FROG CALL

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THE FROG AND TADPOLE STUDY GROUP OF NSW INC
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Marion Anstis' PhD thesis scholarship application "Tadpoles and Frog Eggs of Australia" was 1 of 3 winners of the Vice Chancellor's Award for Excellence in Research. Photo Phillip Grimm

Dr Karen Thumm, Dr Michael Mahony and Marion Anstis

Join us at our FATS meeting.
Arrive 6.30pm for a 7pm start

Friday 2nd October 2009

Park at the first security gate on the right hand side of Jamieson St. (about 300m off Holker St)
Follow the signs to Building 22 Homebush Bay, Sydney Olympic Park
Accessible by bus or train.
Call us for details

MEETING FORMAT for Friday 2nd October 2009

6.30 pm	Lost frogs needing homes. Please bring your FATS membership card, donation and amphibian licence, which must be sighted.
7.00 pm	Welcome, and announcements.
7.30 pm	The main speaker is Phillip Grimm: Auditory surveys at Sydney Olympic Park and Falls Retreat
8.15 pm	Field trip reports and five favourite slides. Tell us about your recent frogging trips or experiences. If you have slides or other images, bring them along as well.
8.30 pm	For the second half of our meeting, Judy Harrington has invited us to the Birds Australia building, next door, for a look and some tea. Evenings end with our regular guessing competition, light refreshments and an opportunity to talk to other frog enthusiasts and experts.

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ANNUAL GENERAL MEETING 7th AUG 2009

The AGM was held in building 22, Newington Armoury, Sydney Olympic Park. The attendance list was circulated. Apologies were received from Paul and Joel Cassar, George Madani, Heather Parsons, Alysha Hardy, Karen Russell and Marion Anstis The minutes of the previous AGM are as per FrogCall Business Arising from the Minutes: The FATS Student Grant scheme was initiated in late 2008. AW

PRESIDENT'S REPORT: (ARTHUR WHITE)

The 2008-2009 financial year was a consolidation period for FATS. It was our first year without the FrogMobile and the year that we finally launched the Student Grants Scheme. The first recipient of a Student Grant was Rowena Hamer for her tracking studies on the Brown Striped Frog.

As usual, our various activities have been running, such as the Frog Rescue Service, public exhibitions, school workshops, field trips and community workshops. We continue to be invited to contribute to Governmental Panels in areas such as Threatened Species Conservation and the listing and keeping of native animals as pets.

One recent addition to our field trip destinations has been Falls Retreat, on the mid north coast of New South Wales. Falls Retreat is owned and run by Dr Mary White, a famed palaeobotanist and ecologist. Mary's plans for Falls Retreat are to develop it as an environmental centre and FATS may be able to assist with this end.

In February 2010, we are undertaking another field trip in to the north coast in conjunction with Outback Tours. We have never organized a bus field trip before and this will be a trial for any such future trips. Robert Wall, our field trip co-ordinator, again produced a nice array of field trips throughout the year, and he was ably assisted by Matt and Brad McCaffrey and Grant Webster in the running of these trips. From time to time you will see various items about field trips and the codes of conduct during field trips advertised in FrogCall.

As usual, the FATS executive has been busy and efficient and I thank them all for their efforts. Karen White has been our Treasurer and has kept FATS accounts in the black. Wendy Grimm and Punia Jeffery have been our ever-efficient secretaries, Grant Webster has acted as our chairperson and we thank him for running some of the meetings. Monica Wangmann continues to put out FrogCall packed with juicy articles and tales of interest. Andrew Nelson has maintained our membership data base and looks after new memberships. Robert Wall organizes the field trips and deals with government departments on our behalf. Alistair MacDougall and David Nelson have been busy updating the website and preparing a new membership brochure, with the help of Marion Anstis and others. Everyone on FATS helps and that is why we are able to run so many different activities.

Finally, although we have lots of helpers, we always could do with more. Many of you have helped at the various community days, at meetings, with frog rescue or frog care or other activities. If you want to be more involved, don't be shy, let us know. We are also open to suggestions about how we might better operate or other services that could be run by FATS. So if you want to help or merely have some suggestion, approach a FATS executive member and chew their ear off. Don't forget, positions on the FATS executive are not divine, if you would like to be on the executive, let us know and we will see what can be arranged.

It was moved (A.Nelson/L.Voigt) that the President's Report be accepted. Carried. **AW**

LAST MEETING 7TH AUGUST 2009 continued

Following on from the President's and Treasurer's reports were announcements. Brochures for Falls Retreat were available. Books for sale include, Rainforest Frogs $20, Frogs and Reptiles of the Sydney Region with CD by Ken Griffiths $20 (a generous discount), Frogs and Tadpoles by Marion Anstis' children's book, special discount $10 for the night and FATS T Shirts $25. Arthur spoke about Falls Retreat and other field trips planned. Arthur introduced Michelle Stockwell who did her PHD on the Green and Golden Bell Frog looking at a number of aspects of their biology and the cause of their demise. **MW**

Michelle Stockwell, from the University of Newcastle, was our main speaker at the last meeting. She spoke about the Green & Golden Bell Frog Monitoring and her role in coordinating auditory surveys at Sydney Olympic Parklands. Continued on page 7 **MW**

CONGRATULATIONS MARION ANSTIS

Marion Anstis' Ph D thesis scholarship application entitled "Tadpoles and Frog Eggs of Australia" was selected as one of three winners of the Vice-Chancellor's Award for Excellence in Research from the 103 Ph D scholarship winners at the University of Newcastle in 2009. See front page.

