NEWSLETTER No. 130 April 2014

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Photo by Aaron Payne *Litoria xanthomera* Mount Spec, Queensland-Orange Thighed Tree Frog



Arrive 6.30 pm for a 7pm start.

Friday 4th April

FATS meet at the Education Centre, Bicentennial Pk, Sydney Olympic Park

Easy walk from Concord West railway station and straight down Victoria Ave. By car: Enter from Australia Ave at the Bicentennial Park main entrance, turn off to the right and drive through the park. It is a one way road. Or enter from Bennelong Road / Parkway. It is a short stretch of two way road. Park in p10f car park, the last car park before the exit gate.

MEETING FORMAT Friday 4th April 2014

6.30 pm There are a few lost frogs needing forever homes available to FATS financial members. Please bring your FATS membership card and cash \$40 - \$50 donation. Your current NSW NPWS amphibian licence must be sighted on the night. Rescued frogs can never be released. Sorry we have no EFTPOS at meetings. Please call Monica before the meeting to confirm your interest in adopting.

7.00pm Welcome and announcements.

7.45 pm Main speaker: Dr Cameron Webb talking about mosquitoes "Taking the bites out of frogging"

9.00 pm Show us your frog images, tell us about your frogging trips or experiences, guessing competition, continue with frog adoptions, supper & a chance to relax and chat with frog experts.

CONTENTS	PAGE
• Last meeting – main speakers: Jako	e Janos,
Lothar Voigt, Marion Anstis	
& Arthur White	2
 Cane Toad find at Gosford 	
 Guacamole, by Kirsty 	3
 Frog hits high notes 	
 FATS on Facebook 	4,8 & 9
 Hot bodies protect frogs 	5
• Smiths Lake field trip reports (part	1)
By Louise Egerton	6 & 7
 Interesting web site 	10
• Expos	
 Herpdigest, Chytrid distribution 	
 FATS information and contacts 	11
• Hula Painted Frog makes comebac	k
 Guide to Health and Disease in 	

Reptiles and Amphibians, new book

12

Dr Brendan Carmel and Dr Robert Johnson

LAST FATS MEETING 7 FEBRUARY 2014

Following announcements, Jake Janos spoke about keeping Central Breaded Dragons, their mutations and frog husbandry. He brought his gorgeous dragons for us to hold. Lothar Voigt gave tips on keeping frogs, pool to pond conversions and algae control. Marion Anstis spoke about the 2014 Australian Society of Herpetologists International Conference in Canberra. Arthur White reported on insectivorous Ghost Bats and Cane Toads. He displayed native animal photos in our "show us your images" segment at the end of the meeting. Judy Harrington spoke about Haslams Creek rising tides. The meeting ended with yummy supper, raffle and lots of good conversation. MW



aedes_aegypti_doggett Photo borrowed from blog http://cameronwebb.wordpress.com/ Dr Cameron Webb

Our main speaker in April is Dr Cameron Webb, Hospital Scientist and Clinical Lecturer, Pathology West - ICPMR Westmead, Medical Entomology, Marie Bashir Institute of Infectious Diseases and Biosecurity, University of Sydney, Twitter: @mozziebites His talk is entitled "Taking the bites out of frogging". He will be talking about mosquitoes. FATS are so fortunate and honoured to have experienced and expert speakers every meeting. Some main speakers are our FATS members and others are linked to the herpetology field.

CANE TOAD FIND AT GOSFORD (extracts)

prompts warning from frog expert Ross Wellington



Frog and toad expert Ross Wellington urges Central Coast people to be on the lookout for cane toads after one was found in Gosford. A lone cane toad found in a retention basin at a Gosford construction site has conservationists worried — is it a stray or the tip of a disastrous environmental iceberg? Only time will tell according to ecologist and frog expert Ross Wellington. "So far it's the only one found there," Mr Wellington said.....Building contractors found the dreaded cane toad last Friday and took it to the Gosford NPWS office. As luck

would have it Mr Wellington was working at the time just across the road at the Rumbalara environment centre. Mr Wellington, who formerly worked for the National Parks and Wildlife Service specialising in frogs — particularly cane toads — immediately identified it as the most unwanted guest in all of Australia.

