



**ACTHA contact details**  
 PO Box 160  
 Jamison ACT 2614  
 E-mail: [info@actha.org.au](mailto:info@actha.org.au)  
 Website: [www.actha.org.au](http://www.actha.org.au)

## ACTHA Inc. News

**Apr - May '17**

*Newsletter of the  
 ACT Herpetological  
 Association Inc.*

## Your Committee for 2016 - 2017

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

*\* Denotes Life Members*



### **Copperhead Snake (right)**

From Matthew Higgins

"... at lunchtime in far southern Namadgi. Beautiful close view showing the copper eye; the snake was completely oblivious to me as I trod carefully and close by."

## In this issue

**The ACT's venomous snakes, dry bites and first aid**, Ric Longmore was interviewed on his pet subject by 666 radio, a summary of the interview begins on page 2.

**Save The Frogs Day**, an international event, page 4.

**Herping in Indonesia: a travelogue**, Damien Esquerré was a guest speaker at our February '17 meeting where he presented a travelogue of his journey to parts of Indonesia. Examples of just some of his stunning photography begins on page 5.

**8<sup>th</sup> World Congress of Herpetology**, Hangzhou China, 15-21 August 2016, Bruno Ferronato was also a guest speaker at our February '17 meeting and he presented an overview of his attendance at this Congress, focussing on the plight of turtles in Asia, page 10.

### **The Australian & International Scene:**

**Relocated 350kg crocodile swims 400km to return home in North Queensland**, page 12.

**Earless dragon models made by Canberra kids could help save endangered lizards**, page 13.

**Woman rushed to Canberra Hospital after snake bite**, page 14.

**Where have all our goannas gone?** page 14.

**'Big mother of a snake' photobombs mum's snap of two-year-old daughter**, page 16.

## 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

**Tuesday, 18 April 2017**

**Carlos Joaquín Pavón Vázquez**, Division of Ecology & Evolution, Research School of Biology, ANU, is a Mexican PhD student interested in the processes that have shaped the diversity and distribution of amphibians and reptiles through time. He will bring us a travelogue from his home of Mexico.

"Mexico is home to an enormous diversity of amphibians and reptiles with over 900 species of reptiles (2nd place in the world after Australia) and nearly 400 species of amphibians (5th in the world). The country is home to such iconic critters as the red-eyed tree frog, axolotl, mole lizard, beaded lizard, and rattlesnakes, with several new species being described every year."

*It is school holidays, so it is a perfect opportunity to bring the kids along to the meeting for a beaut evening of Mexican herpetofauna. We hope to see lots of you there!*

## The ACT's venomous snakes, dry bites and first aid

*Ric Longmore was interviewed by 666 radio in Oct '17, and Margaret Ning has produced this summary for the Newsletter (with thanks to Phil for recording the interview)*

On 28 October '17 one of ACTHA's life members, Ric Longmore, was interviewed by Genevieve Jacobs on 666, following her mother receiving a dry bite from an Eastern Brown Snake. It made Genevieve wonder if most people would know what to do if this happened to them. ACTHA was contacted by 666 and of course Ric went in there to answer all of Genevieve's questions.

I was reminded of Ric's interview when a young woman was bitten by an Eastern Brown in a horse paddock the week after our 2017 *Snakes Alive!* so I decided to write up Ric's interview because of all the wisdom contained in it. The young woman's bite was also a dry bite.



*Above: the place on the calf where the woman was bitten by a brown snake. Image: ABC News, Jesse Dorsett.*

Genevieve prefaced the interview by saying her mother was well into her 80s and was in her vegie garden at her home in western NSW when she received the bite. She was still helicoptered to Orange Base Hospital for treatment.

Ric was introduced as being from the ACT Herpetological Association.

**Genevieve:** I was not aware of how many snake bites don't involve venom, and that it is actually reasonably common for this to happen?



*Above: the highly poisonous brown snake. Image: Jim Trial*

**Ric:** Venom for snakes is a valuable asset, and it's not always released. It is primarily a device for overpowering prey. Secondly it is a defensive mechanism. It is a modified saliva and its release is a voluntary release. I've had quite a few dry bites over the years, including a Tiger Snake at Lake George which I knew after five minutes that no venom had been injected as there were no symptoms. Yes, snakes can control the release of their venom.

**Genevieve:** Why doesn't the snake expend all its venom if it has made the decision to bite?

**Ric:** Venom ducts and glands are constantly being recharged and refilled. The only real time a snake's ducts and glands are completely exhausted is through a milking process at one of the serum laboratories, where a snake is forced to keep on biting until it is just about drained. And then they'll leave it for a couple of weeks until it gets back its venom supply. There is always sufficient venom there, either in the fang or the remaining bit of the gland, to inflict a nasty bite.

