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ACTHA INC. NEWS

FEB - MAR 2013

*Newsletter of the
ACT Herpetological
Association Inc.*



MEDAL OF THE ORDER OF AUSTRALIA

Mr Richard Craig LONGMORE, Hawker, ACT

**For Service to herpetology, particularly the
study of snakes and lizards**

Congratulations Ric!

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YOUR NEW COMMITTEE FOR 2012 - 2013

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

** Denotes Life Members*

DIARY DATE

The *bi-monthly* meetings of the Association are 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, 19 FEB 2013

This month we are delighted to have Marta Vidal Garcia, Research School of Biology, ANU, who will give a presentation entitled '**Habitat use and body shape in the Australo-Papuan myobatrachid frogs.**

Body shape is usually a highly conserved trait in frogs and toads, yet body morphology can still differ greatly among them. Some groups of related species can display a broad ecological and morphological variation, while others display very little change. The Australo-Papuan family of the 'Southern' frogs (Myobatrachidae) is an ideal system to examine these questions since this group represents 57% of the frog diversity in Australia, displays considerable variation in body size and shape and occupies a broad range of ecological niches.

ACTHA 2012 CHRISTMAS PARTY

The Association's Christmas Party was held on Tuesday, 18 December 2013 and was exceptionally well attended. Everyone enjoyed Margaret's home made finger-food as well as the usual mini pies and sausage rolls etc acquired by Dennis. This Ed. was in charge of bringing the drinks, soft and alcoholic, which arrived 40 minutes late but just in time to avoid a mutiny.

Our party was held at the new Canberra Reptile Zoo, formerly the Reptile Sanctuary, at Federation Square in Nicholls. Peter Child and his co-owner Anthony (along with Peter's amazing dad Derek) have been working flat-out refurbishing the Centre for the past 6-8 weeks and ACTHA was lucky enough to be one of the first to celebrate the venture's very recent opening. Members were invited to tour the building on the night; the new and gorgeous enclosures a taste of things yet to come.

Dennis Dyer, our poetic President, gave a small speech, highlighting this year's achievements and the excellent speakers we have had at each of our meetings. He thanked the Association's hardworking volunteers by launching into one of his great poems. Unfortunately, the piece of paper it was written on got lost and I forgot to write it down. So, when he remembers the poem I will be able to reproduce it in this Newsletter!



Ric Longmore then stepped forward with something wrapped in brown paper. He spoke about a long-time member of ACTHA who has donated many, many hours of her time to ensure the Association's bank account is meticulously managed, new memberships and renewals are swiftly processed, guest speakers are acquired for each and every meeting, that those guests have electronic devices to deliver their presentations, and many more tasks that yield copious daily emails to other Committee members.



This wonder woman is none other than **Margaret Ning**, our beloved Secretary (*below*), who was presented with an original painting of her favourite part of Australia; Nimmitabel, NSW. Margaret and Geoff Robertson own their own nature reserve orientated property in this region, with several comfy buildings regularly used by our members as well as other like-minded conservation bodies. Thanks Margaret! we couldn't manage without you!!



SNAKES ALIVE! 2013

Another Snakes Alive! display has come and gone. Several ACTHA members pen their thoughts on proceedings, which includes a summary of the opening speech by local MLA Mick Gentleman.

The first day, shortly after 10am...

Dennis Dyer, ACTHA's President, welcomed visitors to another *Snakes Alive!* Exhibition, which is held annually at the Australian National Botanic Gardens, Canberra.

"No-where else in Australia can people interested in herpetology or reptiles put on a display in such an amazing environment for families to not only enjoy the display but also the Gardens.

The display exhibits animals owned by the Association's members, who always enjoy the responses to people who come to the display. People can be made to feel at ease at events like this whilst learning about how these animals fit into our environment, to be admired and looked after."

Dennis then introduced local **MLA Mick Gentleman**, (right) who officially opened *Snakes Alive!* 2013.

Mick Gentleman started his speech by highlighting the fact that *Snakes Alive!* has been operating for an incredible 21 years, which is one year longer than Floriade.

"I grew up in Canberra, in Reid just below Mount Ainslie, where I spent my weekends searching for blue-tongued lizards and scorpions like many other youngsters.

"In 1987 Ric Longmore, one of ACTHA's original members, gave a talk to ANBG staff and the general public on reptiles and their place in our environment. The annual event that ensued has since grown to be a nationally recognised leading such display in Australia.

"The *Snakes Alive!* Exhibition's main aim is to show visitors of all ages and nationalities a selection of Australia's unique biodiversity of reptiles and amphibians and to educate about the vital role they play in our environment and

the importance of their conservation as we see more and more reptiles listed as vulnerable species.

"ACTHA has also been instrumental in making the public aware of the efforts of the ACT Department of Environment to assist in the survival of the Corroboree Frog by placing some of them on display. The Corroboree Frog has been a very important species to

re-establish in the Tidbinbilla

Nature Reserve. The Department plans to return some of these frogs to alpine areas.

"ACTHA is also liaising with the ACT Government with a view to assist the survival

of other native reptile species such as the Grassland Earless Dragon, the Little Whip Snake, the Striped Legless Lizard and the Pink-tongued Worm-lizard.

"For those interested in Australia's ecology and biodiversity, CSIRO's recent Australia's Living Atlas at www.ala.org.au is a website where you can interact with fauna throughout Australia, whether by region or species, even down to your own postcode or street. There is also a Smart Phone Application which allows you to take a photo of a species and log it on to the website for an expert to identify it."



