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ACTHA Inc. News

Dec '16 - Jan '17

*Newsletter of the
ACT Herpetological
Association Inc.*

Your Committee for 2016 - 2017

President	Scott Keogh
Vice President	Ric Longmore*
Secretary	Dennis Dyer
Treasurer	Margaret Ning
Newsletter Editor	Mandy Conway
Webmaster	Angus Kennedy
Public Officer	John Wombey *
Excursion Officer	Mandy Conway
Conservation Officer	Joe McAuliffe
Committee Members	Jason Spurr
	Iris Carter
	Greg Flowers
	Peter Child
Student Representatives	Vacant

** Denotes Life Members*

In this issue

ACTHA's AGM: what we've done during 2016 and our new Committee, page 2.

Rosenberg's Monitors on Mt Ainslie: a very special event happened on 24 Sept '16, turn to page 3!

The Australian & International Scene:

Currawong vs big goanna, page 6.

New frog species in Newcastle, page 6.

Professor Rick Shine receives Prime Minister's prize for his work, page 7.

Red -bellied Black Snake vs Brown Snake, page 8.

Seen! page 9.

Diary date

The *bi-monthly* meetings of the Association are usually held on the **third Tuesday of the month** at 7.30pm. Our usual venue is:

Belconnen Soccer Club, Hawker

(cnr Belconnen Way & Springvale Drive)

Upcoming meeting is the Christmas Party!

Christmas party for ACTHA members

from 6pm, Tuesday 20th December 2016

to be held at **Canberra Reptile Zoo, O'Hanlon Place, Gold Creek, Nicholls.**

A selection of food & drink will be available for all financial members.

(Margaret will have her receipt book for *last minute membership subscriptions, \$20pa*)

RSVP to margaretning1@gmail.com by **Sunday, 18 December 2016** pls

Of course we shall take the opportunity to discuss Snakes Alive! 2017; who can volunteer, who can provide animals and most importantly who can show off our beautiful animals to people attending the week-long event!

ACTHA's AGM sees a change in its Committee line up and moves to support our local vet

Twenty six members and friends turned out to see Matthew Higgins' presentation on Rosenberg's monitor activity on Mt Ainslie at our meeting in October. Only one thing momentarily stood in his way, ACTHA's AGM.

ACT Herpetological Association Inc. Annual General Meeting



Dennis Dyer handed out the Annual Report, which highlighted the guest speakers we were fortunate to have in the past year and advised our membership now stands at 80.

Dennis went on to give an overview of *Snakes Alive!* 2016, which had over 50 herps on display for the 2,600 people which came along during the week-long event. A significant number of attendees were

children from the YMCA and other school holiday programs. CDAS, the Canberra and Distract Aquarium Society, once again provided an outstanding native, and some introduced, aquatic species display. Dennis thanked everyone who helped make the annual display a success, especially Peter Child who provided most of the enclosures, erecting and disassembling them at speed.

The advent of the Canberra Nature Map, financed mostly by a grant from the ACT Government and administered by ACTHA, is now online and receiving a great deal of information from the general public. The information on reptiles is verified by selected herpetologists before inclusion in the map.

Dennis also highlighted the very enjoyable weekend fieldtrip for ACTHA members to the Australian Reptile Park and a Reptile Expo at Gosford in May '16.

He then thanked the Committee for their support and actions throughout the year, particularly Margaret Ning who organises speakers for each meeting and her extensive Treasurer duties, and this Editor for producing an informative bimonthly Newsletter.

One notable item on the Agenda was a discussion about the recent de-registration of local vet Jan Spate, in Hall, who saw and treated many reptiles belonging to members over many, many years. Several ACTHA members expressed dismay over this which led to further talk about where we go to now for reptile treatment? Members passed a resolution to support Jan in any way possible.

[Following the resolution, several members turned up to a rally during the week, to which the media were invited. The ABC subsequently televised a few brief words from Geoff Robertson and then Dennis Dyer who explained ACTHA's position. Dennis was also interviewed by the Canberra Times.]

Current Committee members were asked to briefly step aside for the election of the new Committee. The only change to the Committee was the important role of President, which sees Prof Scott Keogh, ANU, join ACTHA in a somewhat more official capacity.

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	Iris Carter
	Greg Flowers
	Peter Child

Scott then took the floor and sincerely thanked Dennis for his work as ACTHA's President over many years, which everyone loudly applauded.