The award certificate was presented by the Vice Chancellor on 30th July 2009, and is accompanied by a generous financial grant per annum in addition to, and for the life of the scholarship.

Marion gave a short inspiring address about her career in tadpole research to the audience of academic staff and prospective research higher degree students.

Marion was supported by FATS friends Phillip and Wendy Grimm, and others, including her Ph D supervisor Dr Michael Mahony and close friend and colleague Dr Karen Thumm, long standing FATS members.

The Frog and Tadpole Society are very proud of Marion and the well deserved acknowledgement of her ground-breaking research in this field. **Phillip Grimm**

LIFE MEMBERSHIP AWARD TO KAREN AND ARTHUR WHITE.

The FATS Group is fast approaching many significant milestones. We have already seen our 100th issue of Frogcall. We are also on the cusp of some significant anniversary events. Longevity and success are often the result of the tireless work of some very dedicated individuals. These people make a contribution that is clearly beyond the ordinary and requires special recognition.

All members would be aware of the significant input Karen and Arthur White have provided to FATS over many years. They really are the Dynamic Duo of the FATS Group. They were there at the first meeting of our fledgling group. Since that time, they have had a hand in virtually every aspect of the club.

Our first field-trips were led by them. They have been at the forefront of our education and promotional days. Many of our dealings and representations to authorities are prepared and submitted by them. They organize our meetings and speakers. Our financial and administrative affairs are kept in orderly fashion by them. Our enviable financial position is largely a result of their early and generous fund-raising efforts. Between them, they have held two pivotal committee positions for over a decade. In that time, they have exercised their duties without any self-interest or personal agenda. Their tenure has been characterized only by the commitment to furthering FATS as a respected zoological society.

In short, under their stewardship, FATS is a much stronger, more prosperous and more reputable organization.

To recognize this outstanding contribution, it was resolved to confer the award of Life Membership on both Karen and Arthur White. We know that all members would agree that this award was well-deserved and perhaps a little overdue.

The awarding of this honour had presented the committee with a unique and serious problem. Should either Karen or Arthur have gained a hint that such an award was in the pipeline, the committee was aware that Arthur would invoke his CEO administrative powers to veto the proposal. It was thus resolved in secret to press ahead with the award and hold a suitable presentation – the August AGM being chosen as an appropriate event.

For those who attended our August meeting, all would agree it was a great evening. Our special guest, Martyn Robinson, presented the award to two rather surprised recipients. An early conclusion to the meeting allowed all members an opportunity to congratulate Karen and Arthur and to chat with fellow members over a light supper.

We know that all members would like to pass on their very best wishes to Karen and Arthur and their appreciation for a job well-done.

The FATS Committee.

FATS FROG-O-GRAPHIC COMPETITION

In 2008, FATS conducted the first Frog-o-graphic competition. This proved very successful as we have many creative people in the group who take marvellous photo, do incredible drawings and art works, can sculpt, potter or create frog do-dahs from just about anything. Here is your chance to show off your skills.

There are several categories in this competition:
Best Frog Image (Adult)
Best Frog Image (Junior)
Most Interesting Frog Image (Adult)
Most Interesting Frog Image (Junior)
Best Frog Artwork (Adult)
Best Frog Artwork (Junior)
and the People's Choice Award.

The first six awards will be selected by a specifically hand-picked panel of judges while the People's Choice will be decided by the audience at the December Fats meeting.

To enter: Send an electronic image of your entry to Arthur White 1arthur@tpg.com.au

Don't forget to add your
name,
age (if under 18) and
contact phone number.

How many times can you enter? Unlimited.

Is there a Prize? Fabulous prizes will be awarded for each division winner. No correspondence will be entered into the judge's decision. Please note: the entries must be original and your work. The winning entries will also be featured in a colour supplement in FrogCall.

Entry Date: Entries may be submitted until the 1st of November 2009. If you suspect that you may have a problem meeting the deadline, contact Arthur and see if some other arrangement can be made.

So start painting, drawing, photographing or whatever you do to capture the essence of a frog. We look forward to see your entries. **Arthur White**

Arthur White and his pet GTF frog Zumo

SUN-LOVING FROGS AID FUNGUS FIGHT

Andrew Gray reveals the secrets of the frogs' skin Sunbathing tree frogs may hold the key to understanding how a deadly fungus is wiping out amphibians around the world. The chytrid fungus has been implicated in many amphibian extinctions.

Now scientists are using non-invasive imaging technology to find out how some frogs from Central America may be able to beat this deadly disease. They believe that the frogs' unusual skin is allowing the animals to bask in hot sunlight, possibly boosting their temperatures to kill off the fungus.