Left: Ric and his woma python – with Summer Sounds performers at the ANBG.



Photo by Mandy Conway

Geoff Robertson, one of our long serving members, then took centre stage.

Geoff highlighted the fact that a number of years ago ACTHA was in a dire situation. However, thanks to the current Committee and many members the Association has been resurrected to one of strength and commitment to education about reptiles and amphibians.

“ACTHA has played a very active role within the Friends of Grasslands and Kosciuszko2Coast groups, particularly with the research and conservation of the threatened reptiles that Mick Gentlemen mentioned. Also, the money that is raised from attendance at this display goes towards further research, in particular to Corroboree Frog research and re-introduction programs.”

Dennis Dyer pens his thoughts...

This year it was decided to hold ACTHA's annual *Snakes Alive!* over four days instead of seven, from Thursday 17th to Sunday 20th of January at the Crosbie Morrison Building, Australian National Botanic Gardens. Julie and Jennifer of ANBG Media gave much promotion prior to the event including organising and judging a colouring-in competition, regular newspaper advertisements and contacting the local media outlets. Ric Longmore and his Woma were interviewed live on Radio 2CA which continued to mention the event during the four days, along with local stations ABC radio and 2CN.

Perfect weather arrived for the official opening in the amphitheatre adjacent to the building, in front of a large audience. Mick Gentleman spoke about his experiences with herps whilst growing up in Canberra and he also displayed his handling skills to the admiring folk. It was encouraging to hear Mick outlining the efforts the Government is making to sustain local suitable environments for herps to live and breed. He also congratulated ACTHA for its work in educating the public about reptiles and

(*Snakes Alive!* 2013, cont'd)

amphibians. After the opening, Mick, together with his assistant whose friend keeps reptiles, toured the display and spoke with Association members and visitors.

For the third year Peter Child, his father and assistants from Reptiles

Inc, did the setting up of all the enclosures together with a couple of members on the Wednesday and the dismantling on the following Monday. There was still a considerable amount of final work to be undertaken on Thursday morning before the 10am opening by scurrying members.

Over 40 herpetofauna species were on display, including lizards (17 species), pythons (16 sp.), elapids (3 sp.), frogs (4 sp.), turtles (2 sp.) and a crocodile. Peter and Joe each provided a number of animals

and a considerable contribution was made by other members who are keen to display their reptiles. A highlight of this year's *Snakes Alive!*

was the presence of a King Brown snake and the display provided by Frogwatch. Other exhibits included the Northern Corroboree frogs from the Tidbinbilla facility, Ric's Death Adder, Peter's Perentie, Pig-nosed turtle and fresh water crocodile, Joe's Olive and Carpet pythons, Geg's Carpet python 'Fingers' who continues to grow and Toby's young, spectacular and easily handled Jungle pythons.

The younger members of the Association again were actively and enthusiastically involved in the care and handling of the animals as well as



Red-bellied Black Snake, photo by Mandy Conway



Frill-necked Lizard, photo by Rebecca Neigert



Mulga or King Brown Snake, photo by Mandy Conway

(Snakes Alive! 2013, cont'd)



Above: Noah and Connor McAuliffe - chief merchandise salesmen!

Below: Jaran Hicks and Greg Cover with 'Fingers' the Carpet Python. Photos by Geoff Robertson.



Trish Taylor and Lucinda Royston at their Exhibition Entry posts, photo by Geoff Robertson

interacting with visitors of all ages. They also managed the merchandise shop. Other members continually staffed the entry desk, sold raffle tickets, attended to the monetary aspects, manned the sound system, conducted the feeding sessions and participated in the handling and care of the animals as well as ensuring each visitor had an enjoyable and educational experience.

There were at least two feeding sessions each day. These did not always go as planned with some pythons declining the offer of a mouse or rat, but it is pleasing to report that in such cases another python was willing to slot in and be fed, demonstrating to the audience some aspects of reptile behaviour.

Despite high atmospheric temperatures for two of the four days, almost 2,000 visitors attended. The raffle and 'shop' were also well patronised.

The winners and their families of the colouring-in competition were given a private visit which included much reptile handling after the doors closed on Thursday evening as their prize. Their parents expressed much appreciation for the efforts made by the members during this visit.

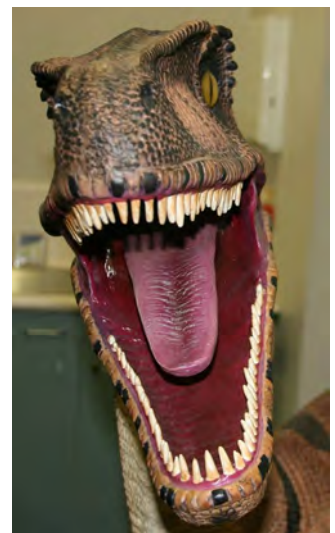
As in the past, all volunteers enjoyed refreshments on the Sunday evening get-together to celebrate another successful *Snakes Alive!*.

Margaret Ning pens her thoughts...

Well, what can I say about *Snakes Alive!* after so many years?

Once again Peter Child provided some very large and attractive enclosures for his two large goanna species, as well as other enclosures for the rest of our exhibits. He also brought along life-like replicas of a giant turtle and a Komodo dragon, not to mention a dinosaur model that managed to scare my granddaughter!

