree buttresses about 15 m away from the creek line at Gloucester Tops. This is the frog with the (sometimes) cannibalistic tadpoles.

14.10.95 on the FATS Group excursion to the Karloo Pool, Heathcote: Found eight male Red-crowned Toadlets together in an area of about 1 m² of leaf drift. Another group of 6 RCTs was found nearby. There were also huge tadpoles of the Giant Burrowing Frog. This is very pleasing indeed: Not only is the site within a frog's call of Frank Lemckert's parents' back garden, it is also an area that had appeared to be in decline after two bush fires had gone through it in quick succession.

K.T.

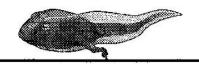
PS: David Tyrell found two new RCT locations in the Lane Cove area. As these will make useful study sites, we thank David and present him with a copy of Robinson's Field Guide, L.V.

The Committee

(02) 371 9129 President, AAHS Councillor Lothar Voigt FROGCALL ed., Public Officer (02) 320 6364 Martyn Robinson Chairman (02) 796 8526 (h) Secretary David Millar 018-257 585 ENDFROGS coord. & data, Harald Ehmann (02) 599 1161 (h & fax) Treasurer, ENDFROGS consultant Arthur White fax (08) 270 3280 FROG WEEK (scientific) (02) 897 5066 (h) FROGCALL ed. Membership Sec. Giselle Howard (043) 882 321 (ph & fax) Schools Philip Green (02) 487 4345 (h) Field trips Frank Lemckert (049) 772 773 (h) ENDFROGS consultant Michael Mahony (02) 476 2853 Catering Jacquie Recsei (02) 482 1017 (ph & fax) Media Karen Thumm







Tadpole Page

with Deborah Pergolotti

Hi young froggers!

We have a crossword puzzle for you to try. And, of course, all the words have something to do with frogs! Good luck.

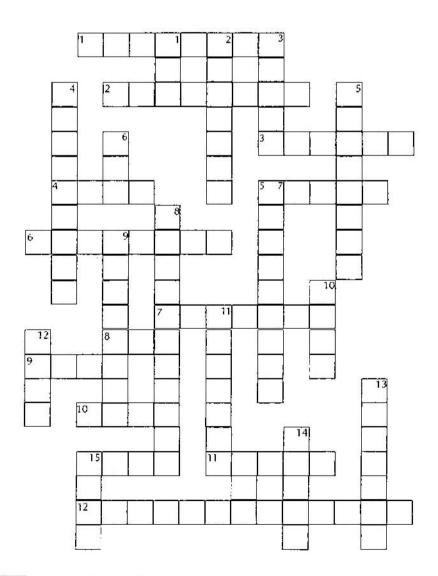
Across

- 1- these are fun to watch in a tank
- 2- this is a most unwelcome amphibian to Australia
- 3- sometimes you have to look under these to see frogs
- 4- this is a soft insect to give a frog
- 5- so are these if you can catch them
- 6- a good thing to put in your yard

- 7- this is the genus of many of our tree frogs
- 8- froggers call Uperolea frogs this name for short
- 9- this is what spawn is made up of
- 10- the kind of weather frogs like
- 11- this fellow writes frog books
- 12- this name means Lord of the Marshes

Down

- 1- some people cook frogs legs in this!
- 2- if you freeze or boil this, its good to feed tadpoles
- 3- a great place to look for frogs
- 4- what we call a tadpole that turns into a frog
- 5- the scientific name of the Crucifix frog is Notaben
- 6- don't put your tadpoles in water that's too
- 7- short name for the Frog & Tadpole Study Group
- 8- this common Eastern frog has a fun name to say
- 9- the other name for the awful Mosquito Fish
- 10- when you're looking for frogs, be careful where you _____
- 11- the Red-crowned
- 12- one way to study frogs is to ____ them
- 13- these make a pleasant sound and frogs eat them
- 14- never put tadpoles in a container made of this
- 15- what we listen for when we look for frogs at night





Claude Makes an Atoll

Do you still have any dynamite? I'm fed up with my swimming pool.

My dear madam, haven't we blown up enough already?

But n's in my own back yard. The kids now go to the beach instead. I think the last ten times I used the pool was to get drowned frogs out.