"It's raised the question of whether cane toads have established on the Central Coast or this is a one-off sighting of a stray individual that has hitched a ride among materials or produce from Queensland," Mr Wellington said. "The community needs to keep an eye out to ensure that it is just a stray and not the first sign of an establishing colony south of its known range."

Cane toads have moved south as far as Yamba and are marching west across Queensland to the Northern Territory. They reached Darwin a few years ago and are heading towards to the Kimberlys. Recently a colony was found at Taren Point, a southern suburb of Sydney, and Port Macquarie, but both were eradicated.

While Mr Wellington is urging the community to be vigilant, he has also asked people not to go around killing frogs willy nilly. "People should not just go and kill a frog because they may accidently kill a native frog that, at first glance, might appear to be one of them," he said.

IDENTIFY FIRST ...Adult cane toads are usually heavy-built and weigh an average of up to 1.8kg and their size can vary from between 12cm up to 23cm. The colouration on their back and sides also varies from olive-brown or reddish-brown, grey, and yellow while their bellies are semi-yellow or semi-white with darker mottling. Behind their ears lie the parotid glands, which usually causes their head to appear swollen. The glands gland produce milky toxic secretion or poison that is dangerous to many species an can kill native wildlife.

"We don't want people to go around killing native frogs by mistake," Mr Wellington said. "If you think you have seen a cane toad you should notify the NSW Environment and Heritage NPWS office in Gosford on 4320 4320." The NSW Environment and Heritage has a useful website at http://www.environment.nsw.gov.au/pestweeds/Cane Toads.htm

Source: Australian government, Dept of Environment http://m.dailytelegraph.com.au/newslocal/central-coast/canetoad-find-at-gosford-prompts-warning-from-frog-expert-ross-wellington/story-fngr8h0p-1226830267414



Photos by Andre Rank from FATS meeting in February Jilli and Luc Streit, Wendy Grimm at Education Centre

GUACAMOLE

Kirsty, our 11 year old daughter adopted "Guacamole", the Green Tree Frog at the December FATS Society Meeting. Joanna advised us that Guacamole has become a treasured member of our household, with his habitat having pride of place in our living room. Kirsty has written more about Guacamole's adventures in her own words....

Guacamole has had a number of experiences he will always remember, and this adventure is one of many. Guacamole was enjoying the peacefulness of his rock hide out. When a very peculiar visitor arrived. This impostor was furry and appeared to be attached to a green string.



This imposter was Belle the labradoodle. Belle was with us for six weeks while her original family were renovating. Bell was instantly curious of this petite, green animal and took it upon herself to inspect him closely. Guacamole was highly alarmed and took cover high up on his stick. He let a small croak escape and fled behind some rocks.

Belle soon lost interest and began to ignore Guacamole. However she has not yet mastered her curiosity over the crickets and a few will occasionally end up in the wrong mouth.

Extra thoughts: If Guacamole spends long periods in his rock, he will come out a darker green than when he went in. **By Kirsty**



FROGS HIT HIGH NOTES TO WARD OFF COMPETITION source teejaybee/Flickr (extracts)

Ale orange-eyed tree frogs trill to advertise their size not to prospective mates, but to other males, a new study has found. "Frog calls are analogous to a human face in terms of the information they convey," says Dr Shinichi Nakagawa of New Zealand's University of Otago. "They can convey 'sexy' information, such as whether someone is good looking or handsome, as well as the person's unique identity. "Normally, frogs call to attract potential mates to their territory, however, the calls of orange-eyed tree frogs (*Litoria chloris*) are unique because they contain two distinctly different notes - moans and trills."

Previous research had suggested that the moan component attracts females, while the trills are thought to warn off other males...Their study, led by Morgan Maclean and published in the *Australian Journal of Zoology*, found six different call features - trill frequency and duration, moan frequency, duration, number and number of pulses -combined to give each frog a unique call.