Scott has been the Head of the Division of Evolution, Ecology and Genetics at the Australian National University since 2012. His Evolutionary Biology & Ecology of Reptiles and Amphibians Laboratory, otherwise known as the Keogh Lab, was established



in 1998 and has seen no less than 14 honours and 11 PhD students complete their studies.

Scott has for many years been associated with ACTHA, who he recognises gives his students the opportunity to practise their presentation and speaking skills.

He looks forward to helping to promote ACTHA as a valuable information exchange platform between students at the ANU and the University of Canberra, amongst others.

We will soon be canvassing members to seek suggestions on what ACTHA can do in the future: good examples include more excursions or fieldtrips, ideas for newsletter content or changes to the current format, ways to bring the next generation of herpetologists to the fold.

Adventures with Rosie & Rex - Monitoring Rosenberg's Monitor on Mt Ainslie ACT 2013 - 2016

Matthew Higgins was our guest speaker at the 18 October '16 meeting and several news reports and bulletins were produced around the time of Matthew's high profile presentation. So just for a change I thought I would reproduce the articles in this Newsletter rather than my usual writings. Enjoy!

Photographer captures baby goannas digging their way out of termite mounds on Mt Ainslie

*By Katie Burgess, The Sydney Morning Herald,
25 October 2016*

It may sound like the premise for a science fiction film but there are giant lizards hatching out of termite mounds in the middle of Canberra.



Matthew Higgins



Matthew Higgins

Above: The goanna hatchlings have colourful facial markings to help tell them apart.

Canberra historian and conservationist Matthew Higgins captured the moment a rare Rosenberg's monitor poked its head out of a termite mound after hatching on Mount Ainslie.

Mr Higgins had been keeping an eye on the mound since he saw a Rosenberg's monitor he'd dubbed Rosie lay eggs in there in January '16

"They use termite mounds because the mound acts like an incubation chamber," Mr Higgins said.

Rosie and her partner Rex guarded the nest until February. Unlike the Lace monitor, the parents do not return to help dig their hatchlings out and the little goannas are left to claw their way to the surface on their own.

As September rolled around, Mr Higgins started to trek daily up the mountain with the hope of witnessing something remarkable. He was not disappointed.

"At first it didn't catch my eye but when I looked at it again I thought 'that's a hatchling hole'. I'd only seen one of these holes before but as I waited, sure enough the hatchlings inside started to poke their heads out."

Mr Higgins has identified 14 hatchlings in total. If they reach maturity, the baby Rosenberg's will grow to 1.5 metres in length.



Matthew Higgins

The hatchlings will live inside the mound eating the termites for some time, before burrowing their way out for the final time and disappearing into the bush.

"The poor old termites have their house nearly destroyed by these goannas and they do all the repairs and then they get eaten for their trouble," he said.

Rosenberg's monitors are listed as threatened throughout most of their range in Australia.

Mr Higgins first spotted this elusive species atop Mt Ainslie three years ago and has worked with the ACT government's senior ecologist Don Fletcher to monitor their breeding cycle.

"They're very difficult animals to find because they're extremely well camouflaged and they know how to hide from people, they just stay still under some fallen branches. You could be right on top of them and not know that they're there," Mr Higgins said.

The next stage of the project will be to determine how many of these evasive reptiles are left across the ACT.

But Mr Higgins said witnessing the birth of the next generation of Rosenberg's monitors was a "golden moment".

"It was such a beautiful moment because it represented the continuation of a very special species," Mr Higgins said.

ACT Parks and Conservation director Daniel Iglesias said it was wonderful to see Mt Ainslie supporting this species.

"Mt Ainslie is a very important component of the natural environment here in Canberra. It is also one of our most popular reserves so visitors should please remember the area is home to many reptiles and other wildlife. Responsible use of the reserve, including ensuring dogs are kept on a leash, will help give these hatchlings and other native wildlife the best chance of survival."



Rare giant goannas caught on camera near Canberra's CBD

By Adrienne Francis, ABC News, 5 November 2016

Historian and amateur photographer Matthew Higgins, who captured the images, said he became involved as a volunteer citizen scientist following a chance sighting of the mighty Rosenberg's Monitor three years ago on Mount Ainslie.

"I identified it as a Rosenberg's Monitor but not everyone I told that story to believed me because I didn't have a camera," Mr Higgins said.

That only hardened Mr Higgins resolve as he began to stake-out the predator that can grow to 1.5 metres in length and live for 30 years.

With a lot of patience and luck, in January Mr Higgins recorded what is believed to be the first footage from Canberra of a breeding pair of the giant goannas, including the female laying eggs.

