

#### **MEETING FORMAT**

#### Friday 7th December 2012

6.30 pm: Lost frogs needing homes. Please bring your FATS membership card and \$\$ donation. **DECCW amphibian licence must be sighted on the night.** Rescued frogs can never be released.

7.00 pm: Welcome and announcements.

7.45 pm: The main speaker is Arthur White, who finally gets to tell us about Caecilians and will introduce us to a new species of *Uperoleia*.

8.15 pm: People's Choice judging of the Frogographic Competition. The evening will end with a guessing competition and Xmas party food.

Thanks to all speakers for an enjoyable year of meetings, and all entrants in the Frogographic Competition.

Email wangmann@tig.com.au if you would like to receive a pdf copy of Frogcall in colour - every two months.

#### **CONTENTS**

Meeting format	2
President's Page: Arthur White	3
Borneo, a Frogger's Dream: David Nelson	4
Australia's Vanishing Frogs: Kirsty Richardson	8
Frogs in Nests?: Jodi Rowley	10
Centre poster photo: Marion Anstis	12
Flight of a Frog: George Madani	16
Frogographic Competition winners	18
Frogs! a poem: Alex Dudley	20
Some well-known Sydney Frogs: Peter Street	21
Field Trips: Robert Wall	22
Meeting directions and map	23
Committee contact list, FATS disclaimer	24

## President's Page

#### **Arthur White**

Everyone who attends FATS functions will realise that FATS is a vibrant and strong organisation. Not only do we run a variety of activities but we also try to make them as enjoyable as possible. This works because FATS is blessed with having a great group of devoted workers on the Committee and members who volunteer their time to help with display days, workshops or other activities.

FATS is financially strong, thanks to our long-standing Treasurer Karen White. Because we are so sound, we again offered student research grants this year. Jo Ocock was successful in attaining a second grant for her frog work in the Macquarie Marshes and Grant Webster gained a grant for his work on male colouration in frogs.

FATS held a number of community activities this year including a frog day for Pittwater Council, frog activities at the Ku-ring-gai Wildflower Centre and the Summer Hill and Croydon Public School fetes. We also undertook the Bell frog auditory surveys at Sydney Olympic Park in November and December.

FATS also ran classes at the "Science in the City" at the Australian Museum and is a member of the NSW Government's Advisory Committee on Native Animals, as well as the Task Force for Cane Toads in New South Wales.

In addition, Robert Wall organised a great series of field trips that are always well attended. These are for anyone who wants to come- you don't have to be frog know-all to attend. But make sure that you get your name down on the attendance sheet as quick as you can after the trips are announced or else you could miss out.

Monica, our editor, has been busy as always, putting out FrogCall, our flagship publication. It is a great credit to her and a wonderful means of getting frog news around. Our special December colour editions have become collectors' items.

Many thanks to our other executive members: Wendy and Phillip Grimm, Marion Anstis, Andre Rank, Andrew Nelson, Lothar Voigt, Punia Jeffery, Alistair MacDougall, Vicky Deluca, Sheila Briffa and our new member Kathy Potter. Each has contributed whole-heartedly and helped keep FATS alive and well. You would have noted that last year that we had a new web site Manager: Phillip Grimm. Phillip's efforts have turned our website around to become one that is current and much more presentable. If you haven't seen the revised website please do so. Any feedback that you want to give us is welcome. Thank you Phillip for all the time and effort that you put into our website.

Finally, I would like to thank all of our members for making FATS such a great group to be in. People really make an organisation and FATS is the pick of the bunch. It is a joy to be President of FATS and to be involved with you all.

## Borneo, a frogger's dream!

#### **David Nelson**

The articles I've written in the past for Frogcall have a common theme: travelling somewhere interesting and looking for frogs, often along with fellow FATS member George Madani. In April 2012, hungering for new adventure, we took this strange obsession to a new extreme, choosing to spend a month together in Borneo. To many of the frog-mad readers of this publication, this decision needs no further explanation. Why not? But for those not so well acquainted with the island in question, allow me to briefly explain our choice.

Borneo is a big island in South-east Asia, nestled amongst the islands of Indonesia, Malaysia and the Philippines. It's separated from Australia's biogeographic region by the 'Wallace line' - reflecting a very different evolutionary history. In terms of frog assemblages, without delving into the murky waters of frog systematics, this means that while there are some frogs in Borneo that are similar to ours taxonomically, many others are quite unrelated. For example, the microhylid family is well represented in both regions while the rhacophorid family is diverse in Asia but is not found at all Australia. So, being fairly familiar with what Australia has to offer, we were now heading into a region filled with animals completely *new* to us. We were looking forward to being clueless as to what we were seeing. That, and the fact that it's a big island covered in hot, wet rainforest filled with animals — so what's not to love?