Most frogs avoid prolonged exposure to sunlight; the light and heat dry out their skin. However, some tree frogs from Costa Rica thrive in these conditions. Andrew Gray, curator of herpetology at Manchester Museum who keeps a large collection of frogs from this area, said: "They sit in the Sun and bask for long periods without doing themselves any harm.

The team wanted to study the frogs' skin without harming the animals

"However, until now, nobody has really looked at how they do this." The challenge, he said, was to find ways of examining the frogs' skin in detail without harming the creatures, some of which are extremely endangered. So the researcher teamed up with physicists from the Photon Science Institute at the University of Manchester. Dr Mark Dickinson said: "I had been working on a new imaging technology called Optical Coherence Tomography (OCT) for medical imaging. "But when Andrew approached me, I thought that this would be perfect for the frogs - it can show us what is happening in the frogs' skin but it is non-invasive."

"Is this their natural defence against the fungus? Andrew Gray"

Hot stuff The OCT reveals that an unusual pigment in their frog's skin, called pterorhodin, was allowing the creatures to reflect light in the infrared spectrum rather than absorb it. Melanin, the pigment typically found in skin, absorbs light.

Some believe the frogs could be reflecting light so they can blend in with the leaves they sit on, which also reflect at these wavelengths, to hide from predators that can only see in the infrared range.

But Mr Gray said: "We believe that the frogs are also reflecting the light and heat for thermoregulation - to cool themselves down. The surface of the skin is hot, while the body stays cool."

Some of these sunbathing frogs even take on a slightly metallic sheen as they bask in the sun, he added.

He believes that the unusual reflective skin structure revealed by OCT could help scientists to better understand how the chytrid fungus (Batrachochytrium dendrobatidis) is affecting frogs.

Mr Gray said: "The chytrid fungus lives in the skin of the frog, but it can only live at certain temperatures.

"It has been shown with frogs in captivity that if you elevate the skin temperature for short periods, you can clear them of the fungus.

"We thought: 'what if the sunbathing frogs are doing this naturally?'; is this their natural defence against the fungus?" If temperature regulation is linked to the chytrid fungus, recent climate changes in the regions where the frogs live could have affected their ability to fight off infections - causing the recent dramatic declines, said Mr Gray.

"In Costa Rica, in the Monteverde rainforest, conditions have changed a lot in the past 10 years. There is now much more cloud cover, which leaves the frogs with less opportunities for sunbathing, and for possibly clearing themselves of the fungus."

The team is now using the OCT technique to see how different species of frogs that carry the special pigment reflect light, and also to study the skin structure in frogs that do not carry the pterorhodin pigment. They believe that the amphibians' differences in ability to reflect may explain why some species are coping better with chytrid infections than others.

http://news.bbc.co.uk/2/hi/science/nature/7464437.stm
By Rebecca Morelle Science reporter, BBC News
forwarded by Arthur White

GETTING DOWN AND DIRTY WITH FROGS

Research: Marion Anstis is receiving a scholarship to study frogs. Photo by Ryan Osland Newcastle Herald 1st August 2009 sent to FATS by Rodney Parker-Wright and Wendy and Phillip Grimm.

By ALISON BRANLEY

THE thought of drinking treated effluent might make some people cringe but it is working wonders for some frog species.

University of Newcastle researcher Marion Anstis made the discovery during field work on the South Coast for her Biological Sciences doctorate.

She is undertaking a comprehensive study of all Australia's tadpole and frog species.

Ms Anstis said the green and golden bell frogs living around the final pool at the Sussex Inlet

water treatment plant at Jervis Bay had avoided the fungus that was threatening frog species around the world. And they were thriving.

"There must be something in the treatment chemicals that kills the fungus," she said.

Ms Anstis's work will be the first comprehensive study of all Australia's tadpoles and will include photos and drawings of the junior amphibians.

A former high school music teacher, Ms Anstis said she used her finely tuned ear to help identify similar-looking frogs by their call.

Ms Anstis was one of three doctorate students awarded a $10,000 scholarship at the University of Newcastle's vice-chancellor's awards on Thursday.

Other winners included Sarah Hiles and James Foster.

FROG CALLS BEING LOST IN SYDNEY'S TRAFFIC NOISE

Electric cars could help save the sex lives of Sydney's frogs. The amphibians' mating calls are being drowned out by traffic noise and if there's one thing a female frog judges her potential partner on it's the strength of his vocal seduction. "The poor things croak their hearts out but the females just can't hear them because of the noise of traffic on our roads," Dr Kirsten Parris from the University of Melbourne said.