Peter's large open lizard enclosure occupied a central part of the main room, which enabled visitors young and old to both look at and handle the local blue-tongue and bearded dragon species, with help from an ACTHA volunteer.



(Snakes Alive! 2013, cont'd...)



Long-necked Turtle time.

For the first time we had three elapids on display: Ric's beautiful Desert Death Adder and Canberra Reptile Zoo's equally splendid Mulga Snake and Red-bellied Black Snake. The larger pythons always draw a crowd and get visitors gasping in disbelief at their size, and this year was no exception.

Mandy (above, giving a talk) and Gus' turtles were in a tub in the main room and proved as popular as in past years: although, despite the signage, it was sometimes difficult to keep curious fingers out of their water and potentially their mouths!



Freshwater Crocodile. Photo by Rebecca Neigert, one of our international visitors.

Another area contained a number of smaller pythons, geckos and a large aquatic tank with Peter's baby freshwater crocodile and Pig-nosed Turtle. While wary of each other at first, those two settled down pretty quickly and also displayed well.

We also used part of the second room for feeding times, a change that proved very



successful as there was more room, people could hear better, and the animals were more visible because they were fed on a high branch. Feeding times continue to be a very popular part of the Exhibition; whilst visitors see the animals being fed they are also treated to a brilliant talk by the owner of the reptile. I have to say I was amused when watching a python being fed, to hear a mother say to her daughter 'if you find it too confronting, you don't have to watch it', and to see the daughter just turn straight back to watching the snake squeezing its prey.

This year we also occupied a third, smaller room to put two threatened frog species on display, namely the Northern Corroboree Frog and the Green and Golden Bell Frog. This worked perfectly, as we were asked to provide air conditioning this year for the ten Corroboree Frogs from Tidbinbilla. Although most of the frogs did their normal disappearing act into the sphagnum moss, there were always a handful able to be seen by visitors.

Thanks to some behind the scenes organising, Gerry Marantelli, from the Amphibian Research Centre (ARC) in Victoria, filled the theatrette at the ANBG, and we were treated to a colourful and compelling presentation, 'Saving Frogs because we MUST'. Gerry's talk illustrated how



Northern Corroboree Frog, photo by Iris Carter



Green Tree Frog, photo by Mandy Conway

(Snakes Alive! 2013, cont'd...)

passion and perseverance can lead to scientific insights and conservation outcomes. The ARC is one of three organisations involved with Corroboree Frog recovery programs, and ACTHA has donated most of its raffle profits over the years to it.

(NB a write-up of his presentation will appear in the next edition of this Newsletter).

Steven Holland (*below*) brought along a new sculpture this year; a Red-bellied Black Snake made from bronze. This exhibit was a little less upsetting to the birds in the Gardens; last year his bronze Eastern Brown Snakes caused quite a stir. Being outside attending his new sculpture exposed Stephen to the ferocity of the heat on days one and two of the exhibition, but overall he thoroughly enjoyed being outside talking to people about his exhibit.



Hot weather is never good for attendance records at *Snakes Alive!*, and the temperature on our first two days reached 37 and 42 degrees respectively. Whilst our building was air-conditioned, the front door had to stay open.

After many years of having the same prizes for our raffle winners we decided to change things a little this time. First prize was still a voucher to Reptiles Inc., Peter Child's shop at Kambah, but we decided to have half a dozen second prizes, namely six family passes to the Canberra Reptile Zoo (CRZ) at Gold Creek (formerly the Canberra Reptile Centre), now partly owned by Peter Child. The people who won these passes were initially concerned they might have won a snake, but were then delighted to hear they had won their passes. They will enjoy their visit to the CRZ where Peter has enthusiastically embarked on a renovation program.



Above: Emily Robertson and below: Greg Cover, photos by Geoff Robertson



Above: an ANBG Gippsland Water Dragon. "Why are all these people here?!" photo by Geoff Robertson

(Snakes Alive! 2013, cont'd...)

Advertising plus!

Of interest, a Google search of 'Snakes Alive 2013' produced 40 plus entries of the event for the general public's information. Some 'sites' included:

ACTHA Newsletter
Canberra Events/About Australia
Reptiles inc facebook
flightcentre events (Aust/NZ)
ShopSafe Australia Travel Information
visitbyroad.com
ANBG What's On
About Australia – Canberra Events
k2c.org
Martin Westgate's Research
visitcanberra
travelozinfo
outandaboutwithkids.com
eventful.com
communityswitch.com
ActewAGL
actlandcare.org
outincanberra.com
liveguide/EventsTicketing
pleasetakemeto.com
2ca
totaltravel.yahoo.com (Canberra & Surrounds)



Above: Rebecca Neigert, one of our international visitors, is thrilled to handle a Carpet Python for the very first time! photo by Mandy Conway.

Below: Ashley Sloan with a Shingle-back Lizard, photo by Geoff Robertson.



The stunning lace monitors (Bell's form on right), photo by Mandy Conway



Above: Ric's Desert Death Adder has lunch, photo by Geoff Robertson



Mr 'Poh' Carpet Python lays eggs!

Shortly before this year's *Snakes Alive!*, Joe McAuliffe made an astonishing discovery in his reptile room.

Joe's male Carpet Python 'Poh' and his female companion 'Mel' have lived together for over seven years, failing to reproduce, much to Joe's annoyance.