Within hours of landing on the island we were in the rainforest after nightfall following tracks and streams and loving every minute, our dreams coming true. This was more-orless how we would spend the next month. We rushed around in frenzy, looking at each new animal, admiring its novelty, taking some photos, pondering its identity, then rushing only a few steps further before some new fascinating subject was caught in the beam of a

torch. It soon became overwhelming. Without being overwhelming myself, I'll try to condense a few highlights of the frog fauna that we saw.

There's the tree-hole frog (Metaphrynella sundana), a microhylid that breeds in small hollows in tree trunks that collect a little water. The tadpoles of another microhylid (*Microhyla* nepenthicola) live in the digestive fluids of carnivorous pitcher-plants. There's the fileeared frog (Polypedates otilophus), with its beautiful tiger-striped legs and flanks, named for the sharp, serrated bony projections above the tympana (we discovered that this frog had a peculiar, strong stink when handled). We saw charming little Black-spotted rock frogs (Staurois guttatus) and their congeners the rock-skippers (S. latopalmatus) – frogs that live on and around waterfalls and signal to each other with waves of the back feet. The giant river frogs (Limnonectes leporinus) which can grow to 15 cm long, eat anything they can fit in their mouths, and in turn and can be bought at village markets as a delicacy. Tree toads (Pedostibes hosii), which despite their ordinary appearance, climb many metres up trees to call for mates. Also adept climbers are the slender toads (Ansonia spp.) with their long graceful arms and legs. The jade frog (Rhacophorus *dulitensis*) – a carved jewel. The guardian frogs (Limnonectes finchi and palavanensis); the males of which carries a mass of squirming tadpoles on their backs. I could go on....

If, like me, you ever pored over a book on frogs of the world as a child, there's little doubt that you've seen photos of two particular iconic frogs found in Borneo. The first we came across on only our second night – the Bornean Horned Frog (*Megophrys nasuta*). The legendary camouflage of this frog doesn't help it stay hidden at night, when its eye-shine stands out like a beacon. Stumbling across three individuals easily was very lucky, as finding the



Black Spotted Rock Frog, Staurois latopalmatus waves its feet to communicate

**David Nelson** 



 $\label{thm:male} \mbox{Male Rough Guardian Frog}, \mbox{\it Limnonectes finchi} \mbox{ carrying tadpoles on its back}$ 

David Nelson



Bornean Horned Frog, *Megophrys nasuta*, a frog which needs no introduction **David Nelson** 

frog by its call is frustrating in the extreme – it only makes its honking call once every few minutes. We were surprised to find that the 'nose' and other sharp-looking projections on this frog's head are soft and fleshy!

The second 'icon' was Wallace's flying frog (Rhacophorus nigropalmatus). Borneo is overrun with 'flying' animals: species of geckos, dragons, squirrels, snakes, and of course frogs. There's also a very strange mammal called the Colugo or Flying Lemur (though it's no lemur), occupying its very own order (Dermoptera). These animals all use flaps of skin, supported by fingers or limbs, or in reptiles, their ribs are used to slow and control a glide from a tree. In the case of frogs, there are several species in the rhacophorid family that have extensive webbing between the fingers to a greater or lesser degree. In the case of Wallace's flying frog, this webbing is immense. Eventually, we found this spectacular species above a small



Wallace's Flying Frog, Rhacophorus nigropalmatus showing off its extensive webbing

David Nelson



Mossy Treefrog, *Philautus macroscelis*, in the shadow of Mt Kinabula, the tallest peak in south-east Asia

David Nelson

muddy pool used by pigs as a wallow – and also by the frogs as a breeding site.

While space permits only a brief mention of the other animals we spotted, suffice to say we were very, very lucky and equally pleased. We got good looks at all those other types of flying animals. Plenty of snakes. Macaques, leafmonkeys, proboscis monkeys, gibbons, the 70 cm long giant squirrel, the mouse-sized pygmy squirrel and several other types in between. Tarsiers galore, Slow Loris, even a Pangolin. Hornbills of several varieties. Large and beautiful insects, snails, millipedes. Shrews and otters and mouse-deer and civets, including

the vegetarian binturong. Even an orang-utan and a bull elephant! Truly, Borneo is a paradise for the keen naturalist. Altogether we saw more than 50 species of frogs alone, representing a vast variety of shapes, sizes, colours and lifehistory strategies. Though the conditions can be challenging, the reward in observing the myriad forms of life is unquestionably worth the effort.