**Genevieve:** What does it cost the snake to bite someone or something? What sort of choice is it making there?

**Ric:** I can't read a snake's mind, but they would do it as a last resort if they were being attacked. When attacking prey it is important for them to demobilise the prey rapidly, if they are after mice, or rats or some other fleet-footed prey. A snake is unable to pursue and catch them, so the idea is to knock them out quickly.

Some snakes do multiple bites and they will bite and bite and bite, and you virtually have to pull them off your hand.

**Genevieve:** What a terrifying prospect, Ric, absolutely horrendous.

**Ric:** I think the shorter the fang, the greater the number of bites they will deliver to the victim. The Brown Snake, the most common snake in the ACT, has small fangs which won't pierce good denim jeans. So, as a bushwalker, wear stout shoes, socks and jeans.

**Genevieve:** Mum reported feeling sharp needle-like pain and seeing blood, on reaching into a garden bed. She was really shocked and frightened, but had no other affect at all.

Is there any way you would know if you'd had a dose of venom or not? You can't take that chance really?

**Ric:** It's not a good idea if you are out in the bush to take that chance. If you're with a group of people, they should monitor you, sit you down and see whether the signs of the neurotoxins, which is the primary element in the Brown Snake, Tiger Snake or Copperhead venom, is acting on the nerves. Having experienced that myself, I can tell you that your eyes start to come out of focus, your tongue swells, your lips distend, you're breathing rapidly as the nerves to your diaphragm are being interrupted so you find breathing difficult. But there is no obvious sign at the site of the bite except maybe a couple of red pin pricks, unlike an American Rattlesnake where you get rapid bruising and gangrene developing.

**Genevieve:** What bit you, Ric?

**Ric:** I've had Brown Snake, Tiger Snake and a number of other smaller non-toxic species bite me, having kept them for 55 years now. It teaches you respect for snakes and a bit more knowledge. It is like a Formula 1 driver who walks away from an accident. You learn about snake behaviour, not in five minutes, but over many years. Catching snakes puts one at great risk even with the advances now in snake-catching gear, which we import from America predominantly.

There are ten species of snake in the ACT, four that would cause concern to people. Bushwalkers and fishermen would come across them most.

- Eastern Brown Snakes - the most common snake in the ACT - like dry high ground, generally away from wet areas,

- Tiger Snakes - swamp dwellers from Lake George, Lake Collector and Rose Lagoon,
- Copperheads - up above the snow line, skiing areas, the Brindabellas, and
- Red-bellied Black Snakes - water courses like the Cotter and Casuarina Sands, like the water and swim very well.

**Genevieve:** Most of us are likely to encounter a Brown Snake, and, on snake behaviour, I have read that almost everybody who dies of a snake bite is attempting to do something to the snake; to handle it in some way, taunt it, engage in some way that makes it more likely that you will be hurt.

**Ric:** Yes, I think people like myself who are snake handlers, put themselves at a bigger risk because they are catching and keeping these deadly animals, but the off chance of a bushwalker or a hiker being bitten is much smaller. There is more chance of fishermen coming across a snake. I know a lot of fishermen who just walk around them and ignore them; they respect them. The chances of a member of the public being bitten are fairly small. As snakes cannot hear - they have no external ears - they pick up vibrations through the ground, and are usually well out of your way before you see them. If you are looking for them, you may see a tail disappearing 20m ahead.

**Genevieve:** My advice to the kids has always been 'if you see a snake, stay still, completely still, and observe where the snake is going. It is not going to attack you if you are doing nothing to it.'

**Ric:** That's right.

**Genevieve:** Ric, what are your first aid priorities if you are bitten? You are not going to know if it is a dry bite.

**Ric:** Better to be safe than sorry, Genevieve. The accepted practice now, and I must say that practices have changed over the years when it used to be the cutting of the wound with a razor blade, applying condy's crystals and tying a tight ligature around the lower arm which, if left on too long, can cause gangrene. They're all out the door now. The latest recommended practice is a tight bandage, fairly tight like a

*(The ACT's venomous snakes, dry bites and first aid, cont'd,...)*

torn up shirt or any bit of clothing like that wrapped around, if the bite's on the finger, from the elbow, or even from the shoulder downwards towards the bite, fairly tight, but not too tight.

The venom is transported in the lymphatic system which is just under the skin, and doesn't get into the blood supply until up into the neck region. So the lymph system is much closer to the surface, so the pressure bandage makes a lot of sense. You don't need a really tight ligature which will cut into you badly.