An interim re-organisation of enclosure occupants meant 'Poh' was housed with a male Carpet Python of similar size and quiet demeanour.

The co-habitation resulted in some hanky-panky and Wha-la! 'Poh' is about to become a mum. Joe is pleased but still in a state of shock.

A similar thing happened last year when Angus' nine year old male turtle 'Colin' had a holiday with Mandy's turtles (of previous unknown sex). 'Colin' laid eggs sometime later. So what sex is Colin's partner 'Dot'?!



Left: Mark Robertson is just happy to manage the reptile 'touching experience' tank.

Eggs and poems: only at *Snakes Alive!*

Joe (below left) question's his snake expertise while Dennis (below right) thinks about his next poem.



When a Happy Herpetologist Displays

By Dennis Dyer, our ever poetic Pres.

*When a happy Herpo displays,
Sorrow goes and pleasure stays;
Every hiss and crunch becomes a song,
All is therefore right, and nothing's wrong!
From **this** Snakes Alive and ever after
Let your tears be tears of laughter -
Every sigh that finds a vent
Be a sound of sweet content!
At the feeding, each snake arose,
And so every kind of trouble goes
Every skink became a splendid dragon,
In the minds of the members who log-on;
Gnawing care and aching sorrow,
Get ye gone until to-morrow!
Reptile viruses in grim array,
They are things of yesterday!
When you display distinctive dragon,
Then the air with joy is laden;
All the areas of Snakes Alive displayed
Echoes with children's laughter played,
Sunlight takes the place of shade
When our display, has been made!*

The End, for another year...



Recognition has a real bite

The Chronicle, 29 January 2013

Herpetologist receives OAM for life's work

By Mark Sawa

"WHEN I was about 11 a friend and I rode our pushbikes out to Lake George and caught our first tiger snakes. A very deadly snake of course. The worst part was riding the pushbike back. It's a long way from Lake George. We were young and fit and silly."

More than half a century later Richard (Ric) Longmore has been awarded the Medal of the Order of Australia for services to herpetology – the study of reptiles and amphibians.

Stretching his memory he believes his first pet was a bearded dragon or some other local lizard. But that was 55 years ago.

"I'd keep them at home and study them, feed them and write up little books on them like I was a pretending scientist," Mr Longmore said.

"This is a 10-year-old boy. Other kids were out on skateboards and all that, and here I am studying a lizard."

The Hawker resident has left an indelible mark on reptile protection in the ACT and beyond over the past 40 years.

He's had a tiger snake named in his honour, an award named after him, has been the editor of many scientific

papers and was also instrumental in developing legislation for wildlife protection in the territory that would have national influence.

"Animals in those days were birds and mammals, reptiles and amphibians didn't even count," Mr Longmore said. "I think the ACT's legislation became an example of what the other states could try and achieve."

"That was a good achievement."

"Reptiles were then acknowledged as animals that deserved protection."

As his fascination for reptiles grew it began to focus on the slithering world of snakes. "I never told my parents I had a pet tiger snake in the cage up the backyard," Mr Longmore said.

"But they eventually got to learn that I was interested in herpetology ... and also that this was going to be a career for me not just a passing fad. So they fostered my interest."

He kept a variety of snakes and lizards at home and developed a reputation as a local expert, giving talks at schools, shows and fairs.

Continued Page 10



MEDAL (OAM) OF THE ORDER OF AUSTRALIA IN THE GENERAL DIVISION Mr Richard Craig LONGMORE, Hawker, ACT

For Service to herpetology, particularly the study of snakes and lizards

Public Officer, Australian Society of Herpetologists (ASH), 1983-2007; Editor, 1984-1999; Assistant Secretary/Treasurer, 1976-1977; Committee Member, 1981-2007; Life Member, 1999.

Vice-President and Excursions Officer, ACT Herpetological Association, for 15 years; Founding Member, since 1985; Life Member, 2008.

Founder & Coordinator, Annual *Snakes Alive!* exhibition, ANBG, Canberra, since 1987.

Supporter, Tadpole Kit School Education Program. Reptile Rescue Volunteer, for 12 years.

Officer, Australian National Parks and Wildlife Service, for 20 years, Senior Officer, Australian Biological Resources Study, for 10 years.

Editor, *Atlas of Elapid Snakes of Australia*, AGPS, Canberra, ACT, 1986.

Executive Editor, *Kowari Series* (biological reports of various animals or plants of Australia), Australian Nature Conservation Agency, ca 1991-1995.

Awards/recognition includes:

An annual award named *Ric Longmore Student Prize for Best Poster*, ASH.

A tiger snake discovered around Lake George and its environs has been named after Mr Longmore.

Continued from Page 1

After completing a science degree he worked for parks and wildlife and any federal department with an environmental orientation. And although it wasn't his job, he became the go-to man for snake related problems in the ACT well before rangers were trained to deal with such situations.

"The police and the fire brigade used to ring me up and they'd say, 'We've got a brown snake in someone's garage.' My boss would put a sign up on my door to say 'Rick is on a snake call,'" he said.

"I really had a job that fitted in with my interests, which was wonderful."

But despite an understanding boss the ACT government in the end put their rangers through some snake wrangling courses.

Mr Longmore has only been bitten once. And it wasn't during his stint rescuing temperamental eastern brown snakes from Canberra backyards. It was on one of his jaunts to Lake George as a youngster when he was struck by a tiger snake.