In many frog species size equates to quality, with larger males having grown faster or survived longer than smaller males. They usually have greater fertilization success and their offspring have better survival rates. "Most frog calls contain information about the caller's size, as indicators of male quality that help females choose the best mate." This is known as intersexual indicator theory. "These frogs are unusual because females don't choose mates based on body size, either large or small," says Dr Nakagawa. "If they did, that information would be contained in the moan calls."

Instead they seem to be using their calls only to keep in touch with the other frogs in their pond, helping to distinguish between friendly neighbours and potentially threatening strangers. 2012 Rachel Sullivan ABC From Andrew Nelson





Selangor, Malaysia. http://orionmystery.blogspot.com/2012/12/tropicalreptiles-amphibians.html

Unlike Comment Share 10 January at 18:04 🖒 You, Cindy Jackson, Kira Alia Leeon, Christian Hofmann and 3 others like

Chantel Beadnell Cutest, cranky old man faced frog 16 January at 23:49 · Unlike · △ 1

Giant Banjo Frog (Limnodynastes interioris) chorus, Backyamma State

Forest, NSW, Australia soundcloud.com

https://soundcloud.com/wildambience/giant-banjo-frog-

Last night I camped by a small wetland in a



limnodynastes From Ed Glatfelter-Jones

You, Kira Alia Leeon, Cindy Jackson and 2 others like this.



14 January at 10:07 · Unlike · 🖒 1

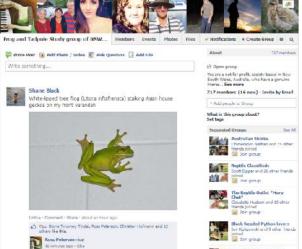
SAMPLE POSTS ON FATS FACEBOOK PAGE

Above centre, a mermie in Facebook house of frogs https://wwwfacebook.com/AHouseOfFrogs/question/mark/hc_location=timeline Here are samples of what the FATS Facebook page looks like and some of the posts. Dozens of our members help with regular enquiries. Below left & bottom of this page is a thread of conversation to identify a brightly coloured Perons Frog.





25 Tanuary at 12:08 : Unlike : 🖒 2





these frogs completely olive green in colour.

about an hour ago : Like

HOT BODIES PROTECT FROGS FROM DISEASE

By following individual frogs in the rainforest, we reveal that hot frogs are less likely to be infected with a potentially deadly fungus. The amphibian chytrid fungus (Batrachochytrium dendrobatidis) is responsible for the often fatal amphibian disease chytridiomycosis. This disease has now been associated with declines and extinctions in hundreds of species of amphibians worldwide, and is a serious threat to global amphibian biodiversity.

However, not all amphibian species decline from chytridiomycosis, and many amphibians that have declined from the disease in some environments coexist with it in others. Why might this be?

One such reason is temperature. In the lab, the amphibian chytrid fungus grows best between 17-25°C and infected captive frogs can be cured by simply raising the temperature. Natural populations of frogs also appear to be affected by temperature, with infected frogs more often detected in cooler months and at higher (and therefore cooler) altitudes. So there's reason to suspect that temperature may play an important role in determining whether individual frogs are infected with the amphibian chytrid fungus in nature.



To investigate this, a small team of volunteers and I tracked over 100 frogs of three species in the rainforests of north eastern Australia. Each frog was fitted with a tiny radiotransmitter or diode attached via a tailor-made waist-belt that allowed us to find each frog every day and night for up to 16 days at a time. This was no easy feat in steep, boulder-strewn streams surrounded by dense (and often prickly!) vegetation. Once we located each frog, we recorded its body temperature (using an infrared gun or thermally sensitive radiotransmitter). This was also often rather tricky- just because the transmitter is telling you the frog is close, it doesn't mean that it's easy to see. Frogs that sit on rocks tend to look like rock, and frogs that sit on leaves have a tendency to look like leaves!