**Genevieve:** So a firm but not tight bandage, and stay still.

**Ric:** We also recommend that once the bandage is on, that the arm is in some way tied to the chest or something to limit any movement at all, because any movement is going to increase flow.

**Genevieve:** Now Richard asks "Can you confirm that stomping loudly through the bush can alert snakes to your presence and they will leave?"

**Ric:** Well, it can, as they are very good at picking up ground sounds through their belly scales. They don't have external ears, can't hear airborne sounds, although there is now thought that they may pick up low density, low frequency sounds. Stomping will be picked up by them, and certainly make them move on. The chance of confrontation comes if you are between them and a place they may want to seek refuge in, or someone trying to chop one in half with a shovel or an axe, or someone like me trying to pick it up and put it in a cloth bag.

**Genevieve:** Ric, good to talk to you, and to have you here.

**Ric:** Every January the Association has a *Snakes Alive!* display in the Australian National Botanic Gardens and this year it is from 16 to 22 January and we look forward to Canberra residents coming along as they have for the last 28 years. We're older than Floriade, and come along and see all different types of snakes, lizards, frogs, and Corroboree frogs too.



## Save The Frogs Day

*ACTHA member Janet shared this news from the internet.*

Save The Frogs Day aims to raise awareness of the plight of declining frog populations, and to encourage conservation and protective initiatives. They are excellent indicators of the quality of their environment!

Since 2009 supporters have held over 1,051 Save The Frogs Day educational events in 60 countries; Australia, Brazil, Canada, Ecuador, Finland, Hungary, Madagascar, South Africa, United Kingdom and the USA, just to name a few.

"Save The Frogs Day is the largest day of amphibian education and conservation action. Our goal is to provide people with educational materials, ideas and inspiration and empower



them to educate their local communities about amphibians. The event takes place annually on the last Saturday of April. Thank you for organising and registering your event!"



## Herping in Indonesia: a travelogue



This article gives an overview of **Damien Esquerré's** amazing journey to parts of Indonesia, and includes some of his stunning photography. (Text by Ed.)



Damien (PhD student, Keogh Lab, ANU) started his presentation by thanking Scott for understanding his need to take a trip to Indonesia with his brother, before his sibling returned to Chile, and that finishing off his thesis could wait just a few weeks: Scott's email stating that 'Life is too short' was all the approval Damien needed!

### Part I: West Bali & King Cobras



Damien and his brother started off their trip with a visit to the Bali Reptile Rescue Centre, whose main activity is answering calls to come and rescue or remove a snake, mainly King Cobras. The snakes are released back into the wild or enter a wildlife rehabilitation centre if injured. The group is mainly focussed on fauna conservation and awareness, and education through snake shows is very popular.

"I thought the shows would be centred around identifying snakes, emphasising not to harm them and what to do if bitten. But the handlers quickly moved on to playing with the cobras." Damien has great respect for these animals, the largest venomous snake in the world. Allowing tourists to 'touch this snake's head' was not a good idea in his opinion.

West Bali is predominantly wilderness with a vast array of flora and fauna. Their first encounter with an animal was with a bat colony (*top right*) whose 'home' was a huge doomed cave, perhaps 30m high and 50m deep. Buddhists have no qualms in praying in this 'temple'.

*Images at left:* Within 2 days of travelling they found a wild King Cobra, standing tall: something Damien described as an almost religious experience.

"There are proper ways of catching a cobra and pinning them before grabbing them by the head is one such method." Their guide on the other hand had a very laid back technique; he had been hospitalised just a few weeks before from a bite. He has unfortunately since died as a result of a bite, a matter of months after their trip.

### Part II: Herping in Bali

Damien told his audience that Bali was the best herping trip he had ever experienced. Finding 15-17 snakes a night was not unusual.

*Bottom left:* These 2 vine snakes were found in the same tree.

Whilst Damien's brother specialises in sport photography, Damien prefers taking photos of animals in their natural environment and the following photos highlight his skill.

*Right:* Keeled Slug-eating Snake, *Pareas carinatus*, a small and harmless snake which specialises in eating slugs.





(Herping in Indonesia: a travelogue, cont'd,...)



**Above:** Lesser Sunda White-lipped Pit Viper, *Cryptelytrops insularis*, they are a very diverse species.



**Above:** Oriental Vine Snake, *Ahaetulla prasina*, a long, arboreal snake that was quite bitey although harmless. A much younger one with bright colouration was found in the same area.



**Above & left:** the Reticulated Python, *Malayopython reticulatus*, the largest snake in the world, was another snake Damien really wanted to find. This specimen was 3m long although they can grow to 9m in length, albeit rarely found.