If you're interested in browsing many more photos of the bizarre and beautiful animals from David and George's trip, head to the photo gallery at http://linvul.com/d9ok87k

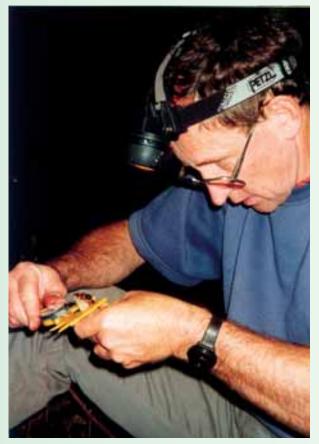
### Australia's Vanishing Frogs

#### **Kirsty Richardson**

When Professor Michael Mahony began the Earthwatch *Australia's Vanishing Frogs* project in Watagan National Park 11 years ago, he and his Earthwatch volunteers regularly came across nine more species than are there today.

It seems that even in protected areas such as the Park, frogs are in decline, but on the 12<sup>th</sup> anniversary of the project, the research may be indicating a way forward.

"With over 230 species, Australia has one of the most diverse frog assemblages in the world, so our task is to monitor the health of several species that are considered critically endangered and to keep a watch on others that may be susceptible to sudden declines," says Michael Mahony, Associate Professor in the Faculty of Science and Information Technology



Professor Michael Mahony measures the head width of a frog, Watagan National Park, NSW

at the University of Newcastle.

The chytrid fungus, which has spread around the world in the past 30 years, is a factor in the decline of frogs globally, and it is estimated that at least another 30 Australian species are now threatened by the fungus. However, Mahony's research is showing the different ways in which frogs may be gaining immunity to the fungus.

"We have found numerous cases where the populations of frogs declined dramatically, but over time the numbers have gradually returned", he says. "To explain these observations we hypothesise that either the frogs have evolved a resistance to the disease, that the disease has become less virulent or there is a change in the frog community structure which reduces the prevalence of the disease organism."

Given that climate change may be 'loading the dice' towards more chytrid outbreaks, Mahony's focus is on preserving the populations he has studied, and he believes that spreading the message about frog decline is one key element in achieving that.

"Frog conservation is a message that needs to be disseminated widely around the world, and our Earthwatch volunteers help us do that," says Mahony.

"They will tell their friends about their experience of walking around streams looking at frogs – and some of them will go back and perhaps start to look at their own environment with a different pair of eyes. Our volunteers are also important because the work we do is labour intensive. We have to walk distances along streams, identify frogs, collect them, weigh them, measure them, check them for disease – so having a team helps you get a great deal more done."

Volunteer Michelle Kine and her son have been on the project twice, and both have found it a life-changing experience.

"I learnt a huge amount from the experience – it was very empowering and now when I hear a frog I think, 'oh, I might have saved him!" says Michelle.

Australia's Vanishing Frogs research project celebrates its 12<sup>th</sup> anniversary in November 2012. The project aims to monitor selected species and populations and assist in determining why the frogs are declining. It also aims to determine the distribution of one of the chytrid fungi, which has been implicated in the decline of amphibians around the world.

#### Some Facts

- o Since Vanishing Frogs began, data on 22 frog species has been collected
- o In the 10 years of the project, 293 volunteers have assisted Prof. Mahony's research
- o The Vanishing Frogs project has identified one new species of frog
- Along the east coast of Australia, about 5% of Australian frog species have disappeared in the past two decades and are now presumed extinct
- o 20 frog species have declined alarmingly and 27 species are listed as threatened by the national Action Plan for Australian Amphibians

Join the next Vanishing Frogs expedition on 12-18 January or 4-10 November 2013 by calling Earthwatch on: (03) 9682 6828 or emailing krichardson@earthwatch.org.au

More information; www.earthwatch.org.au



Red-eyed Tree Frog, Litoria chloris, a species once much more common than it is today

**Stephen Mahony** 

### Frogs in Nests?

**Jodi Rowley** 

Most of the time, frogs deposit their eggs in a pond or stream and leave their offspring to fend for themselves. Male Limborg's Frogs, however, take being a father quite seriously...