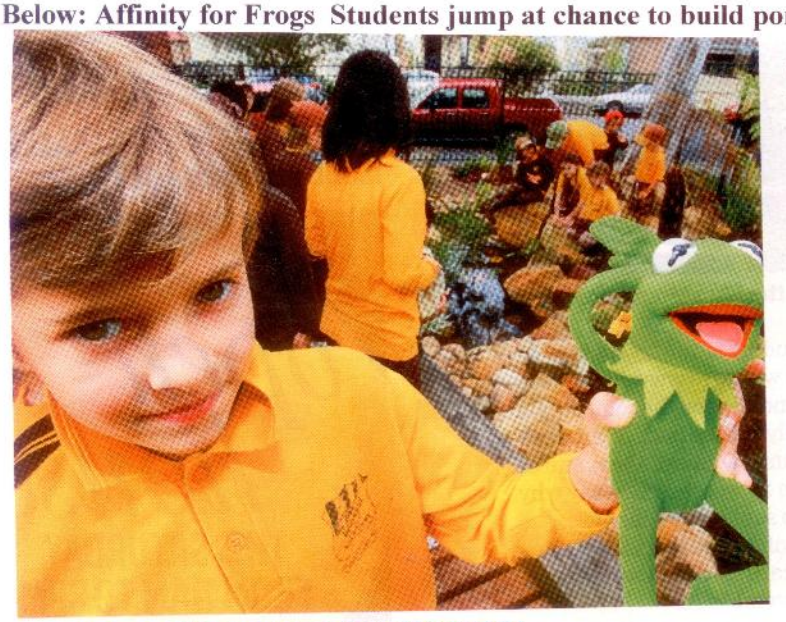
"Male frogs show they are fit and strong by calling fast and loudly and for a long time. "The girls don't want a wimp." She said in areas of heavy traffic, male frogs once heard 800m away are audible from 14m. Dr Parris has been studying nine frog species in public garden ponds in Melbourne but she said noise was a problem in any urban environment in Australia. "The frogs in Sydney will be having the same issue" she said.

Dr Parris, who addressed the 10th International Ecology Congress in Brisbane yesterday, said at present there was no legislation protecting non-humans from traffic noise. "One way to help might be for developers to plant hedges between ponds or creeks and a busy road. A hedge with small densely packed leaves isn't a bad way to suppress noise," Dr Parris said. "Reducing traffic on popular busy streets probably won't happen, but in the future electric cars which are so much quieter could really help the frogs hear mating calls. **By Malcolm Holland The Daily Telegraph 21 August 2009**

A Green Tree Frog named Matie - Monica Wangmann's 12 year old Green Tree Frog posing in Ashfield for The Daily Telegraph.

Centre article: Frogs to go: could man's appetite take away species? Adelaidean March 2009 sent by Les Moore

Below: Affinity for Frogs Students jump at chance to build pond Inner Western Courier 8 Sept 2009



James Anderson with his own froa. Photo: PHIL BLATCH

Kate Carr

Frogs are among those hardest hit by climate change, but one local school is doing its bit to help.

Balmain Public School has just finished building a frog pond designed and built by children from the school with the help of their parents.

President of Balmain Public's parents and citizens committee Theresa Collignon said children had a natural affinity for frogs.

"I think it is just seeing them jump out of the water and hearing them croak," she said.

Featuring native plants and fish, Ms Collignon said the pond was a magnet for children.

"My son is a huge nature lover," she said. "Both my children love frogs." She said the pond was designed to catch water run-off from the playground, minimising its water needs.

Built over five weekends after extensive fundraising, Ms Collignon said the pond had provided a real rallying point for the school.

"It was an all in family affair," she said.

"This school really is a parent and kids power place."

The global trade in frog legs for human consumption is threatening their extinction, according to a study by an international team including University of Adelaide researchers.

The researchers say the global pattern of harvesting and decline of wild populations of frogs appears to be following the same path set by overexploitation of the seas and subsequent "chain reaction" of fisheries collapses around the world.

The researchers have called for mandatory certification of frog harvests to improve monitoring and help the development of sustainable harvest strategies.

University of Adelaide ecologist Associate Professor Corey Bradshaw said frog's legs were not just a French delicacy.

"Frog's legs are on the menu at school cafeterias in Europe, market stalls and dinner tables across Asia to high end restaurants throughout the world," said Associate Professor Bradshaw, from the University's School of Earth and Environmental Sciences and also employed as a Senior Scientist by the South Australian Research and Development Institute (SARDI).

"Amphibians are already the most threatened animal group yet assessed because of disease, habitat loss and climate change – man's massive appetite for their legs is not helping."

The annual global trade in frogs for human consumption has increased over the past 20 years with at least 200 million and maybe more than one billion frogs consumed every year. Only a fraction of the total trade is assessed in world trade figures.

"Absence of essential data to monitor and manage the wild harvest is a large concern."

The study team includes researchers from the Memorial University of Newfoundland in Canada, the National University of Singapore and Harvard University. A paper about the study has been published online in the journal *Conservation Biology*.

Story by Robyn Mills

Brendan O'Keefe

NO sooner had Australia's newest frog species been identified than its discoverer warned that the amphibian's existence was threatened by climate change.

The frog, *Mixophyes carbinensis* (the Carbine Tableland barred frog), lives on or near mountain tops in cool rainforest pockets in far north Queensland.

University of Newcastle conservation biologist Michael Mahony, who helped identify the species, told *The Australian* yesterday the frog faced two potential threats: climate change that would not only make life too hot for it, but might also allow a deadly disease to flourish.

The species could have less than 50 years to live.

"Even with moderate predictions of global warming, its habitat will disappear before 2050," Dr Mahony said.

The rare frog lives 1200m to 1400m above sea level in the Carbine Ranges, inland from the Daintree region. "What we know from the predictions of global climate change and global warming is that the first places that will experience significant change are high altitudes," Dr Mahony said.