**Above & below:** a morning walk down a river unearthed this Water Monitor, *Varanus salvator*, a common aquatic species.



**Above:** the very attractive orange eye of a young Reticulated Python.



**Left:** an interesting insect whose long, feathery sexual glands retracted on approach.

(Herping in Indonesia: a travelogue, cont'd,...)



*Above:* Agamids, or iguana lizards, were commonly found during the day, sleeping on trees. This specimen was a Maned Forest Lizard, *Bronchocela jubata*.



*Above:* the Tokay Gecko, *Gekko gecko*, one of the largest species of gecko in the world.



*Above:* the Malayan Krait, *Bungarus candidus*, common in rice fields, it is one of the most venomous elapids in the world. "Their bite is neurotoxic", Damien explained. "A lot of people don't feel much pain after being bitten. They go to bed and just don't wake up. The nervous system just shuts down."



*Above:* " a skink..." Damien informed his audience, followed by "many of the caves had cool insects..." *Below.*



### Part III: Herping in Labuan Bajo

The small fishing village of Bajo is a famous departing point for the Komodo National Park: a mecca for wildlife and diving tourists.

"We spotted a snake hook on the bungalow next to us, and after politely knocking on the door were introduced to two German herpers who knew a local guide known for taking BBC film crews out. The guide took them all herping for a few nights.

"Our guide kept talking about a snake cave where bats could be seen hunting bats. Keen to see this we accepted his offer to take us there. After an hour drive into the country we ended up basically in the middle of nowhere. We walked for about an hour into the forest, not even following a trail; we were getting a little worried. The cave was supposedly behind all these plants."



(Herping in Indonesia: a travelogue, cont'd,...)

"Parting the bushes we entered the cave which was many metres deep, had dozens of channels and a strong stench of bats. We eventually found 2 Reticulated Pythons trying to catch bats from the air."

Damien took many hundreds of photos trying to get a bat in flight.

[NB Images at right have been cropped & enlarged]

**Below:** the Mock Viper, *Psammodynastes pulverulentus*, is harmless. It is one of the few snake species to possess three hemipenes. The shape of the head is the reason this snake is often confused with pit vipers.



#### Part IV: Diving in Komodo National Park

Slide 83, "Diving within this national park is fantastic but the conditions can be rough. A fellow diver got separated from us at one stage and within minutes he was spotted as a little dot way out to sea. A few more minutes and he would have been lost. We were told that a diver's life is lost nearly every month whereby a person is taken out to sea by the strong current."

We spent a total of 3 days on the boat, sleeping on it as well.

"Night dives were the most enjoyable", Damien said, "producing some of the best photos. A camera flash brings out the real colours, and all the weird animals as well!"

"sharks, octopus, lion fish, manta rays, sea turtles, sea slugs and stone fish (a venomous creature which we were careful not to step on) just to name a few."



Green sea turtle (*Chelonia mydas*)





*(Herping in Indonesia: a travelogue, cont'd,...)*

#### **Part V: Komodo National Park and the Dragons**

"Finding these beautiful creatures meant going for long walks. Sightings were pretty much guaranteed because the dragons were routinely fed near the ranger stations and along the track. We eventually convinced the rangers to take us a long hike out of the trails - a dream come true to see the largest lizard on earth!"

"Whilst out exploring we came across a juvenile Komodo Dragon, about 1.5m long, heading for a tree to seek shelter from the heat. Further along we found a big male trying to eat a dead buffalo calf which was semi-submerged in mud. We watched the dragon trying to get through the flesh for over an hour, without success."

**Part VI: try to relax, get a massage, drink some beer...**

**Part VII: write thesis!! 118**



## 8<sup>th</sup> World Congress of Herpetology, Hangzhou China, 15-21 August 2016

Bruno Ferronato, Institute for Applied Ecology, UC, was our first guest speaker at the Feb '17 ACTHA meeting. He gave members a brief overview of the Congress and presented some startling facts about the plight of China's endemic turtles.

*This summary by Mandy Conway.*

Bruno started his presentation by saying it was a tumultuous start to the Congress - the event was moved from Hangzhou to the city of Tonglu, some 100km south, just 2 days before the start. The local organisers managed to swiftly transfer all 650 participants, no mean feat!

Twenty-six symposiums were subsequently held, with participants coming from all over the world. Speakers had the opportunity to present their research to a broad audience; some of the research areas included:

Taxonomy, Systemics, Phylogenetics  
Diversity Distribution  
Genetics Development, Morphology,  
Biogeography  
Landscape, Conservation Genetics  
Adaptation Evolution  
Recovery Restoration

Bruno's presentation fell in the Ecology Ethology segment and it concentrated on his research into the ecology and conservation of Australian turtles.