And your husband?

He can get out by himself. I think he wants to collect rain water in it now. But Claude, think of the eyesore! The pool would be half empty much of the time, wouldn't it? There'd be no point in running the downpipes from the roof into it if there were no space left in the pool. All those bare walls! No, I want that dynamite before he gets back from his frogging trip.

Madam, if it's only the bare walls of the pool that you don't like, you could just hide the walls. He could catch his rain water and he could keep frogs and tadpoles in the pool as well.

Sure, Just hide the walls. How, may I ask? And how do the frogs get out, Claude? Or do they starve or drown in there? Perhaps you sell frog ladders, eh?

Frog ladders and floating islands, standard stuff in our trade. This way, please - our new pool conversion department!

Where? That's just a normal wooden ladder.

It quickly becomes a frog ladder when you glue a plywood backing to it. Throw it in the water, along the pool's edge, and fasten one end of the ladder to the top rim of the pool. The other end will float up and down with the water level. But once you have put fine gravel and swamp plants on the ladder, it will be heavier and you must attach a float under the ladder's free end.

You're kidding!

A large float, such as this plastic drum, if you want to cut big holes in the plywood to stick planter pots through. For the bulrushes, to hide the pool wall. Ah, and install a small submersible pump in the pool, with a hose leading to the top of the ladder, to keep the plants wet.

And that whole curtain of bulrushes goes up and down with the water level, and frogs can get out up the ladder?

That is correct. You can hide the wall even more if you grow climbers down as well, climbers that either float or that don't mind being under water for a while, like water cress or tradescantia or water buttercup. Put a rectangle made of plastic roof guttering all around the pool, above its edge, and plant it up. Makes watering the climbers easier.

What if the frogs don't use the ladder? I once heard of a frog tunnel they wouldn't go in because they couldn't see light at the other end...

Ah. Well. That's where your dedicated amateur research will come in. As a backup, I suggest you also make a floating island with a frog feeder in the middle.

You mean one of those planks where you stick banana peel and old fruit underneath? Where the frogs help themselves to fruit

flies and springtails and worms and slaters? I'm not going to put one of those on a floating island, Claude! I would have to pull my husband out every day.

Not if you made the floating island of four ladders in a rectangle, with floats underneath, and if you also put a strong plank across the whole pool as a bridge. Your square island should also have some planks across it, to put the frog feeder and lots of hiding places and plant pots on. Mind you, if you put too much rotting fruit on it, you may pollute the water you are trying to save.

Yes, an atoll with frogs all over it and a big mess in the middle! No, we don't want that in our back yard, Claude, do we?

Hey, Claude! There were some guys here looking for you. One said he was from the MAFIA.

The Ministry Against Frogs in Aviaries???

And the other one was from the Frog Liberationist Cult.

FROLIC!! And they came here together? What did they want?

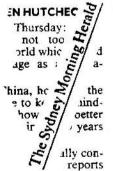
To lock you up, probably. And to release everything else. Gee, I'm glad they didn't cut the mouse cord off the computer! Said they heard you collected froglets in the desert.

Frog lids, not froglets! Did you tell them our hardware store now has the biggest frog lid section in this suburb? Were they impressed?

Listen, they're after you! They're gonna Shanghai your frogs, mate. They're like the TRIAD!

I remember those 'Tadpole Research is All Dead' revolutionaries. All we were allowed to keep in China was cabbages. So we called our frogs cabbages in the end. As long as they were green!

China's green movement



1 . is and that

old custom to reflect China's rapid modernisation. The cabbage was the subject of this week's parable.

Once, cabbage was the only green vegetable available in northern China in winter. The first week of November is Cabbage Week, and in cities like Beijing, tonnes of the greens are shipped in from outlying districts and piled high on the streets.

Some 2.8 million tonnes of cabbage will hit the streets of

Tapes of Frog Calls

David Stewart produced three new cassettes:

- Frog Calls of the Greater Sydney Basin
- · Frog Calls of North Eastern NSW
- · Frog Calls of Brisbane and SE Queensland

\$15 each at the next meeting, or \$18 including postage by mail from David. More about it in the next issue.