"Animals at lower altitudes can migrate north or south to where there's a suitable climate, but the trouble with living on a mountain top is that you can't move. They have nowhere to go."

It was feared that the mountain tops, where Dr Mahony said the summer daytime temperature was in the mid to high teens, might warm up to the 17C to 25C range that encourages a disease called chytrid fungus, which science holds responsible for a worldwide amphibian decline.

About 10 species of Australian frogs have become extinct since 1980 from climate change, including some of the new species' mountain top neighbours, such as the sharp-snouted day frog and the tinker frog. "So in the very streams where this animal is found, there are three or four species of frog that have already disappeared or become critically endangered," Dr Mahony said.

The discovery is described in the journal *Zootaxa*. The new frogs belong to a group known as barred frogs. Scientists curious about their altitudinal range did genetic tests that showed more diversity than previously thought. They also discovered a second new species, *Mixophyes coggeri*.

'Nowhere to go': *Mixophyes carbinensis*, the new frog species

Above 12 Jan 2007 Hello, goodbye: new frog's days are numbered

LAST FATS MEETING 7 August 2009 continued

Michelle Stockwell at SOP with Green & Golden Bell Frog

http://www.abc.net.au/catalyst/stories/img/michellestockwellLarge.jpg

Green and Golden Bell Frogs now inhabit less than 10% of their former range. One of the largest sites remaining is Sydney Olympic Park. A conservation program has been put in place to protect remnant populations. The primary habitat areas for the GGBF are where breeding occurs. Supplementary sites are where there are fewer Bell Frogs and less breeding occurs. The brick pit, where they are found, is a shale and sandstone site.

In 2008 further auditory, visual and dip netting research began at the site. GGBF were captured, microchipped, measured and sexed. Ponds were examined for occupancy, pond performance and abundance of frogs. Frogs were recaptured to determine how far they moved. These surveys were done to understand what drives occupancy, how to increase occupancy and the degree a pond is utilized.

Australian Zoologist October 2008

The naïve occupancy rate is 58% of ponds at SOP but modelling indicates it's actually 79%.of ponds. 156 individuals were identified at the brick pit. This implies an estimated population of 450 to 500 adults. Management is working to improve pond performance. Michelle took many questions from the keenly interested audience. Thank you for sharing your findings with us, Michelle.

Lothar Voigt introduced a special guest, Martyn Robinson from the Australia Museum. Martyn congratulated a very surprise Karen and Arthur White. He spoke about their hard work for FATS and Arthur's diverse zoological expertise. Arthur has been the President of FATS for 10 years. He is a recognised expert and consultant on all things to do with the GGBF - such that the earth has moved for him (or not) as the case may be – keeping the GGBF colony site at SOP.

Although Arthur's knowledge of frogs is legendary, he doesn't just restrict himself to those. He is a zoology researcher at the Uni of NSW, has published a wide variety of papers, on a wide variety of species and supervises the research of other students. Karen and Arthur have travelled widely, to remote areas and he can advise on a variety of subjects, covering a diversity of animals including bats and turtles. He has discovered a number of species and unravelled the description of the *Litoria jervisiensis.* He is a palaeontologist of some renown, a driving force behind the Riversleigh Society, not only discovering a fossil of a freshwater turtle but went on to discover the living animal as well. So we have a President that can raise species from the dead! Thank you for your speech Martyn. The meeting ended with superb supper.

Veterinarian Lee Peacock's Perons Tree Frog "Glitch"

Just thought I'd update you on my little Peron's tree frog (now known as "Glitch") that came to me a year ago with a leg fracture. The leg that was fractured has healed very well, with only a small bulge at the fracture site to indicate anything was wrong. I've attached a recent photo (the leg facing you is the injured leg). It's been fantastic having the little cutie! Glitch will be the star of a short case report being presented at a vet conference coming up soon. Thanks again for the opportunity to care for Glitch.
Sincerely, Lee Peacock

Ed: Do you remember Glitch's broken leg? FrogCall 97.

The nest-making frogs are believed to be "very rare"

NEST-MAKING FROGS FOUND IN INDIA

A scientist in India says he has found three rare species of frogs that make nests in which to lay their eggs. Dr SD Biju of Delhi University says the frogs make nests after laying eggs to protect them from heat and predators.

The discovery was made in the rainforests of the Western Ghats mountain range in the southern Indian states of Kerala and Karnataka. It comes after 20 years of intensive research carried out in Wayanad in Kerala and Coorg in Karnataka.

The tiny frogs, which measure up to 12cm (about five inches) in length, roll leaves from top to bottom to make a cocoon and produce a sticky substance to close the ends to secure the eggs. "These are extremely rare frogs, the only ones of their kind found in Asia," Dr Biju told the BBC. He said the frogs differed from leaf-nesting frogs found in America and Africa as they make their nests after the females have laid the eggs.