Bruno and some of his fellow researchers went on a tour of the local food market in Hangzhou which revealed a variety of animal based products on sale; a newt, a species currently endangered, was spotted which caused some angst.

### Asian turtles

There are 90 species of Asian freshwater turtles and tortoises, both hard and soft shell varieties; Bruno went on to tell ACTHA members about the problem that many of these turtle species currently face.

### The Asian turtle crisis - 1980s

A large decline of Asian turtle populations was identified by researchers in the 1980s. A more recent

study has found that over 70% of Asian turtles and tortoises are now listed as threatened under the IUCN (2014).

"People in Asia have been harvesting turtles for food, medicinal purposes and pets for thousands of years, which was sustainable in the past. But since the 1980s, with changes in the economy and economic growth, turtle consumption has grown to unprecedented levels. In fact turtles have been imported from many parts of the world, especially South-east Asia (*Left, image: Turtle Survival Alliance*) Turtles are being shipped illegally to China from as far away as the US, particularly from around Florida and

Mississippi. Most of these animals are destined for the food industry, some as pets and many more for turtle breeding farms." Bruno said before adding, "The world's greatest turtle species richness area is in the Ganges-Brahmaputra river basin drainages of India and Bangladesh."

"Local researchers have been monitoring the vast food markets, determining species numbers and diversity. They estimate that ten thousand tonnes, around 10 million animals, are traded in South-east Asia every year. Some species have been found in the markets that have not previously been found in the wild. A key point here is the use of 'local' people doing the on-ground work; foreigners would cause suspicion and hence problems collecting data."

### Turtle farming - China

In 2008 there were an estimated 1500 turtle farms registered with the appropriate authorities in



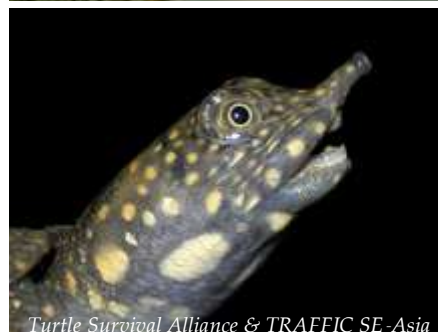
*Turtle Survival Alliance & TRAFFIC SE-Asia*



*Turtle Survival Alliance & TRAFFIC SE-Asia*



*Turtle Survival Alliance & TRAFFIC SE-Asia*



*Turtle Survival Alliance & TRAFFIC SE-Asia*



China, mainly in the southern provinces of Guangdong, Guangxi, Hainan and Hunan. Approximately 300 million farm-raised turtles are sold annually by China's registered turtle farms (worth an estimated US\$750 million).

The main species traded are the Chinese Soft-shelled Turtle, *Pelodiscus sinensis* (Right). Bruno found this species freely available in the large supermarkets he visited. Oddly, he found a variety of prices being asked for individuals. "Turtles sourced from farms were cheaper than those sourced from the wild, which were more desirable for their medicinal purposes." he was told.

Hard-shelled turtles that have become common in the farming trade include the Three-line Box Turtle, *Cuora trifasciata*, and the Yellow Pond or Chinese Stripe-necked Turtle, *Mauremys mutica*.

Bruno attended a symposium about turtle farming where literature was presented by the turtle farming community. 37 species of turtle are being farmed in China at the present time. 1500 farms are registered with authorities however indications are that there are currently 330,000 turtle breeding farms.

Bruno passed around a booklet which showed examples of turtle farming businesses, some of which were up to 400 hectares in size, with huge breeding ponds and lagoons.

### **Turtle farming vs Conservation**

There are many different views regarding the issue of turtle farming. Proponents argue that farming greatly reduces the acquisition of stock from the wild, alleviating pressure on wild populations throughout the region and elsewhere in the world. The number of wild-caught turtles to improve breeding stock is still a problem though.

Protected areas to preserve the few populations of wild Chinese turtles and anti-poaching efforts are more important than ever. Many agree that conservation and

research need to be conducted in-situ, otherwise poachers will continue to return to sites.