Although frogs were often located in the same parts of the same stream (with the same air temperature), the body temperatures of individual frogs varied considerably among and within individuals. A frog sitting under a boulder in the stream was a whole lot cooler than a frog basking in the sun ten metres up a tree or sitting on a sun-warmed rock.

The results of our intensive frog-stalking revealed that the more time individual frogs were found at temperatures above 25°C, the less likely they were to be infected by the amphibian chytrid. Frogs of all species were very unlikely to be infected if 75% or more of their body temperatures were above 25°C. This is the first demonstration that individual frog thermal histories affect the probability of amphibian chytrid infection in nature.



Our findings also point towards one possible way to reduce the impact of the disease on threatened amphibians in nature. By carefully manipulating habitats to increase the availability of warmer temperatures, we may be able to help frogs reach temperatures that allow them to reduce or eliminate infection. While at first glance, our findings may suggest that global climate change may act in favour of amphibians, it's too complicated to predict. The impacts of global climate change, particularly at the small scales relevant to a frog, are likely to vary among species and sites. While increased air temperatures at some sites might decrease disease impact, increased cloud or canopy cover may increase it.

Reference: Rowley, J.J.L. & Alford, R.A. Hot bodies protect amphibians against chytrid infection in nature. Scientific Reports 3, 1515; DOI:10.1038/srep01515 (2013). Research from the School of Marine and Tropical Biology at James Cook University and the Australian Museum. 22 March 2013 Dr Jodi J L Rowley©Jodi http://australianmuseum.net.au/BlogPost/Science/Hotbodies-protect-frogs-from-disease#sthash.2nirC70b.dpuf



Green and Golden Bell Frog photo Punia Jeffrey

A WEEKEND WITH THE FROG AND TADPOLE STUDY GROUP

never come back from a FATS field trip without feeling I've been 'away'. It may only be a Friday afternoon to midday Sunday but what goes on in between is so diverse and stimulating that I rock home full of new memories, new knowledge (or old knowledge renewed more like) and a sense that the world is a richer place than it was when I set out two days before.

To start with there's the sheer beauty of the place. The UNSW field station is set beside Smiths Lake, a huge shimmering saucer of water that stretches in all directions with barely a house or cleared field in sight. Lined with reeds and melaleucas, its stillness seeps into your brain and bones. A salve to a jangled body torn through highways and byways after a 3-and-half-hour ride from the city.

Then there's the people: old faces, new faces, greetings, introductions and a sideways glance at the blackboard which is already filling up with the names of animals sighted by the first arrivals. By the end of the weekend you'll be scratching around for space to add another entry. The people gathered here bring new meaning to the term 'focus group'. Ostensibly they are here to discover more about frogs but discussions around the long table where we eat our meals, drink, knit, read, listen and learn are abuzz with exchanged experiences and fascinating stories about wildlife and the natural world. You may be a PhD student, a child, an amateur naturalist or a professor; everyone has a tale to tell.



Our intrepid Willie Wagtail photo Louise Egerton

On this latest weekend, those around the table are continually entertained by a fearless Willie Wagtail (above) who loves human company, the greediest Kookaburra I have ever encountered and some Lace Monitors that saunter around, flicking their forked tongues in and out in their never ending quest for food. Among the Swamp Mahoganies on the right a family of 3 Sacred Kingfishers zip around, calling to one another while on the left friarbirds and honeyeaters squabble over nectar rights in the flowering paperbarks.

There's time to kick back. Arthur, Karen and Punia head for the Lake. The level is very low, despite the recent rain but it only serves to concentrate prey for the White-faced Herons and Sea Eagles, so they're happy. We eat lunch, find our bunks and wander down the track as showers of Red-rumped Finches fly up before us.

We'll prepare dinner in the outside kitchen, sup a wine or two and wait for night to fall.