The American and African species build the nest in the process of laying eggs, and both male and female frogs build it together. Dr Biju says the species are seriously threatened by coffee and other plantations due to which they are losing their habitat in the forest. "Eight years ago when I visited the area it was easy to spot them breeding during the night. But there has been a dramatic change and it's now extremely rare to spot them," he says. **By Jyotsna Singh BBC News, Delhi forwarded by Andrew Nelson http://news.bbc.co.uk/2/hi/south_asia/8233923.stm**

WORLD'S RAREST TREE FROG FOUND

An extremely rare female frog has been spotted for the first time in 20 years. The tiny tree frog, *Isthmohyla rivularis*, was seen in Costa Rica's Monteverde Cloud Forest Preserve. This species was thought to have become extinct two decades ago, but last year a University of Manchester researcher caught a glimpse of a male.

However, the discovery of the female and more males suggests this species is breeding and has been able to survive where many other frogs have not. Andrew Gray, a herpetologist from Manchester Museum at the University of Manchester, said: "This has been the highlight of the whole of my career. "Now that we know that both sexes exist in the wild, we should intensify efforts to understand their ecology and further their conservation."

The BBC has been following the team from the University of Manchester and Chester Zoo that is working on amphibian conservation programmes The BBC video of the frog is the first-known footage of this species. The 2.5cm-long female, which was released after the discovery, was brown with metallic green speckles and was packed full of eggs.

A difficult task: Finding female frogs is extremely difficult; males make a distinctive call but females are silent for most of the time. And tracking down this particular species in a great expanse of rainforest was even more difficult - the team had few clues about where the frogs might be, and the search could only take place at night. The team trekked deep into the forest to a spot close to where the male *Isthmohyla rivularis* was spotted last year. The researchers first discovered another male from its soft insect-like call. The conservationists then trained their torches on the undergrowth, and eventually Luis Obando, head of park maintenance at Monteverde's Tropical Science Center, found the tiny female, which was sitting on a leaf.

Mr Gray told the BBC: "It is hard to describe just how unlikely it was to have discovered a female of this particular species. "The only time you ever come across a female is by chance - and it is only once in a blue moon that they come down to lay their eggs. You really have to be in the right place at the right time. "You could come out here every night for a year and not see a thing. I really think that this time we have had luck on our side."

The discovery of both sexes of this species has given the researchers hope that this population may be surviving against the odds. Mr Gray explained: "Last year, when we saw the male, we had no idea whether this was one of the last few remaining male specimens of this species. "But now we have found the female, there is hope that the species may recover. It still seems that these critically endangered creatures are on the very brink of extinction - and although we have been intensively searching the streams all through the night, it appears that the density of the population is precarious."

The researchers swabbed the frogs before they were released to see if they are carrying the chytrid fungus - a disease thought to have killed of many other species in this area. They also used a spectrometer to look at the properties of the frogs' skin to try to find out why this species has survived where others have not. "It is imperative for the future conservation of Costa Rican amphibians that collaborative efforts harness the skills of biologists, researchers, educators and committed individuals, if we are to save these rare species," Mr Gray added. **By Rebecca Morelle Science reporter, BBC News, Costa Rica Forwarded by Arthur White**

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<u>INSURANCE DISCLAIMER</u> FATS has public liability insurance for its various public functions. Members should be aware that 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 about 7pm, end about 10pm and are usually held on the <u>first Friday of every EVEN month</u> February, April, June, August, October and December. Building 22, RANAD, turn into Jamieson St from Holker St and park at the first security gate on the right hand side, Sydney Olympic Park, Homebush Bay. Accessible by car or bus. Call us the day before for a lift from the train station. We hold 6 informative, informal, topical and practical meetings each year. Visitors are welcome. We are actively involved in monitoring frog populations, other field studies, 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. Material from FROGCALL MAY NOT BE REPRODUCED without the prior consent of the Editor or President of FATS. Permission from FATS and/or author/s must be obtained prior to any commercial use of material. The author/s and sources must be fully acknowledged.

Three Photos by George Madani *Litoria rothii* *Limnodynastes convexiusculus* - Marbled Frog *Litoria brevipalmata*

Thank you to the many FrogCall contributors. Your articles, photos, media clippings, webpage uploads, membership administration, mail-out inserts and envelope preparation, is greatly appreciated. Special thanks to regular newsletter supporters, including Lothar Voigt, Steve Weir, Robert Wall, George Madani Karen and Arthur White, Wendy and Phillip Grimm, Matthew Kemplay-Hill, Brad and Matt McCaffery, Grant Webster, Marion Anstis, Punia Jeffery, Fiorella, Andrew & David Nelson and Al MacDougall..

Spawn mass of the tusked frog *Adelotus brevis*. Unlike the more familiar spawn of *Limnodynastes* species, the eggs of *Adelotus* are entirely unpigmented. Photo David Nelson 2007 .