He christened the female Rosie and her male partner T-Rex.

Mr Higgins said he became fascinated by the way the giant goannas behave.

"They lay their eggs inside termite mounds because a termite mound has a reasonably even warm temperature and high humidity," he said.

"It is a big incubation chamber and it is self-healing because the termites repair any damage."

Mr Higgins said other monitors were among the biggest threats to the Rosenberg's Monitor.

"They maraud around cannibalising one another's eggs," Mr Higgins said.

"So the females stake-out their eggs' stash at the mound, they guard it for two to three weeks."

Mr Higgins said the species' striking facial markings had allowed him to identify 14 hatchlings.

"They are quite beautiful and you can tell individuals from those marks, they are like human fingerprints," he said.

"But there are another couple I can't identify so there could be 16 — Rex and Rosie did a pretty good job."



Above: dogs, foxes and other monitors are the main threats to baby goannas.
Image supplied by ACT Government.

But Mr Higgins said he was warned that a high mortality rate among hatchlings was normal for the species.

ACT Government ecologist Dr Don Fletcher said it was possible none of Rosie and T-Rex's babies would survive until breeding age.

"We see members of the public breaking the rules frequently, we would really appeal to people to people to keep their dogs on the leash under control," Dr Fletcher said.

Dr Fletcher said Mr Higgins' new photos were considered a rarity because feral animals and habitat destruction had decimated the reptile across the south of the mainland.

The monitors are listed as a threatened species in New South Wales, Victoria and South Australia and they are considered rare in the ACT, with just a handful of sightings including within Namadgi National Park in the far south.

(Adventures with Rosie & Rex, cont'd,...)

Dr Fletcher said he was concerned big goannas like the Rosenberg's Monitor were in decline.

"Here we are witnessing extinction in our own time."

However a comeback could also be possible, if the predator lizard is approved for introduction to the Mulligan's Flat Woodland Sanctuary - free of feral animals.

"Rosenberg's Monitor is definitely on the list there for consideration and at this stage those decisions have yet to be made," Dr Fletcher said.

'Sightings of goannas around Canberra, with special reference to Rosenberg's Monitor (*Varanus rosenbergi*)'

For anyone wanting to further their knowledge of this incredible reptile, Matthew has been working on a paper titled as above, which is now available, albeit as a work in progress.

The paper documents the results of a Canberra Times (CT) newspaper search together with references from other publications, databases, reports and recent conversations with several herpetologists and ecologists. The 19 page report should be considered as a contribution to knowledge of the ACT's goanna story, particularly the Rosenberg's chapter of that story, to be updated as opportunity allows.

Ed. I have the latest copy of this paper, so please email me at mandycnwy@gmail.com if you'd like to receive one by return email.



A little something from Dennis Dyer, given at the recent AGM

Some Ideas

There's a little gathering of Herps across the Lake,
So tiny you might almost wonder where it is.
That Group one might say always takes the cake,
And failure is the rarest of all rarities.
The proudest species identifiers usually accede to its
commands
Whilst terrifying all shonky and devious breeders.
Such at least is the tale
Which is sent by e-mail
From that office that sends out the fee.
Let us hope, for ACT's sake
They make no mistake
That they're all they profess to be.

Oh, we shall copy all their procedures wise
And imitate their virtues and charities.
And may we by degrees incorporate
Its identifying system peculiarities.
By doing so, we shall, in course of time
Regenerate completely our entire profession.
ACT Herps is that group sublime
To which some may add (but others do not) Association.
Such at least is the tale
Which is sent by e-mail
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The Australian & International Scene

Currawong successfully defends nest against monster goanna

By Murray Trembath, *The Sydney Morning Herald*,
26 October '16



Greg Tannos nearly fell off his mountain bike when he saw the size of a goanna beside a trail in the Royal National Park, south of Sydney.

"It was at least 1.5 metres long, and probably closer to two metres," Mr Tannos said.

He then watched on in awe as the monster lizard climbed a tree, seeking to raid a currawong's nest.

During the next half hour, he recorded an "absorbing video" of the battle between the goanna and the currawong.



Above: The goanna climbed a tree to try and raid the nest. Image Credit: Greg Tannos

"The [currawong] would not give up – it kept flying around the goanna and hassling it," he said.

"The [currawong] put up a big fight and eventually won the battle.

"The goanna walked back down the tree, straight past me as though I didn't pose any threat to him, and headed off to look for easier prey."