"I had to be hospitalised at Collector," he said. "That wasn't so good, especially when my parents found out. I had to leave my pushbike by the side of the road and hitchhike a ride into Collector Hospital. I think I was about 13 or 14 then."

In 1987 he started the *Snakes Alive!* exhibition at Canberra's National Botanic Gardens.

"I've been doing that for 28 years. I started off just by myself and it grew like topsy and became quite a well known annual display," he said.

The exhibition has been an annual education for adults and children about the importance of lizards and snakes. It aims to change perspectives, allay fears and remind many that reptiles are protected animals like koalas or birds.

"It's been a lifelong addiction. Fifty-five years of being a herpetologist. As a little boy right through to mature adult and now into senility," Mr Longmore said with a laugh.

Mr Richard Craig Longmore (Ric) has made a significant impact to Australians' understanding and appreciation of the unique reptile and amphibian species that share this Continent. He has furthered knowledge to a significant degree which has affected the attitude that Australians show towards their native reptiles in a sensible and measured fashion.

At the local level, he initiated the very successful annual 'Snakes Alive!' which has done much to achieve his aim to educate the general public. He has also influenced Government concerning policies and procedures and provided strong support for the measures to save the

Corroboree Frog. These have been achieved by Ric working on a voluntary basis.

Nationally, Ric has produced the highly regarded *Atlas of Elapid Snakes of Australia* and through his active membership of the professional Australian Society of Herpetologists and editing their publication has significantly influenced thought, actions and attitudes in Australia.

Internationally, an understanding of Australia's reptiles and amphibians has been increased by Ric's enthusiastic forming of professional relationships with herpetologists in SE Asia and the sharing of knowledge.



Motorists target turtles

Scores killed along bridge

By Mark Sawa

THE MIRRABEI Drive bridge has become a deathtrap for scores of turtles trying to cross the road near Gungahlin's Yerrabi Pond.

Some motorists are even trying to run over the turtles deliberately.

Ngunnawal resident Jess Bartlett witnessed one such incident, in which a turtle attempting to cross the road retreated into its shell after being spooked by cars.

"I couldn't believe it," Ms Bartlett said. "They swerved on to the other side of the road to hit it."

She was with her sister at the time and they had just pulled over to rescue two turtles from the roadway.

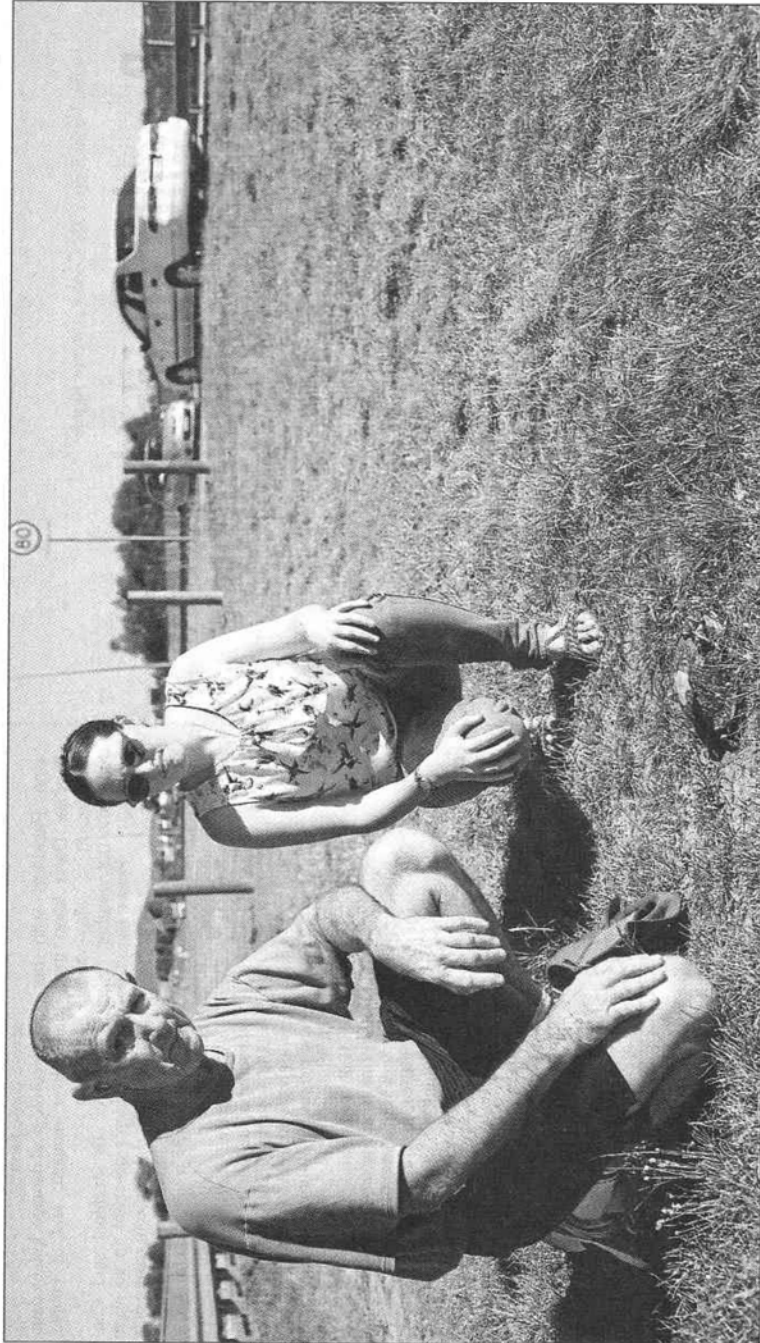
Walk along the bridge's roadside and a smattering of crushed shells from dead turtles can be found. Ms Bartlett estimated she had seen 15 to 20 dead turtles on Mirrabai Drive during the past couple of months.