### **Turtle Conservation - Organisations**

These are just some of the organisations helping to conserve wild turtle populations throughout the world:

#### Turtle Survival Alliance

#### Turtle Conservancy

#### Chelonian Research Foundation

#### Turtle Conservation Fund

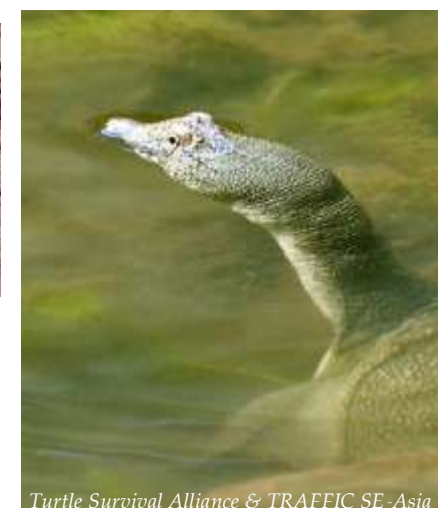
#### Tortoise and Freshwater Turtle

#### Specialist Group - IUCN

#### Conservation International

Many provide grants for students to study endangered species, have insurance colonies in place, local turtle conservation projects, and scheduled meetings between organisations to share ideas and developments.

If the current trend of taking turtles from the wild continues then we are likely to only see them in zoos in a few short years.



### Relocated 350kg crocodile swims 400km to return home in North Queensland

*By Amy Mitchell-Whittington, Brisbane Times, 20 December 2015*

Several years ago, University of Queensland, School of Biological Sciences, Professor Craig Franklin and his team translocated three saltwater crocodiles from a remote section of Wenlock River in the Steve Irwin Wildlife Reserve on the west coast of Cape York to various remote locations along the west coast.

The aim was to track their movements and determine if relocation would be a good management strategy for crocodiles who continuously come into contact with humans or livestock.



*Above: Tiny Tim, a male crocodile involved in Prof Franklin's latest research, detected on Thursday, September 10, 2015, north of Weipa. Photo: Supplied.*

Two of the crocodiles were released up to 80 kilometres away, along the west coast of Cape York, with one carried via helicopter 400 kilometres to a remote beach on the east coast of Cape York.

This crocodile, which weighed about 350kg and measured 4.5 metres, shocked Prof Franklin's team at the time by swimming over 400km around the tip of Cape York in less than 20 days to return home.

"This feat not only destroyed any notion of relocating problem crocodiles found in far north Queensland, it also proved, for the first time, that crocodiles use currents to travel long distances", Prof Franklin said.

"When we translocated it from the west coast of Cape York to the East Coast, it didn't go straight back home, it waited around for several months," he said. "It was the first time anyone had shown that crocodiles use currents to travel."

"If they are travelling long distances in river systems they will use tidal movement in and out of the river to facilitate their travel."

Crocodile numbers seem to have risen in Queensland's north. *Photo: Terry Trewin*

Unfortunately this has meant other more invasive methods have been put in place to manage problem crocodiles.

"If there is a problem animal likely to impact humans or livestock, then the government's Department of Environment makes all attempts to try and catch that animal and then place it into a farm or zoo; try to find some place that will take it," Prof Franklin said.

"If they are unable to capture it, they are able to make the decisions to shoot the animal, but they try not to do that."

"In terms of the population, it makes very little difference whether the animal is moved or shot, because its ability to reproduce (in the wild) has been lost."

"We have the longest and largest tracking survey ever done on crocodiles," Prof Franklin said.

"The more we know about a species, the better we can conserve it, protect it and the better we can manage it; manage its protection and conservation."

Prof Franklin and his team use a combination of satellite tags, that are costly and short-lived, and acoustic tags, which are implanted into the animal and have more longevity.

More than 130 crocodiles have been tagged with acoustic tags since 2008 in a bid to conduct longer-term studies.

"These days in the age of climate change what we want is long term data that goes over multiple years and that way you can see the patterns that emerge and the animals behaviour and movements," Prof Franklin said.

"We are losing species at a very fast rate because of human impacts on the environments. What we want to understand is how animals respond to those impacts."

Prof Franklin hopes his research will educate people to live safely alongside crocodiles.

"We can inform people how to behave around crocodiles and then how to reduce those negative interactions, which is good for humans and good for crocodiles," he said.

"We can look at crocodile behaviour, look at the patterns that exist and say this is a bad idea to be in this area, or exhibit these behaviours as there could be chance there could be a crocodile there."



"Most of the reasons these crocs go around boat ramps is because people stupidly feed them. The best way to protect people is to educate them about how to live alongside crocodiles safely."

"We have a habit of wanting to shoot animals that pose a threat, or that have a trophy value, which I find objectionable firstly because we don't fully understand how much that could affect the population structure and secondly the behaviours of some individuals."

"We are conscious of that and hopefully our research provides insight into the role of crocodiles in ecosystems."