Mr Tannos posted the video on his website which details his encounters with nature in Australia while he's out kayaking, mountain biking and diving.

The Alfords Point resident says his love of adventure has given him an opportunity to see things in their natural environment.

"I began taking photos and videos so I could show others what amazing experiences I was encountering.

"I started findmyaustralia.com in 2015 so I could show off this great country of ours and give other people ideas for their very own Australian adventure.

New frog species found in Newcastle

By AG Staff Writer, *Australian Geographic*,
3 November '16

A tiny species of frog previously unknown to science has been found in Port Stephens, just 10km from Newcastle Airport.

Right: New Australian frog species. Mahoney's Toadlet, *Uperoleia mahonyi*.

Image Credit:
Sheena Martin



Dr Simon Clulow, a biologist at the University of Newcastle, said it was the frog's unique marbled black and white underbelly that led him to realise he had found something special.

"The distinctive marble pattern on the frog's belly, along with other features makes it quite different to any other frog species in this part of

(The Australian & International Scene, cont'd,...)

the world and led us to believe straight away that we had found a new species – it was an incredible moment,” said Simon, who first spotted the new frog at a sand swamp at Oyster Cove.

Discoveries of new vertebrate species are rare, but particularly so within developed areas like Newcastle, which is the second most populated area in NSW after Sydney.



Above: The new species was discovered by University of Newcastle biologist and frog expert Dr Simon Clulow. Image Credit: Sheena Martin

The find is also of significance given most new species 'discoveries' these days are based on differences in genetics uncovered in the lab, Simon explained. "It's almost unheard of to pick up a vertebrate in the field and know instantly, based on appearance alone, that it is a new species," he said.

The new frog is tiny – it fits on a human fingertip – and it is effectively camouflaged, living well concealed under a layer of vegetation or sand, which likely contributed to it managing to evade discovery for so long.

The new species has been named Mahony's Toadlet (*Uperoleia mahonyi*) after Simon's supervisor and mentor, Professor Michael Mahony, who is a renowned frog expert and conservationist.

Despite the name, Mahony's toadlet is not to be confused with a toad. It is a native Australian frog species named for the glands on its back, which resemble the toads of Europe and America.

The new species is thought to have a highly restrictive distribution, occurring in select coastal sand swamps in the Myall Lakes, Port Stephens and Central Coast.

"The frog is a habitat specialist, living exclusively on a particular type of leached white sand substrate, which could make it more at risk from threats such as habitat loss and sand mining," said Simon.

Professor Rick Shine wins Prime Minister's Prize for Science for work on can toads

By Marcus Strom, The SMH, 19 October '16

"We're just going to have to learn to live with them." That's the verdict on cane toads from this year's winner of the Prime Minister's Prize for Science.

Professor Rick Shine became an expert on the invasive amphibians after his snake research site on the Adelaide River floodplain near Darwin was overrun by cane toads a decade ago.

In order to help his beloved reptiles survive the onslaught, he needed to learn about the behaviour of the toads – and he has become very fond of them.

"She has beautiful eyes," he said of his cane toad Galadriel in his Sydney University laboratory ahead of Wednesday night's awards in Canberra.

Below: Professor Rick Shine with his cane toad Galadriel in his Sydney University lab. Image credit: Steven Siewert



Professor Shine is stunned to have won the coveted award, which his brother, molecular biologist John Shine, also won in 2010.

The prize was in recognition of his work to ensure northern Australia's peak predators are more likely to survive the cane toad invasion.

"I'm still in shock. I do incredibly simple science. I don't even own a lab coat, let alone have any machines with flashing lights," he said.

"It's extraordinary to me that what is essentially old-fashioned natural history with an evolutionary twist has been recognised with not one but two prizes in the course of a week."

Professor Shine has also received the NSW Premier's Science Prize this month.

"You don't go prying into the sex lives of snakes thinking this is a guaranteed route to winning lucrative scientific awards. I just feel incredibly fortunate."

And because of Professor Shine's work, the peak predators of northern Australia are much more likely to survive the cane toad invasion.

The westward march of cane toads from Queensland into the Northern Territory and Western Australia is killing up to 95 per cent of native predators such as goannas, snakes, freshwater crocodiles and quolls.

Bryan Fry with a yellow-spotted monitor lizard in the Pilbara in 2005. This peak predator has been 'hammered' by the cane toad

This is because the frontline "storm troopers", as he calls them, are the large, highly toxic adult males. One toad meal for a yellow-spotted monitor is more than enough to kill it.