Limborg's Frog (*Limnonectes limborgi*) is a small frog species occurring in the humid forests of Southeast Asia. Male Limborg's Frogs advertise their presence (and availability!) to females with a deep, raspy "craaawk" from underneath the leaf litter.



Limborg's Frog, Limnonectes limborgi

Jodi Rowley



Limborg's Frog, *Limnonectes limborgi* in excavated nest basin **Jodi Rowley** 

If you happen to be in the forests of Southeast Asia, the best way to actually see one of these frogs is to track down the exact patch of leaf-litter a call is coming from, and carefully clear away the leaves, one at a time. If you're lucky, you'll uncover something rather unexpected- a frog in a *nest*!

Rather than breed in ponds or streams like most species of frog, the male Limborg's Frog carefully excavates nests in the mud on the forest floor, away from water. Males then advertise their location in the hope that a female will stop by and lay some eggs in their nest. Compared to some frog species, which may deposit hundreds or thousands of eggs at a time, female Limborg's Frogs deposit less than a dozen in a nest. These eggs are then carefully guarded by the males (by sitting on top of them!).

For over 50 years, it was assumed that the eggs of Limborg's Frog skipped the tadpole stage entirely and developed straight to little frogs within the egg ('direct development'relatively rare in the frog world). However, by crawling on our hands and knees in the forests of Vietnam and Cambodia, my colleagues and I discovered that their eggs don't skip the tadpole stage at all! Rather, their eggs hatch into tadpoles (like 'typical' frogs), but unlike typical frogs, they live entirely within the cosy confines of their nest in liquefied jelly from the egg capsules. Interestingly, because there's not enough food for the tadpoles inside the nest, they skip feeding altogether, and live off internal yolk stores.

So why do male Limborg's Frogs go to all the trouble of carefully constructing nests and guarding them for weeks on end? Well, it seems from our observations that most of their eggs survive and develop into tadpoles inside these nests. This is actually quite rare in frogs – usually the vast majority of eggs deposited by most frogs will become tasty treats for fish, birds, aquatic invertebrates or some other hungry predator. Therefore, by making nests in mud away from water, and guarding their brood, the offspring of Limborg's Frog seem to stand a much higher chance of survival than if they were left to fend for themselves in a pond or stream full of predators. And for this species, it's the male that does most of the work!

**Reference:** Rowley, J. J. L., & Altig, R. (2012). Nidicolous development in *Limnonectes limborgi* (Anura, Dicroglossidae). *Amphibia-Reptilia* 33: 145–149.



Fresh egg clutch of Limborg's Frog, *Limnonectes limborgi* in nest basin excavated in mud **Jodi Rowley** 



Nidicolous tadpoles of Limborg's Frog, *Limnonectes limborgi* in nest basin within liquefied jelly from the egg capsules. Here they swim around and grow, sustained solely by yolk supplies and protected by the adult male frog. **Jodi Rowley** 



Wallum Sedge Frog
Litoria olongburensis
© Marion Anstis



## Flight of a Frog

#### George Madani

It was a despondent pair seated at the table in the dining room. The jungle air was hot and sticky and I wasn't particularly relishing another meal of chicken and rice. I unenthusiastically shifted food around my plate with my fork while letting out an audible sigh of resignation.

"Come on mate, tomorrow night you'll finally get your pizza" fellow herper and president of the Australian Herpetological Society, Michael Duncan tried to reassure.

But it wasn't the present menu that had us feeling so glum. Sure there wasn't much deviation in our nightly menu over the last week, but the real cause of our sombre mood was the fact that our great Borneo adventure was coming to a close.

Michael had joined fellow frog-mad amphibian-botherer David Nelson and myself in the last week of a whirlwind tour of Northern Borneo. For the past month Dave and I had spent each night sweltering in the jungle in pursuit of our amphibian quarry. Heavily laden with just about every field guide published on Borneo wildlife and a plethora of whizz bang camera gear worth a small fortune we had crossed the island from west to east by plane, longboat and on foot. Every few nights we were in a different type of jungle habitat, swamp, kerangas, lowland or montane. We had conquered obscure peaks, climbed and searched in caves and along great rivers, even within the very heights of the jungle canopy, pushing ourselves to our physical limits and tempting fate on too many occasions for comfort with several near misses and one not quite so near a miss!