The excitement mounts as we don gum boots and head torches. Frogs can absorb harmful chemicals through their skin so those wishing to handle frogs tonight will refrain from using insect repellent. All footwear must be dunked in disinfectant before venturing out to avoid inadvertently spreading Phytophora, a notorious fungal killer of the Australian bush. Arthur sorts us into cars to minimise the convoy that he will

Yellow-faced Whipsnake Photo by **Phillip Grimm**



We're off. The adventure begins. Not far along the forest road and we are brought to a halt. Doors open. Torch beams flicker. We shuffle up to the front car. Arthur is holding a slender Eastern Small-eyed Snake (Cryptophis nigrescens). Do not try this at home! In fact, don't ever handle a snake; it is so easy to misidentify snakes. For one thing, their colour is rarely a good indicator because they slough off their skin; they may look fresh, bright and colourful in their newest skin but in their old outfit they can look dull and murky.

I dip —as they say in birding circles—on the next find: a Yellowfaced Whipsnake (Demansia psammophis). above A third stop, and we're all gathered around to look at a Golden-crowned Snake (Cacophis squamulosus) opposite page



Tylers metamorph by Phillip Grimm

Like the Small-eyed Snake, this species is nocturnal. The night is young and the track is still warm from the day's sun so these snakes are probably warming up here before the hunt. Barmy nights are the best for love, or rather sex, and the temperature has just dropped. Although we hear the calls of the Striped Marsh Frog (*Limnodynastes peronii*) and the Tusked Frog (*Adelotus brevis*), we only get a chance to have a good look at one frog that night, spotted by the young eagle-eyed naturalist, Namkhai.

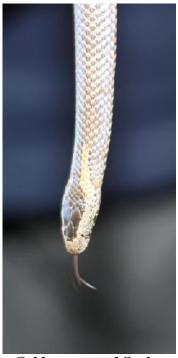


This is the Red-backed Toadlet (*Pseudophryne coriacea*).

A mere 3cm long, its back is indeed red but its belly is a striking jigsaw of black and white shapes. Photos Louise Egerton



Frogcall 130 April 2014 P7



Golden-crowned Snake photo by Phillip Grimm

Saturday morning and the group disperse on various pleasure-seeking activities: birdwatching, snorkelling at Seal Rocks or visiting local friends. In the evening we come together again and set off slightly earlier this time in the hope that the warmth of the day will lure out more amorous frogs. Sploshing about at the edges of dark pools of water, Whirring Tree Frogs (Litoria revelata) are calling but prove elusive. We encounter several tiny Dwarf Tree Frogs (*Litoria fallax*) hunched up against reed stems and there are quite a few Jervis Bay Tree Frogs (Litoria jervisiensis), too. Of great interest is a strange-looking individual: mostly frog but with a tail poking out the back. Many in our group immediately recognize it as a metamorph: a frog in transition from tadpole to fully formed frog. This 'ugly duckling' will come of age as Tyler's Frog (Litoria tyleri). Photo above left It's past midnight on our return.

Tomorrow we will rejoin the rest of humanity to work and watch TV but our encounters at the field station and in the forest's world of darkness will remain with us. A small splinter of understanding and respect for our fellow species has lodged itself in one of those chakras and can never be removed.

Article by Louise Egerton http://louiseegerton.com.au/

VARIOUS POSTS FROM FATS FACEBOOK PAGE https://

https://www.facebook.com/groups/FATSNSW/

TATS has nearly 900 Facebook members (individuals & organisations) from all over the world. Posts on the page range from frog identification enquiries, frog call sound files, new books eg Hal Cogger's book below, husbandry information, wonderful frog, pond and landscape photos, research, new species, competitions, food sources for pet frogs and tadpoles, event announcements and rescue device ideas for animals that fall in water bodies. MW





On Friday I gave presentations on amphibian conservation in Menlo Park to 120 Synapse School students and 60 of their parents. Since 2009 I've given 246 presentations to over 13,000 attendees. www.savethefrogs.com

Like - Comment - Share







Lucky shot of an awesome frog (Duellmanohyla rufioculis, Costa Rica). He says "Hi" (2)