"After we had that period of rain around Christmas Day and Boxing Day we were seeing a couple [of turtles] a day dead on the road," she said.

She contacted Territory and Municipal Services in December to see whether signs could be put up to warn people about all the turtles attempting the bridge crossing. The response she received from a TAMS officer was unexpected.

She said they told her nothing could be done because "people don't read signs".

"They were his exact words," Ms Bartlett said.



Jess Bartlett and her father Kerry are concerned about the high number of turtles getting run over along Mirrabai Drive near Yerrabi Pond. Picture: Elisa Lee

She was about to drop the issue until she rescued two turtles in one day, only one of which could be returned to the water after the other one was deliberately run over.

She fired off an email to TAMS and this time spoke to a ranger.

"He was very sympathetic but reiterated that signage was not an

option as the signs would have to be erected everywhere turtles cross the road," Ms Bartlett said. "I realise that signs won't stop the turtles from trying to make the crossing but they are a relatively low cost intervention that might make some motorists slow down and take a bit more care."

"I just think the lack of interest and

the lack of compassion is really disappointing."

Minister for Territory and Municipal Services Shane Rattenbury was unavailable for comment but a spokeswoman said Roads ACT would continue to liaise with wildlife ecologists from the Environment and Sustainable Development Directorate (ESDD) to

discuss appropriate measures to minimise the risk to turtles crossing the road at this location.

"For example, one possible option is to use wildlife barriers and encourage turtles to use culverts to move under roads," the spokeswoman said.

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THE CHRONICLE, Tuesday, January 15, 2013 - 10

Drivers ignore wildlife signs

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"However, the cost and effectiveness of this in relation to this specific location would need to be further assessed."

"While wildlife warning signs have previously been installed in strategic locations, these have not been found to be particularly effective. For example, Roads ACT previously installed turtle crossing signs on Horse Park Drive, however these were not effective in preventing turtle deaths."

"It seems evident that motorists pay little, if any, notice to such signs. As such, Roads ACT does not have any plans to install new turtle warning signs on Mirrabai Drive."

The spokeswoman said Roads ACT and ESDD was aware of the issue of turtles crossing roads, which seemed to be a particular issue in this part of Gungahlin and that further research was required to establish whether this was an issue for other parts of Canberra.

All new road projects take into consideration wildlife issues/impacts and appropriate action taken. Gungahlin Drive Extension provided for a number of wildlife underpasses and fencing.

THE AUSTRALIAN & INTERNATIONAL SCENE

Two new lizards discovered in Townsville area

James Cook University Media Release
17 December 2012



Pictured are the brightly coloured males of the Elegant Rainbow Skink (above) and the Orange-flanked Rainbow Skink (below).



A James Cook University (JCU) researcher has helped uncover two new lizard species in the Townsville area.

Dr Conrad Hoskin from JCU's School of Marine and Tropical Biology, and Patrick Couper from the Queensland Museum discovered the two new species: the Elegant Rainbow Skink (*Carlia decora*), and the Orange-flanked Rainbow Skink (*Carlia rubigo*).

Dr Hoskin said the new lizards were described and given scientific names in a recent paper published in the international journal *Zootaxa*.

"Both species are small skinks belonging to the genus *Carlia*, a diverse group of skinks in tropical Australia," Dr Hoskin said.

"The species names are in reference to the bright colours sported by breeding males of each species; '*decora*' means 'beautiful' in Latin, with males of that species marked with vivid orange and blue, while '*rubigo*' translates to 'rust', referring to the rusty orange colour of males of that species."

Dr Hoskin said the Elegant Rainbow Skink was found in forests in the Townsville and Mackay areas.

"It is one of the most common skinks in Townsville gardens and would be familiar to many Townsville residents as the small skink that scurries away into the garden bed," he said.

"However, the Orange-flanked Rainbow Skink is found in drier areas of eastern and Central Queensland, preferring open forests and rocky ranges around Townsville like Magnetic Island, where it is the most common lizard, Cape Cleveland and Herveys Range."

Dr Hoskin said a third species was also described in the paper, the Whitsunday Rainbow Skink (*Carlia inconnexa*).

"This species had previously been recognized as a subspecies of another skink species, but our research found that it was sufficiently different from all other populations that it should be elevated from subspecies to full species status.

The Whitsunday Rainbow Skink is only found on Whitsunday, Hook, Hayman and Lindeman Islands. The species name '*inconnexa*' means 'unjoined', in reference to the isolation of this skink on islands.

The three new species resulted from a detailed study of the widespread Open-litter Rainbow Skink (*Carlia pectoralis*).

The study looked in detail at morphology, colour pattern and genetics of all populations thought to be this species and found that in reality *Carlia pectoralis* actually consisted of four species that are genetically distinct and can be identified based on morphology and colour pattern.

"It just goes to show that we still haven't discovered all the diversity that's out there, even in a fairly well known group like lizards in a fairly well studied area like eastern Australia," he said.