## Earless dragon models made by Canberra kids could help save endangered lizards

By Craig Allen, ABC News, 23 March 2017

**They are rarer than China's giant pandas, but grassland earless dragons get much less press — and next to nothing is spent on captive breeding programs.**

And while the enigmatic, endangered lizards may not share the panda's cuddly appeal, those who love them are just as passionate about their survival.

In their drive to learn more about the earless dragon, ACT government ecologists are taking to building tiny life-size reptilian models to entice predators to attack them in the wild.



Above: Bonython Primary School pupils have been enlisted as artists for the project. Image: ABC News, Craig Allen.

And they've enlisted students from Bonython Primary School, to help paint the models in realistic colour schemes. Over coming months, researchers will place the models in the field, then sit back and watch. Sarah Crisp, from the ACT government's Natural Resource Management organisation, said they wanted to know which animals found the reptiles tasty, and

which habitat offered them the best protection.

*"The models are made from clay, so any attacks made on the models we should be able to see," Ms Crisp said.*

"Indents, or bends in the models will be an indication that they were attacked by a predator."

### 'Perfect bait for a feral cat'

Grassland monitoring officer Brett Howland said unlike the real thing, they hoped the fake earless dragons would be attacked — with cats, foxes, birds and snakes the most likely predators.

And to compare attack rates, they'll place different coloured models in the field.

*"The prediction is that animals that have that kind of camouflage that looks like grass, that looks like bare ground, it will do quite well in that short grass, bare ground area," Mr Howland said.*

"And the ones that don't have any camouflage will be mauled."

Threatened Species Commissioner Gregory Andrews said he believed cats were doing the most damage to populations of grassland earless dragons.

"This reptile is perfect bait for a feral cat, or a roaming domestic cat. This is exactly the sort of thing that cats love to eat, and devour instantly," Mr Andrews said.

Curiously, the science shows that earless dragons do better in a modified grazed landscape, rather than in untouched bushland — perhaps because the animals have adapted to regular clearing of their natural habitats through grazing and fire.

*"Allowing sheep grazing actually supports them," Mr Andrews said.*

"It's an example of a species that the recovery requires farming and grazing. The science has shown quite clearly that no grazing is actually worse for this species than some grazing."



Above: Sarah Crisp compares a clay earless dragon model with a real one. Image: ABC News, Ian Cutmore.

## Woman rushed to Canberra Hospital after snake bite

*The Canberra Times*, 23 January 2017

Paramedics are warning people to be cautious outdoors after a woman was rushed to hospital with a snake bite on Monday.



*The 18-year-old was in a Kambah paddock when she was bitten by a brown snake.*

*Image: Steven Siewert*

The 18-year-old had walked into a Kambah paddock when she felt a bite on her calf and looked down to see a brown snake.

She returned home and called 000. Paramedics treated her at home then took her to Canberra Hospital in a stable condition.

ACT Ambulance Service duty officer Chris Barry said: "The community should keep in mind that snakes are very active in the ACT at this time of year and you should exercise caution when outdoors."

## Where have all our goannas gone?

*By Tim the Yowie Man, The Canberra Times, 18 February 2017*

This summer, amongst a bulging mailbag of curious animal sightings, this column received numerous reports of large Lace Monitors (*Varanus varius*) prowling south coast campgrounds, but not one single sighting of this eye-catching goanna, once also common in Canberra's parks and suburbs.

Indeed, looking back through correspondence since this column's inception seven years ago, there has been a disappointing dearth of reports of goannas in the ACT. This is despite the fact that according to local herpetologist Ross Bennett's field guide, *Reptiles and Frogs of the Australian Capital Territory* (National Parks



*Above: This Lace Monitor, photographed in 1990 on Black Mountain, was the last that local herpetologist Ross Bennett has seen in the wild in Canberra. Image: Ross Bennett.*

Association of the ACT, 1997) there are actually two species of goannas found in the ACT — the Lace Monitor, referred to by some as the Common Tree Goanna, and also the ground-dwelling Rosenberg's Monitor (*Varanus rosenbergi*).

Another Canberran also struck by this apparent decline in Lace Monitors in Canberra is good friend of this column, Ainslie naturalist Matthew Higgins. In an attempt to better understand Rosenberg's Monitors, which he has been documenting on Mt Ainslie and other parts of the bush capital for several years, Higgins recently embarked on a mission to uncover historical reports of the Lace Monitor in the ACT.

Leaving no stone unturned in his quest, the dedicated naturalist has interviewed some of our community's longest serving herpetologists and ecologists as well as spent weeks poring over wildlife databases and back copies of newspapers including *The Canberra Times* in search of reports of the disappearing goanna.