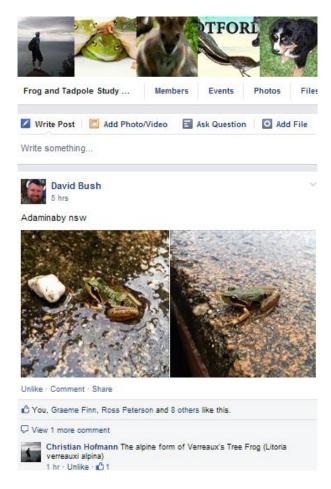
Several Amazonian tree frog species discovered, where only two existed before Read more here: http://news.mongabay.com/2014/0318-watsa-new-amazon-frogs.html



Estimados amigos. Por este medio me permito invitarles a participar como expositores de la 4a Colección Fotográfica "Anfibios Mexicanos" que será presentada por primera vez durante la 4a Semana Internacional y 2o Congreso Nacional de Anfibios a realizarse del 3 al 8 de mayo de 2014 en Berriozábal, Chiapas. Esperamos también contar con la participación de cada uno de Ustedes en el 4o Concurso de Fotografía en Anfibios. Cierre de las convocatorias, 4 de abril.

Dear friends. Hereby I invite you to participate as exhibitors at the 4th photographic "Mexican amphibians" collection which will be presented for the first time during the 4th International week and 2nd National Congress of amphibians to be held from 3 to 8 may 2014 in Berriozabal, Chiapas. We also expect the participation of each one of you in the 4th contest of photography in amphibians. Closing of the calls, on April 4. (Translated by Bling)





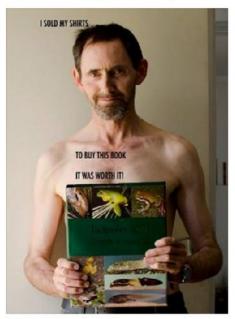
FATS ON FACEBOOK - POSTS BY MEMBERS

Arion Anstis' book Tadpoles and Frogs of Australia created quite a stir on Facebook over the last year with hundreds of people including FATS members paying for a copy months in advance and posting their excited comments on Facebook when their collectors' edition arrived just before Christmas.



Alexander Dudley

Get this book. Even if you have to sel your kids. Or someone else's.





2 hours ago · Unlike · 🖒 4



Bleating Tree Frog By Virginia Davistown 2007

INTERESTING WEB SITES

Identifying Frogs New version of app available: https://play.google.com/store/apps/details?id=au.gov.austmus.frogsfieldguide&hl=en for android devices. We do hope you find the app useful. Regards, Jen Cork Online Producer Australian Museum



Frog Log, Ebay from Natasha Watson & Faye Galbraith Facebook http://swimming-ponds.theownerbuildernetwork.co/2014/02/16/how-to-build-your-own-natural-swimming-pond-pt-3/

http://www.smh.com.au/environment/animals/pool-harbours-last-croaks-of-precious-frogs-20130810-2ror4.html

http://www.thehsi.org/alert-mass-mortality-events-in-irish-frogs/ http://www.thejournal.ie/frogs-kildare-1332973-Feb2014/ Mystery in Kildare after discovery of 250 dead frogs Samples have now been sent to a lab in the UK to examine the cause of the mass die-off.



From Kim Rudderon Facebook. This stunning image is actually five women decorated by world champion body-painter Johannes Stötter to look like a frog.

EXPOS

13 APRIL 2014 ILLAWARRA REPTILE SOCIETY

Kembla Grange Racecourse, Kembla Grange. All enquires to Jo 0429 600 962.

ROYAL EASTER SHOW FROG AND REPTILE EXPO

22nd April – Lizards and Frogs.