(*The Australian and International Scene, cont'd...*)

"More and more we are finding that species we thought were widespread in eastern and tropical Australia are in fact composed of multiple species that have been overlooked because they look approximately similar.

"It's only when we look in detail that we find that there are very interesting new species hidden in there."

Dr Hoskin said while scientists had always known that these skinks existed, they had been calling several species by one name.

"It would be like calling the Eastern Grey Kangaroo, Western Grey Kangaroo and Red Kangaroo one species, the 'Kangaroo'," he said.

"In the case of these skinks, one of them isn't even the closest relative of the others, it just happens to have scale characteristics that meant it was incorrectly lumped in with *Carlia pectoralis* when the original taxonomy was done.

"It is exciting that in this day and age we can realise that the most common skink in Townsville gardens is in fact a new species that needed a scientific name.

Deadly snakes hatch in toddler's wardrobe

Marissa Calligeros, Brisbane Times, 21 Dec 2012

Toddler Kyle Cummings has kept redclaw crayfish, chickens and a pig as pets on his family's hectare property.

But this month, the three-year-old boy unintentionally added a clutch of one of the world's deadliest snake species to his menagerie.

Kyle happened upon a nest of eggs in the yard of his home in Nome, north Queensland, about three weeks ago, piled them into a plastic takeaway container and hid them in his bedroom closet.

On Monday, Kyle's mother, Donna Sim, opened her son's wardrobe to discover a container seething with seven baby snakes.

The snakes were later identified as eastern brown snakes - regarded as the world's second most venomous species behind the inland taipan.

Fortunately, Kyle had tightly closed the lid of the plastic container and the snakes were not yet large enough to push it open.

Kyle's family took the snakes to nearby Billabong Sanctuary, where rangers contacted local wildlife carers.



Snakes alive... the hatched eastern brown snakes, (above) and the plastic container they were found in (below).

Photos: Trish Prendergast



North Queensland Wildlife Care reptile co-ordinator Trish Prendergast was rightly shocked when she was handed the container of deadly reptiles.

Ms Prendergast immediately contacted Kyle's family to ensure no one had touched the snakes.

"They are born highly venomous, they don't grow their venom," she said.

"Their fangs would be extremely tiny [an adult brown snake's fangs are between three and five millimetres long] ... so the chance of one piercing the skin would be very unlikely, but if one had envenomated on the little boy and he had then put his hand in his mouth, or had a cut on his hand, he might not be here today."

Ms Prendergast said Kyle was also extremely lucky not to have been confronted by the mother snake while he was emptying the nest.

Eastern brown snakes are inclined to become aggressive if confronted.

"The mother snake would have been close by, because they generally incubate their eggs," she said.

"He's very lucky he didn't come into contact with her."

Ms Prendergast warned others against taking eggs from wild nests.

"You never know what's inside," she said.

She has released the baby snakes into local bushland.

The eastern brown snake inhabits open grasslands, pastures and woodland in most of eastern Australia from the desert to the coast.

On average, between two and three Australians die annually from snake bites, with eastern browns accounting for about half of those.

Lizards 'nearly wiped out' with dinosaurs

Anna Salleh, *ABC Science*, Tues, 11 Dec 2012

Contrary to previous understanding, lizards and snakes were nearly wiped out along with the dinosaurs 65 million years ago, say researchers.

Carnivorous baby-dinosaur-eating lizards like this would have lost their food source during the extinction (Source: Carl Buell)

Palaeontologist Dr Nicholas Longrich, of Yale University, and colleagues, report their findings today in the *Proceedings of the National Academy of Sciences*.

"The dinosaurs were wiped out entirely but just because lizards and snakes survived, it doesn't mean they weren't affected," says Longrich.

"This is a group that was thought to have been spared the brunt of the extinction and we're showing they were devastated."

About 65 million years ago, the dinosaurs were wiped out paving the way for mammals to become the dominant animals on land.

Scientists have debated for some time over what caused this mass extinction, but says Longrich, this study adds to mounting evidence that an asteroid smashing into Chicxulub, Mexico, was to blame.

Book-keeping error

Previous research had concluded all the major groups of snakes and lizards survived the mass extinction, which occurred at the end of the Cretaceous, but Longrich and colleagues say this finding is an artefact of how different species were classified.

"It's [due to] a geological book-keeping error," says Longrich

By reclassifying snake and lizard fossils from North America, and including some fossils that had not been previously studied, he and colleagues showed 85 per cent of lizard and snake species went extinct.

"The main implication is that the extinction was more severe than we thought," says Longrich.

He says the findings also fit with the asteroid hypothesis.

"We get an extremely diverse fauna of lizards up until the very end of the Cretaceous, when the asteroid hits," says Longrich.

"Our research strongly supports the idea that the asteroid caused the extinction."

Smaller animals survived

Longrich and colleagues showed many different lineages of snakes and lizards went extinct.



In particular they found animals with certain body plans, lifestyles and ecological niches suffered badly.

"We found the larger you were, the less likely you were to survive," says Longrich, adding the largest snake or lizard to survive the extinction weighed only about 500 grams.

He says it took about 10 million years for lizards and snakes to recover anything like their Cretaceous diversity.

Collapse of food chain

One theory why the smaller creatures stood a better chance of survival during the mass extinction, is based on the idea that the asteroid shut out the sunlight and caused a collapse in the food chain.

Plants didn't produce leaves so there wasn't much for herbivores to eat, and without herbivores there wasn't much for big lizards and snakes to eat, says Longrich.