In his research, Professor Shine has been dropping juvenile toads ahead of the invasion line. Native predators eat these, get sick, but don't die – and are then far less likely to eat the larger toads when they arrive.

News from the front is promising. Initial studies show mortality rates dropping below 50 per cent among goannas 18 months after the toads arrive.

Working with Dr Ben Phillips at the University of Melbourne, Professor Shine has developed his theories further.

They have found that there is a genetic variation in the toads that relate to how quickly they spread, which they call "spatial sorting".

"Genes that make a toad go faster move to the front," Professor Shine said. "The genes that say 'take a night off' stay at the back."

He calls this the "Olympic village effect".

By dropping juveniles from the slower-dispersal populations ahead of the fast moving frontline, Professor Shine is not only training

predators to avoid eating the larger, deadly, toads, he is creating a "genetic backburn" to slow down the advance.

The genetic material from the slow toads is moved into the front.

"All of the models suggest the toads won't be able to get too far south, certainly not beyond Sydney," he said. "But they do appear to have some bizarre physiological tricks that enable them to work at low temperatures."

"You'd be a brave person indeed to believe the toads will be limited by the factors that we currently think are constraining them."

This award caps a stellar career for Professor Shine. He has won every major prize for natural history in Australia and is the only person to have won Eureka prizes for science in three categories.

Bryan Fry at the University of Queensland, who studies snake venom, said he could think of a no more deserving winner. "He has had such an important impact on Australian science," he said.

Announcing the awards, a statement from Prime Minister Malcolm Turnbull and Minister for Science Greg Hunt said: "As the calibre of these prize recipients demonstrates, this is an exciting time for science in Australia."

Red-bellied black snake eats a brown

*By Albert McKnight, Bega District News,
2 November 2016*

A red bellied black snake has been photographed eating a brown snake that was almost its own size, off the Candelo-Bega rd. Image Credit: Steve Young

On Sunday afternoon, Steve Young was slashing on his property at Kanoona when he spotted the 1.6-metre black snake with a metre of its brown-coloured relative sticking out of its mouth.

He was not sure how much the black snake had eaten before he arrived, but photos he took show it was certainly much fatter by the time it was done gorging itself.



Seen!

At right, sent in by William Stephinson: 'Spring time at last, love is in the air! Love bite Cunningham skink style at Anembo?!



At left, sent in by Janet Wild:

'Real lizards (as do fake ones) like the warmth of my satellite modem.'



From Mandy Conway: "It's a copperhead," says our ACTHA expert. "you can see the white lip markings, diagnostic for copperheads."

Whilst in Perisher for a few days in late October this Ed. took the opportunity to quietly sit on a boulder and admire the river view near the Bullock's Hut walking track carpark. That is, I tried.

I heard a rustling sound just before I went to sit on the boulder and carefully looking over the rock I saw this beautiful reptile.

After hissing and flattening out its body it quickly moved off and so did I, mainly because I lost sight of it. After a while I carefully returned and peered over the boulder's edge. To my delight the snake was back in position, sunbaking.

I quietly sat on the rock and just watched it. It knew I was there, the tongue flicked continuously as it moved its head around, but then it just chose to ignore me and continue to absorb rays. Very special.



The boulder in question.



Excellent camouflage!



Keeping non-exempt reptiles in the ACT

Reminders that your Keeping Licence is due for renewal are no longer sent out. It is your responsibility to ensure your Licence is current. All current licence holders are to submit a new application form with current animal details and numbers.

Step-by-step instructions

1. Go to the 'ACT Department of Environment, Planning & Sustainable Development Directorate - Environment' Website home page.
2. Click the 'Parks and Conservation' tab.
3. Select the 'Plants and Animals' tab.
4. Select the 'Licensing of Plants and Animals' tab.
5. To look at the fee structure scroll down to 'Fees under the Nature Conservation Act 2014' under which you will find 'Nature Conservation (Fees) Determination 2016'.
Pg 3, under Item 1.8 is 'Keep fewer than 20 non-exempt animals' (s133) \$16.50 - valid for 3 years
6. Now scroll down to 'Standard Licence Applications' and download the 'Application Form' and 'ACT Record Book Worksheet'.

Important: The fee stated on the Application Form, \$15.30, is **incorrect**.
The correct amount is as stated in the point above.

I would contact the Department on 6207 6376 if you have any queries.

Editor

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from 6pm, Tuesday 20th December 2016

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