The last week had been the best of all. We were based as naturalist visitors in the Danum Valley Field Research Centre. The primary jungle here was pristine, exuding diversity and pulsing with life. We had been rewarded and

overwhelmed with all manner of obscure and captivating wildlife.

And here we were on our last night; we had walked all the tracks a dozen times over and become so familiar with the place and its wildlife that we were even taking out some of the resident researchers on tours around the jungle. How were we going to top off our grand adventure?

"It would have been nice to see a clouded leopard" remarked Michael.

"Or a sun bear" I responded.

"Yeah, Dave was pretty keen on seeing a sun bear"

In fact where was Dave? Despite the modest fare, he was never one to be late for dinner.

"Where is Dave?" I asked.

"Dunno, sun bear probably got him" replied Michael half jokingly.

And then he appeared, drenched in sweat, the same shirt he had been wearing for the past week plastered to his back, camera in hand, dropping his heavy pack on the table. The look on his face suggested that he had just been ambushed and robbed by a band of marauding macaques.

"What's wrong Dave?" I asked.

"Have I got a story for you!" he exclaimed. While on his way back to the mess, Dave had made a detour through the jungle when he had heard an obscure woodpecker type trill emanating from the canopy of the jungle just off track. Cutting through he came across a giant jungle tree that had fallen from its great height, lifting with it its tangled anchor of roots and earth and thereby leaving a great hole that had filled with the recent rain. In other words, perfect flying frog breeding habitat.

As Dave peered into the great heights above, what should fall and land right beside him? None other than one of the greatest prizes of all, a Reinwardt's flying frog, *Rhacophorus reinwardtii*! These magnificent and handsome beasts are bright green, yellow below with a discrete brush of jet black ink, dotted with blue spots painted along their side and speckled silver white on their dorsum. They are also as elusive as they are beautiful. Spending their happy lives up in the trees they descend only to breed.

Although gracing the front cover of the field guide to the 'Amphibians of Borneo', given their life history they are exceptionally rarely seen. And here one had landed right next to Dave of its own volition! Surprised but unperturbed, Dave placed the frog on a branch to photograph and turned to grab his camera only to find that within a matter of moments the confounded beast had inexplicably disappeared! Thirty minutes of intense and bewildered searching couldn't relocate the darned thing!

On hearing this, Michael and I, completely stunned and unsure of whether the jungle heat had finally got to Dave, just about shoved his dinner down his throat in our eagerness to recommence another search. Our fellow diners looked on in bemusement and perhaps slight fear as we erupted out of our seats, knocking back chairs and grabbing our head torches, with barely enough regard for tying our boot laces. Our new found friend and local researcher Graham Prescott joined us.

We had barely reached the track when we noticed a light behind us. Frog researcher Oliver Konopik had also come late to dinner and on sitting down had heard of the commotion caused minutes earlier by Dave's account and our sudden departure. He caught up to us panting, having forgotten his dinner and evidently his boots: "What's this I hear of crazy Australians finding Reinwardt's Frog?!"

Oli is studying frog assemblages in Borneo and was our go-to man for identifications and general froggy chat. He had seen just about every amphibian in Borneo but NOT a Reinwardt's Flying Frog. His enthusiasm gave

us all the more impetus for our quest.

Dave guided us back to the spot and we immediately began scanning the trees. There! About 10m high, the very distinct and tempting tell-tale light of froggy eyeshine reflected down at us. To confirm, Dave took a photo with his telephoto lens and sure enough, the distinct shape and colouration of a *R. reinwardtii*!

Oli shook his head in resigned dejection, "It's too high, we can't get it." Dave, Michael and I looked at each other with confident indifference. "Pfft! Of course we can get it, we're *Australian*!"

I removed my boots and had a quick stretch; tree or no tree, we could see our prize and we were going to get it!! Everybody spaced themselves around the base of the tree, craning their necks, not daring to lose sight of the frog should it move.

The great slippery jungle tree, made wet by the afternoon downpour stood before me, entangled with vines and crawling with tiny black ants. I grappled my arms and legs around the trunk of the tree and heaved my entire body weight up, only to slide back down the slippery wet bark. Again with more exertion I pushed up the trunk a fraction higher this time only to feel my purchase slip once more



Mad George up the tree!

and I descended miserably back to the ground. Frustratingly, the lowest branch with which to gain a hold was several metres above. Gritting my teeth with determination I gave it one more go, ignoring the black ants crawling under my shirt and the bark chafing at my skin, I grunted and sweated my way up. Holding on for all I was worth I was loathe to slide down another time when suddenly, with failing strength in my own arms, I felt the strength of another as Michael grabbed my feet and with a primeval grunt heaved my entire weight higher into the tree.