Treasurer's Report: Karen White

FROG & TADPOLE STUDY GROUP
STATEMENT OF INCOME & EXPENDITURE
FOR THE YEAR 01/07/08 – 30/06/09

	01/07/08 – 30/06/09		01/07/07 – 30/06/08
Opening Balance	$ 19,866.28		$ 16,231.41
Income	$ 2,192.53	Interest	$ 1,709.41
	$ 7,200.00	Membership	$ 6,945.00
	$ 1,605.00	Donations	$ 500.00
	$ 2,000.00	Grants	$ 2,000.00
	$ 1,645.00	Sales	$ 483.00
	$ 404.00	Auction/Raffle	$ 685.00
	$ 1,645.00	Rescue Frog Sales	$ 3,190.00
	$ 1,022.00	Field Trip Income	$ 1,769.00
	$ 4,710.00	Frogmobile Income	$ 12,340.00
	$ 1,412.36	Workshop Income	$ 209.05
		Airport Frog Income	$ 294.00
Total Deposits	**$ 23,836.19**		**$ 30,124.46**
	$ 43,702.47		**$ 46,355.95**
Expenditure	$ 10.00	Bank Charges	$ 10.00
	$ 45.00	Dept of fair Trading	$ 44.00
	$ 1,160.00	Insurance	
	$ 295.36	Printing- Sundry	$ 1,166.40
	$ 3,058.00	Printing – Frogcall	$ 1,476.38
	$ 1,188.58	Postage – Frogcall	$ 1,104.83
	$ 119.78	Stationery	$ 75.91
	$ 117.00	Post Box Hire	$ 110.00
	$ 996.00	Field Station Hire	$ 1,560.00
	$ 1,336.50	Herpetofauna	$ 1,326.00
	$ 1,681.75	Sales Expenditure	
	$ 2,105.61	Sundry Expenses	$ 1,325.28
	$ 722.59	Mobile Phone	$ 770.77
		Frogmobile Expenses	$ 7,169.50
		Term Deposit	$ 10,000.00
	$ 621.82	Photographic Comp	$ 350.00
	$ 70.00	Subscriptions	
	$ 600.00	Donations	
	$ 367.00	Student Grant	
Total Expenditure	$ 14,494.99		$ 26,489.67
Closing Balance	$ 29,207.48		$ 19,866.28
TOTAL FATS ASSETS			
Cash in bank	**$ 29,207.48**		**$ 19,866.28**
Term Deposit	**$ 37,114.65**		**$ 37,114.65**
	$ 66,322.13		**$ 56,980.93**

It was moved (P. Grimm / R. Wall)
that the Treasurer's Report be accepted.
Carried.

6-DAY COACH-CAMPING TOUR

Frogs and Reptiles of the Northern NSW Rainforests

12 – 17 February 2010

The Frog and Tadpole Study Group, in conjunction with Outback Track Tours, will host a six-day herpetological tour of the Dorrigo and Washpool rainforests of northern NSW. We will explore the unique wildlife and dark luxuriance of these spectacular World Heritage Listed rainforests. Our itinerary remains flexible to ensure that, each day, we are able to take advantage of optimum local conditions. Returning towards Sydney, we will spend a day taking in the grandeur of Barrington Tops, camping overnight. We will survey the local area for frogs and reptiles.

We will enjoy camping to the sights and sounds of pristine mountain streams set amongst towering forests. This is a wonderful opportunity to see some of our most inspiring frogs and reptiles in their natural habitat. Most members would rarely experience this fauna in the wild.

The tour will be led by Dr. Arthur White. Arthur carries out much professional fieldwork and his research is widely published in scientific journals. He lectures extensively on many scientific matters, and of course, speaks regularly on various frog matters at meetings. This tour is open to all interested herpetologists i.e. FATS membership is not a requirement.

The tour will commence and finish at Eddy Avenue at Central Station. The fare of $800 includes travel by air-conditioned 4WD coach, camp and park entry fees, driver, professional cook and meals. Some assistance with setting-up of tents, after-meal wash-up and general duties will be appreciated. Bookings can only be confirmed with the payment of $250 deposit to Outback Track Tours.

This tour will eventually be advertised to the general public, members are advised to book early to ensure a place on the tour. For further enquiries and detailed itinerary, phone Robert Wall of the FATS Group on 9681 5308 or Mark and Sarah Wardrop of Outback Track Tours on 9913 1484 or STD on 1300 884 463.

***Please Note** : This is a commercial tour and business arrangement with Outback Track Tours. All planned activities at Dorrigo and Washpool are restricted to TOUR PARTICIPANTS ONLY. Club members **will not** be permitted to 'link-up' with the tour group at Dorrigo, Washpool or Barrington in order to attend herpetological activities. Your courtesy will be appreciated.*

amphibian ark

COME ON BOARD THE AMPHIBIAN ARK

Become a member and help save threatened amphibians today!

Did you know? Nearly one third of the world's 6,000 amphibian species are threatened and nearly one half are experiencing population declines. These figures represent more threatened amphibians (frogs, salamanders and caecilians) than birds, fishes or mammals, making them the most threatened class of vertebrates on the planet. In the past few decades, as many as 159 amphibian species may have gone extinct, and all experts involved know that this is an underestimate.

Amphibians are more than cultural icons or simply the creatures we grew up with as kids. They are an important component of the global ecosystem, act as indicators of condition of the environment and contribute to human health. They survived on this planet for millions of years yet now, largely as a result of our own reckless activities, find themselves threatened with extinction. Addressing this crisis represents the greatest species conservation challenge in the history of humanity. The global conservation community has formulated a response in the Amphibian Conservation Action Plan (ACAP), and an integral part of this response is the Amphibian Ark, in which select species that would otherwise go extinct will be safeguarded in breeding programs as a stopgap until they can be secured in the wild.