The giant goanna sculpture at Girrawah Park in Ngunnawal. Image: Tim the Yowie Man

According to Higgins' investigation, still a work in progress, "Lyall Gillespie's histories of Canberra and Ginninderra mention goannas as being numerous in the nineteenth century, but there has been a significant decline in Lace Monitors since Canberra's development early last century."

"It is clear that the Lace Monitor is all but extinct in the ACT," concludes Higgins, who points to two main reasons for their decline.



"Firstly, in the early development of our city it wasn't uncommon for land holders who had chicken coups to shoot them," explains Higgins, adding, "this was to stop the predation of chook eggs."

However, according to Higgins, the most significant factor contributing to the decline in Lace Monitors has been habitat loss.

"They are known to have large home ranges, and if these are fragmented through roads, buildings and suburbs, then it makes it difficult for a population to be viable," explains Higgins.



Image: Canberra Times

Amongst the more notable historical reports of Lace Monitors uncovered by Higgins are a number of sightings in Canberra's north in the 1970s, including a 1.2 metre specimen found climbing the wall of a house on Hackett (much to the alarm of its elderly owner!) and another spotted on the prowl near woodland in Mitchell.

"There's virtually no chance of seeing one in north Canberra these days due to the way it's been developed," laments Higgins.

In fact, these days the only goanna you are guaranteed to see in suburban Canberra is of the concrete kind. While recently searching for new playgrounds for my young children, your akubra-clad columnist spotted a larger than life goanna sculpture in Girrawah (meaning 'goanna' in a local Indigenous language) Park in Ngunnawal, (below). The impressive work of art is hidden down a quiet street but well worth a visit, if



only to contemplate the time when goannas of a flesh and blood variety were a much more common site roaming our bush capital.

Lace monitors are still common on the south coast, like this one spotted climbing a tree near Tathra. Image: 'Brick' from Hawker

Have you spotted a goanna within the ACT's borders? If so, I'd love to hear from you. So would Higgins.

This 1.2 metre long Lace Monitor appeared in *The Canberra Times* in January 1978, climbing up the wall of a house in Dunn Place, Hackett. Image: Supplied.

#### Fact File

Spot the difference: Seen a goanna in the ACT, but don't know whether it's a Rosenberg's or Lace Monitor? According to Higgins, "there are various distinguishing characteristics, but the most obvious one is the banding on the tail", explaining "the Rosenberg's have narrow bands and Lace Monitors have broad bands."

**Tim's Tip:** To see a Lace Monitor in the ACT you have to be extremely lucky. A radio tracking project of an adult male on Black Mountain late last century showed that the goanna would often remain in one tree hollow for several days at a time. When in the bush, use your ears, and listen for their movement. If you hear something scrabbling up a tree trunk, look up, you just never know — it could be one of the last Lace Monitors left in Canberra.

**Where to find Rosenberg's:** While Lace monitors are close to extinction in the ACT, according to Higgins, "Namadgi National Park, especially the Naas Valley, between the area up-river from Caloola Farm and Mt Clear" is the best place to spot Rosenberg's Monitors in Canberra. If you spot a Rosenberg's try to take a close-up photograph of its face which can be used to distinguish individuals — a bit like fingerprints in humans.

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

## 'Big mother of a snake' photobombs mum's snap of two-year-old daughter

By Erin McFadden, *The Land*, 30 March 2017

A mum got the shock of her life when taking a photo of her daughter this week.

Bianca Dickinson took a picture of her daughter Molly, 2, as they waited for Molly's older siblings to get off the school bus on Wednesday afternoon.

At first, nothing seemed out of place. But then Mrs Dickinson looked closer.

A two-metre long brown snake is also in the picture (*right*)

Mrs Dickinson thought she noticed a bit of bark flying off a nearby tree out the corner of her eye.

"It was really windy," she said. "Then I looked up out of the camera to see where the bark went and saw a big mother of a snake."

Luckily, Molly didn't even notice the snake behind her.

"I'm surprised it didn't touch her, it was so close," Mrs Dickinson said.

"I checked her for bite marks still."

Mrs Dickinson said it was a good reminder that snakes were still active, even when it was not a hot day.



### Ed. Important: Future ACTHA Newsletters via email?

Once again up for consideration, would you be willing to receive this Newsletter via email?

A major benefit would be viewing the magnificent images in colour.

*Times seem to have changed and most people who either renew their membership or become members are choosing an email version.*

If you'd prefer to **continue receiving the ACTHA Newsletter in Hardcopy format** then please let me know, preferably by **Tuesday 18 April '17**

**mandycnwy@gmail.com**



ACTHA News

PO Box 160

Jamison ACT 2614