Higher and higher I climbed, the branches getting thinner as the awareness of my own body weight became more apparent. But alas with all the shaking in climbing the tree, the frog had disappeared once more. In desperation I began snapping branches to improve my visibility into the hidden heights of the tree. The guys on the ground were straining their necks still searching and then there! Perched happily on a branch, a big fat green

frog! You beauty, an elusive flying frog! Yet as close as I now was, the branches leading out to it would not be strong enough to hold my weight if I dared venture out from the trunk.

In desperation I began throwing the nuts growing on the tree at the frog to encourage its descent. Below me, Dave sought out a very long branch, and moving to higher ground, stretched upwards with the branch as far as he could. Mere millimetres short... With a lunge he managed to just nudge the frog and suddenly, with grace and ease, our little friend outstretched the dazzling and brightly coloured webbing between its fingers and toes and glided for land. Like an expert cricketer Dave caught it as it headed straight towards him. A great cheer erupted from below, we'd got it! Still stuck up the tree I could hear the happy cries of delight and joy as they marvelled at our prize like excited schoolboys. "Wait for me you scoundrels!" I yelled.

And what a gorgeous creature it was! The



Norhayatis Gliding Frog, *Rhacophorus norhayatii* displaying its magnificent-coloured webbing and undersurface **George Madani** 

size of a decent green tree frog, its body a vibrant green and its throat and belly a rich black sprinkled with a flamboyant splash of blue and yellow speckles with its flanks black as tar. The extensive webbing between its huge toes equally exquisitely marked. But wait on, Oli had misgivings, it was far too boldly marked, and did not look like a typical R. reinwardtii. It hadn't the clean yellow belly nor the silver white specks on its back, and it was slightly too large. There was certainly nothing else like it in the field guide, though. Had we caught a variant of the species? Nonetheless our excitement was undiminished, we photographed this beauty and Oli made use of the team's find and measured the old girl up.

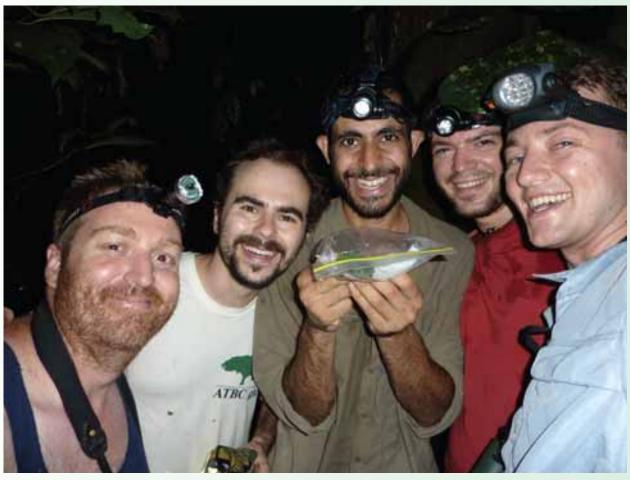
With some follow up research it turned out that our *Rhacophorus reinwardtii* was in fact *R. norhayatii*!! This species was split from *R. reinwardtii* and described formally in 2010. The most exciting thing however is that *R*.

norhayatii is only described from peninsular Malaysia and southern Thailand, and here it was in Borneo! A huge range extension and the first confirmed record of this species on the island!

This begs the question: what else was in the tree? Dave had clearly photographed a *R. reinwardtii* proper, yet what we caught was evidently not. After our departure, Graham visited the same site on several occasions and also turned up Wallace and Harlequin Flying Frogs! What we had found was flying frog breeding habitat paradise with numerous rhacophorid species occurring sympatrically!

All in all it was an absolutely fantastic way to cap off an amazing adventure.

Borneo was good to us, to the very end!



Team 'Norhayatis' with their prize possession

George Madani

# Frogographic competition



Most interesting Image (Senior 1): Camouflage in Green-eyed Tree Frog, *Litoria serrata*Arthur White



Best Image (Senior 2): Giant Barred Frog, Mixophyes iteratus

Veronica Silver

## WINNERS!



Most Interesting Image (Senior 2): Ornate Burrowing Frog, *Platyplectrum ornatus* 

**Arthur White** 

#### See centrefold for:

Best Image (Senior 1): Wallum Sedge Frog,

Litoria olongburensis Marion Anstis



Best Senior Frog Art: **Marie Calalns** (after photo by Pavel German)



Best Junior Frog Art image: Ryan Little

### Frogs!

I've been a frog man for most of my life, which is why I've struggled to find me a wife, as though many women enjoy a good romp, it's tricky to coax them out into a swamp.