The successful Amphibian Ark 2008 Year of the Frog campaign brought news of the amphibian crisis to the masses and began to catalyze an organized, global response. Scientists and conservationists around the world learned a great deal about the state of amphibians on a global level and are organizing to attack the threats facing these very important and diverse creatures. This is only the beginning and there is much to do!

We are happy to announce that Amphibian Ark is now a formal membership organization open to ANYONE interested in keeping amphibians on the planet. Boarding the Ark does not require that you work at a zoo, hold a PhD or bring in a six-figure income. Anyone can be a part! Join us in helping to save amphibians, a challenge that will ultimately be quite important to all! Your support is critical to help us reach our goals and protect species on the brink.

www.amphibianark.org/membership.htm For more information contact **Kevin Johnson, Communications Director, Amphibian Ark kevinj@amphibianark.org**

Photos 1 and 2 by Brad Wilson Far right by Montezuma and Lopez-Lopez

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 ph. 9681 5308.

17 October 7.30 p.m. The Watagans Leader : Steve Weir

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 Dr.

In S-E Australia, most streams have their source in the higher elevations in the ranges. Historically, this was also the preferred location for the forestry industry*. A combination of steep slopes and high rainfall, coupled with potentially careless logging practices and logging road construction can lead to erosion and turbidity (*'ter-bid-it-tee' – the amount of suspended sediment in water, 'muddiness'*). This can affect vast tracts of downstream habitat and can affect frogs many kilometres away. Tonight we will consider the disparate influences of logging, rainfall, terrain, waterflows and their combined effect upon our froglife. Steve is a former Field Trips Co-ordinator and many will be familiar with his outstanding and intuitive grasp of frogs, reptiles and ecology. **Forestry operations developed here because the pastoral and agricultural industry had already cleared much of the forests on the flat, more productive, coastal strip.*

13 – 15 November Smiths Lake Camp-out Leaders : Arthur and Karen White

Historically, when an animal was first discovered and collected, it was sent off to authorities, usually the museum, and the specimen was formally '*described*'. It was then preserved and stored with accompanying notes (usually the date and location of collection and by whom it was collected). This became known as the *Type specimen* (the '*Holotype*' or often simply referred to as the *'Type'*). It also became a very important reference for future researchers. Today, many scientific articles will refer to the '*Type*' or the *'Type locality'* (i.e. where it was found). This weekend, we will look at why museum specimens are not just merely antiquated curiosity items, but are of critical assistance to modern-day research. Arthur has formally described a new species of frog and is perfectly placed to also discuss the often torturous path of introducing a new species to science. Karen and Arthur together have studied the Smiths Lake area for many years and have an unsurpassed knowledge of the local fauna here.

Comfortable cabins and camping sites are available. There is a commercial kitchen with ample refrigeration facilities. All crockery, cutlery and kitchen utensils are supplied. Hot showers. There is a **non-refundable** fee of $14.00 p.p. per night. Phone Arthur and Karen White on ph. 9599 1161 for bookings and further details. A limit of thirty people applies.

Sunday 6 December Australian Reptile Park, Somersby Interclub Christmas Party

The once a year get-together of the herpetological societies. John Weigel is Santa and a big croc gets a Christmas treat. Us mere mortals may get a behind the scenes tour. Not to be missed!! Free entry to FATS members. Please bring your current FATS membership card and check start and finish times - usually around 10 am to 3 pm.

12 December 8.30 p.m. Scheyville National Park Leader : Grant Webster

Meet at the corner of Dormitory Hill Rd and Scheyville Rd, Scheyville.

The once-vast Cumberland Plain woodlands are now listed as an Endangered Ecological Community. Originally covering much of the Greater Western Sydney region, these woodlands are now restricted to a small number of highly fragmented (and often highly disturbed) sites. Similarly, the froglife that are dependent on these woodlands have also experienced a reduction in their distribution and abundance. Tonight we will look at the frogs of the Cumberland Plain, and we will examine how and why they significantly differ from the frogs of the Sydney sandstone (*Hint: See Frogfacts Sheet #7 for a discussion of some of these differences).* Grant carries out extensive fieldwork across NSW and has broad experience of NSW frogs. Tonight he returns to more familiar turf and will show us around some of the habitat that is critical for the survival of the frogs of western Sydney.

In the event of uncertain frogging conditions e.g. prolonged / severe drought, hazardous and/or torrential rain, bushfires etc., please phone 9681 5308. Remember ! - rain is generally ideal for frogging ! Children must be accompanied by an adult. Bring enclosed shoes that can get wet (gumboots are preferable), torch, warm clothing and raincoat. Please be judicious with the use of insect repellent - frogs are very sensitive to chemicals ! Please observe all directions that the leader may give. Children are welcome, however please remember that young children especially can become very excited and boisterous at their first frogging experience – parents 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 - newcomers are however, welcome to take out membership before the commencement of the field-trip. All participants accept that there is some inherent risk associated with outdoor fieldtrips and by attending agree to; a release of all claims, a waiver of liability, and an assumption of risk.