23rd April – Snakes and Frogs. See the web site. http://www.wildexpo.com.au/comp%20rules.htm



Photo Ben Brown

HERPDIGEST LEIPZIG: AN INTERNATIONAL TEAM OF RESEARCHERS HAS MADE IMPORTANT PROGRESS IN UNDERSTANDING THE DISTRIBUTION OF THE DEADLY AMPHIBIAN CHYTRID PATHOGEN (extracts)

In some regions, the deadly impact of the pathogen appears to be hampered by small predators, naturally occurring in freshwater bodies. These micropredators may efficiently reduce the number of free-swimming infectious stages (zoospores) by consuming them. This natural behaviour will reduce the infection pressure on potential amphibian hosts and a goes a long way towards explaining the occurrence of chytridiomycosis, at least in temporal climatic regions. These results were published in the renowned scientific journal Current Biology. The team of researchers state that their results raise the hope of successfully fighting chytridiomycosis, nowadays one of the most deadly wildlife diseases.

The entire class of the amphibians is greatly affected by the current wave of global extinctions. Although anthropogenic habitat alteration and fragmentation are the most important causes of amphibian biodiversity loss, mere conservation of amphibian habitats no longer guarantees amphibian survival. Indeed, the introduction of infectious diseases has been shown to drive amphibians to extinction even in seemingly pristine habitats. "The current amphibian decline is a disaster for ecosystems around the world" says Dr. Dirk S. Schmeller from the Helmholtz-Center for Environmental Research (UFZ) and the CNRS Unit Ecolab, and adds "Amphibians have key roles in freshwater ecosystems, and when they are gone, far going changes are unavoidable".......

The study also contributes to a better understanding on how ecosystem health is linked to the establishment of pathogens in new environments, as only in healthy ecosystems the community of microorganisms might be able to consume zoospores effectively. From the January issue of Current Biology. HerpDigest.org: The Only Free Weekly Electronic Newsletter That Reports on the Latest News on Herpetological Conservation, Husbandry and Science Volume # 14 Issue # 13 2/22/14 Publisher/Editor- Allen Salzberg

FATS MEETINGS commence at 7 pm, (arrive 6.30 pm) and end about 10 pm at the Education Centre, Bicentennial Park, Sydney Olympic Park, Homebush Bay. They are usually held on the **first Friday of every EVEN month** February, April, June, August, October and December (but not Good Friday). Call, check our web site or email us for further directions. We hold 6 informative, informal, topical, practical and free 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 writer, photographer, 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 always fully acknowledged.

Thank you to the many Frogcall supporters.

Your articles, photos, media and webpage links, membership administration and envelope preparation is greatly appreciated. Special thanks to regular newsletter contributors, Lothar Voigt, Robert Wall, George Madani, Karen & Arthur White, Andrew Nelson, Wendy & Phillip Grimm, Marion Anstis and Bill Wangmann.

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AN 'EXTINCT' FROG MAKES A COMEBACK IN ISRAEL

The first amphibian to have been officially declared extinct by the International Union for Conservation of Nature (IUCN) has been rediscovered in the north of Israel after some 60 years and turns out to be a unique "living fossil," without close relatives among other living frogs. The Hula painted frog was catalogued within the Discoglossus group when it was first discovered in the Hula Valley of Israel in the early 1940s. The frog was thought to have disappeared following the drying up of the Hula Lake at the end of the 1950s, and was declared extinct by the IUCN in 1996. As a result, the opportunity to discover more about this species' history, biology and ecology was thought to have disappeared.

However, a team of Israeli, German and French researchers now report in the scientific journal *Nature Communications* on an in-depth scientific analysis of this enigmatic amphibian.

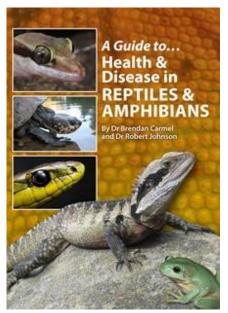
Based on new genetic analyses of rediscovered individuals and the morphologic analyses of extant and fossil bones, the conclusion is that the Hula frog differs strongly from its other living relatives, the painted frogs from northern and western Africa. Instead, the Hula frog is related to a genus of fossil frogs, *Latonia*, which were found over much of Europe dating

back to prehistoric periods and has been considered extinct for about a million years, The results imply that the Hula painted frog is not merely another rare species of frog, but is actually the sole representative of an ancient clade of frogs (a group with a single common ancestor). Plans to reflood parts of the Hula Valley and restore the original swamp habitat are in place, which may allow expansion in population size and a secure future for the Hula painted frog.