Amongst the mosquitoes, you'll find me most nights.

dressed up in my wetsuit and green lycra tights,

Amongst all my frog friends I'll chirrup and croak,

as I like the bond between all froggy folk.

It takes lots of luck for a frog to grow old, as they face many dangers out there in the cold.

As spawn they are gobbled by insects and fish, and to herons big tadpoles make quite a nice dish.

And once they are frogs, well the dangers don't stop, as on the swamp food chain they're far from the top.

Every snake, every fish, every bird, every eel, is out in the swamp looking for a nice meal.

a nice meal of froggies is what they enjoy, to escape them there's tricks that most smart frogs employ.

Frogs are famous for jumping, it's what they do best, most jumps would put any old snake to the test.

But jumping is only a frog's last resort, they don't jump for fun and they don't jump for sport.

In the daytime there are too many bities around, there are birds in the sky, there are snakes on the ground.

The frogs hide away in their damp little houses, where they're safe from the snakes and marsupial mouses.

Some hide in trees, some hide in the ground,
the froggies sit still and hope they won't be found,
but at night when its raining and there's plenty to eat,
the froggies emerge from their daytime retreat.

Of course there are dangers at night for a frog,
Night herons, most fish, or a big hungry dog.
Its probably good that frogs brains are small,
or else they wouldn't go out there at all.
But they go out to sing, and they go out to croak,
to eat a few moths and share a frog joke,
and find a nice mate with good strong froggy legs,
and they get together and make lots of eggs.

And before it gets light they slink back to their houses, and I take off my tights and I put on my trousers.

My friends have remarked how my legs have got longer, my mouth's gotten bigger, my voice a bit stronger,

I spend too much time sitting still on a log,

Good heavens! I think I'm becoming a frog!

©Alex Dudley

Fauna surveys, photography and natural heritage interpretation services



Well-known Sydney frogs and their life histories

**Peter Street** 

**Above:** the Red-crowned Toadlet, a species that has declined greatly as it inhabits sandstone ridges in the Sydney Basin, right where people like to build houses.

**Below:** The Common Eastern Froglet needs no introduction, as it is heard calling most nights throughout the year in the Sydney region, and all eastern States. But sometimes common frogs are neglected, so here is a glimpse of these resilient little frogs in action while breeding.



## Field Trips

Please book your place on field-trips! Due to strong demand, numbers are limited. (ph. 9681-5308).

Be sure to leave a contact number. Regardless of prevailing weather conditions, we will continue to schedule and advertise all monthly field-trips as planned. It is <u>YOUR</u> responsibility to re-confirm, in the final days, whether the field-trip is proceeding or has been cancelled. Phone Robert on 9681-5308.

1. Saturday 1st December: 8-15p.m. The Watagans Leaders: Brad & Matt McCaffery

Take the F3 north. Travel approximately 83km and take the Morisset/Cooranbong exit. Turn right and drive 2km to the cnr. of Mandalong Rd and Freemans Drive. Meet 200 metres from the corner.

Many readers of Frogcall often wonder why we use those seemingly complicated, Latin-based, double-barrelled, scientific names when discussing frogs. It is because we adopt the 'binomial system'. Common names are often confusing and are easily duplicated. They are often colloquial, fraught with historical inaccuracies, and vary from local region to local region. The 'binomial system' provides us with a clear and unambiguous alternative. It also conforms to an internationally accepted code, so we may travel the world and be assured that there is consistency in the naming of frogs. The 'binomial system' also helps describe the relationship between frog species. Brad and Matt have a very simple, unique layman's approach to the 'binomial system'. Tonight, using the spectacular frogs of the Watagan's forests as an example, they will help us unravel some of the mysteries of the 'binomial system' and they will show us how simple it really is. Brad and Matt have accumulated much field experience in a very short time and already enjoy an excellent reputation in herpetological circles.

#### 2. Saturday 5th January: 8-15p.m. Jilliby, Central Coast Leader: Grant Webster

Take the F3 north for approx 65km, go past the twin servos, after approx 3km take the Sparks Rd exit and turn left. Meet 500m down the road, on the corner of Sparks Rd and Hue Hue Rd.