Hula painted frog. (Credit: Sarig Gafny)

http://www.sciencedaily.com/releases/2013/06/130604113437.htm 4 June 2013 Science News ... from universities, journals, and other research organizations brought to FATS' attention by George Madani in Facebook



A GUIDE TO HEALTH & DISEASE IN REPTILES & AMPHIBIANS

uthors: Dr Brendan Carmel and Dr Robert Johnson. RRP AUD55 plus P&H. Before I write this review, I need to put in a disclaimer. Robert Johnson and Brendan Carmel are very good friends and colleagues of mine. We teach together at James Cook University for one week every winter, taking 4th year veterinary students through the intricacies and delights of avian, reptile and small mammal medicine and surgery. I say this because I want you, the reader, to know how passionate these two veterinarians are about exotic pets and teaching the public (and other veterinarians) about reptiles and amphibians.

When Sheryll Steele-Boyce (Reptile Publications) first asked me to suggest the names of two vets who might be interested in writing this book, I did not have to think past their names. That they so readily agreed to write this book, and then did such a magnificent job, assures me that I was right.

A Guide to Health & Disease in Reptiles & Amphibians is 174 pages of full colour information, tips, good humour and awesome cartoons. (Robert is a renowned veterinary cartoonist, seeing the humour in his daily work with a clarity that every vet 'gets' immediately.) The book is broken down into sections and, like the DummyTM series of books, you can read each section separately although—as the authors say in their introduction—you will get the most benefit by reading it from cover to cover first. The sections include an introduction to reptiles, frogs and herpetology; a guide

to buying and quarantining new reptiles and frogs; a large section on husbandry; the safe handling, restraint and transport of reptiles and frogs; feeding them and then breeding them. It then moves on to looking at the healthy reptile frog and turtle (and their anatomy) before going into a discussion on first aid. The rest of the book looks at diseases and conditions of snakes, lizards, turtles and frogs and a checklist of these diseases for quick reference. It concludes with a glossary of terms and words used throughout the book. A unique feature of this book is the use of highlights to draw your attention to what the authors consider to be the most important points. Ignore these highlights at your peril!

The 240 photographs used throughout the book are a tribute to the many photographers who contributed them—this book is worth buying just to look at the pictures!

Now, a review is always considered incomplete or biased if the reviewer doesn't say a few bad things about the book. The title of this book should use the word frog, not amphibian. Readers hoping to learn about axolotls, the most common amphibian in captivity, will be disappointed. This book limits itself somewhat by focusing on Australian species, while ignoring species held overseas. But to include them all would have taken the authors another year and added considerably to the size (and cost) of the book. And, with the increasing popularity of Australian species in overseas collections, everything that is written here will be read avidly outside this country. Besides, I'm not adverse to a little Australian content! An index would have been very useful, particularly given the amount of information provided.

But, if that's as bad as it gets, it must be a good book, right? Yes, it is! I have read my copy several times, and I will be recommending it to veterinary students as a gentle introduction to reptile medicine. My only disappointment is that the people who need to read it—novice reptile and frog owners—won't read it till after they've made their mistakes. But all books carry that inherent drawback and there is nothing we can do about that. All in all, this book should be compulsory reading to anyone working with reptiles—vets, herpetologists, scientists, zookeepers, etc. I am proud that my two colleagues and mates have made such an outstanding contribution to herpetological literature.

Reviewed by Dr Bob Doneley BVs FACVSc CMAVA University of Queensland, Gatton. Published by Reptile Publications © 2014. Books are for sale at Reptile Publications 07 5568 0011 or email reptiles@reptilepublications.com.au or order at www.reptilepublications.com

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Frogcall 130 April 2014 P12