Curiously, some species, such as the Stony Creek Frog, *Litoria wilcoxi*, lack a vocal sac and have a surprisingly soft, muted call. It is thought that the noisy surrounds of rocky streams-sides and rapids where they live may negate any advantage of a loud call. Tonight, we will spend some time examining the way frogs call. We will also consider the importance a frog's uniquely distinctive call plays in the breeding biology of a frog and the viability of a population. Grant at present is spending much time on the Central Coast undertaking extensive fieldwork into the biology of frog breeding. Tonight he will lend his expertise in this interesting area and he will also spend some time introducing us to this new FATS location.

#### 3. Saturday 9th February: 8-30p.m. Castlereagh Nature Reserve Leader: Peter Spradbrow

Meet at the Shell Service Station, Richmond Rd, Berkshire Park, (opp. Windsor Downs Estate). It is between St Marys Rd and Llandilo Rd.

Tonight we will look at the frog life of this reserve and we will contemplate the wildlife that 'might have been' if authorities from the time of the First Fleet had only been more prudent in initially setting aside native forest reserves in the Sydney area. Peter has had a long association with both wildlife and with the public education of wildlife issues. He is highly-regarded in herpetological societies and the broader natural history world. Tonight he will show us his 'backyard' at Castlereagh.

NB: In the event of uncertain weather conditions please phone 9681-5308. Remember - rain is generally ideal for frogging! Children must be accompanied by an adult. Bring shoes or gumboots that can get wet, torch, warm clothing and raincoat. Please be judicious with the use of insect repellant - frogs are very sensitive to chemicals! Please observe all directions that the leader may give. Children are welcome, but parents please remember that young children especially can become very excited and boisterous at their first frogging experience, so you are asked to help ensure that the leader is able to conduct the trip to everyone's satisfaction. All field trips are strictly for members only, but newcomers are welcome to take out membership before the commencement of the field-trip.

#### Field Trip Disclaimer:

All participants accept that there is some inherent risk associated with outdoor field trips and by attending they agree to a release of all claims, a waiver of liability, and an assumption of risk.

#### Notice

The Australian Reptile Park is anticipated to hold its Interclub Christmas party on Sunday 9th December 2012 from 10 am to 3pm. Please call them to confirm. This once a year get-together of the herpetological societies is an event not to be missed. John Weigel is likely to be Santa again and a big croc gets a Christmas treat. Us mere mortals may get a 'behind the scenes' tour. Free entry to FATS members. Please take your current FATS membership card as proof of membership.

FATS meet at 7pm, on the first Friday of every EVEN month at the Education Centre, Bicentennial Park, Sydney Olympic Park



Thank you to the many Frogcall supporters.

Your articles, photos, media clippings, webpage uploads,

membership administration, mail—out inserts and envelope preparation is greatly appreciated.

Special thanks to regular newsletter contributors, including

Lothar Voigt, Robert Wall, George Madani, Karen & Arthur White, Wendy & Phillip Grimm,

Grant Webster, Marion Anstis, Andrew & David Nelson & Bill Wangmann.

<u>INSURANCE DISCLAIMER</u>: FATS has public liability insurance for its various public functions. This insurance does not cover FATS members; it covers the public and indemnifies FATS. We are currently checking with insurance firms to see whether a realistic group policy can be organised to cover FATS volunteers and people who attend field trips.

<u>FATS MEETINGS</u>: Commence at 7 pm, end about 10pm at the Education Centre Bicentennial Park, Sydney Olympic Park, Homebush Bay and are usually held on the <u>first Friday of every EVEN month</u> February, April, June, August, October and December (but not Good Friday). Call, check our web site or email us for further directions. Easy walk from Concord West railway station and straight down Victoria Ave. Take a strong torch in winter. By car: Enter from Australia Ave at the Bicentennial Park entrance and drive through the park (one way road) turn off to the right if entering from the main entrance or enter from Bennelong Rd/Parkway. It's a short stretch of 2 way road and park in p10f car park (the last car park before the exit gate).

We hold six informative, informal, topical and practical meetings each year. Visitors and families are welcome. We are actively involved in monitoring frog populations, other field studies and we produce the newsletter FROGCALL and FROGFACTS information sheets. All expressions of opinion and information are published on the basis that they are not to be regarded as an official opinion of the Frog and Tadpole Study Group Committee, unless expressly so stated.

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The FATS committee especially thank Marion Anstis for producing this annual colour edition.