But, there was a build-up of dead plant and animal material, which probably boosted the number of insects eaten by smaller insectivorous animals.

"That's my best guess as to what happened," says Longrich.

Australian endangered species: Beautiful Nursery Frog

*Joanne Isaac & Yvette Williams JCU,
the conversation, 27 Dec 2012*

The Beautiful Nursery Frog, *Cophixalus concinnus*, is a tiny ground-living frog from the family Microhylidae – from the Greek words "micros", meaning small, and "hyla", meaning forest or woods.

The species is only found in tropical north-east Queensland on the top of Thornton Peak in rainforest above elevations of 1100m. It one of the most restricted species of microhylid found in Australia.

A dull brown colour on their back, Beautiful Nursery Frogs are a vivid orange-red on their throat and chest. They are commonly found in the leaf litter on the forest floor, or within crevices in large boulder fields. Males call during or after heavy rainfall.

Unlike typical frogs they breed on land, and their eggs do not hatch into tadpoles.



Above: The Beautiful Nursery Frog is found only on Thornton Peak in northeast Queensland.

Below: Male frogs have been found caring for their eggs. Photos by Steve Williams

The embryo develops directly in the egg and then hatches out as a tiny froglet. The transparent eggs are laid in a string under rocks or logs in moist soil. One clutch of 17 eggs has been found, under a rock, and guarded by a male in a primitive form of parental care.



Status

Microhylids have made north Queensland their home for a very long time; scientists have dated the origin of these frogs to many millions of years ago. They persisted during the rapid rainforest contractions of the late Pleistocene, most likely because they were small enough to survive in populations in rainforest pockets.

But this means that some, including the Beautiful Nursery Frog, are hanging on in very small rainforest areas – the total distribution of the species is little more than seven square kilometres. However, they are abundant within their range, although due to their cryptic nature there is currently no reliable estimate of population size.

Threats

The primary reason for the critically endangered status of this species is its restricted

geographic range – the total area of suitable habitat is estimated to be only 718 ha, and all individuals are in one single location.

This species is also highly vulnerable to climate change. Possibly the most important impact of climate change on this species, which relies upon a consistently wet environment, will be the predicted decrease in cloud cover.

Climatic models predict that an increase in temperature of only 1 or 2°C will lift the cloud base to higher altitudes, meaning that the 'cloud-stripping potential' (the capture of water droplets on vegetation) will decline significantly and water loss through evaporation will increase.

For this species, restricted to a single mountain top, and for whom cloud cover is of vital importance, there will be nowhere left to go in order to stay cool and wet. Climatic and ecological models predict the species may be extinct within 50 years.

Unlike many other frogs in the Wet Tropics region, microhylid species fortunately do not seem to be affected by the deadly chytrid fungus. This may be due to their terrestrial lifestyle.

Strategy

There is currently no recovery plan in place for the Beautiful Nursery Frog. Details of its population status and aspects of its biology and ecology remain a mystery due to its location and cryptic nature. Because they do not call, females are very rarely encountered.

However, monitoring trips have been made at regular intervals over recent years, and efforts are underway to find out more about this species. Researchers at James Cook University have identified that the frog has one of the most general diets of all Australian microhylids, which could help it persist in such a restricted location.

The boulder fields on Thornton Peak are also key to the persistence of the species; studies show that the temperature within the boulders can be as much as 10°C cooler than in the open, protecting the frogs and keeping them cool and wet.

Conclusion

Lack of knowledge about the population size and trends and information on its physiology and ecology impede efforts to provide a recovery plan or management strategies.

Some aspects of the ecology of the Beautiful Nursery Frog could help it persist and adapt under predicted climate change, including its generalised diet, and tendency to shelter within deep crevices in large boulder fields.

Mitigating climate change through a reduction in greenhouse gas emissions is the best hope to save this species. Assisted migration is not likely to be an option given the frog's restricted, high-altitude range. And while the provision of man-made shelters or refuges could be utilised for other microhylid species, protection of the Thornton Peak boulder fields will be of greater help to the Beautiful Nursery Frog.

Removing doubt over croc snout clout

Monash University News, 17 Jan 2012

Researchers have shown how the shape of a crocodile's snout could determine its ability to feast on certain types of prey, from large mammals to small fish.

Led by Dr Colin McHenry and PhD student Chris Walmsley, from Monash University's School of Biomedical Sciences, a team of researchers compared the jaw strength of different types of crocodiles when feeding on large prey. Using computer technology they subjected the jaws to the sorts of biting, shaking, and twisting loads that crocodiles use to feed on large prey. The team generated 3D images showing the strain measured on the jaws of seven diverse species of crocodile.

They found the lower jaws of short-snouted crocodiles performed well under the loads applied to mimic the feeding behaviour on large prey, but those with elongated jaws were more likely to break under the same loads, showing their limited ability to feed on large prey.

Detailed today in *PLoS One*, the findings contribute to the understanding of how the shape of the crocodile's skull correlates with strength. It is the first study of its kind to investigate the mechanics that underlie the link between the shape of the lower jaw and diet.

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

"The notion that long, narrow snouted crocodiles feed primarily on fish or small prey is well established, but the biomechanics of the crocodiles' lower jaw, the mandible, have not been previously explored," Mr Walmsley said.

"To test the jaw biomechanics of large crocodiles we used a computational engineering approach, called Finite Element Analysis, that is widely used to design planes, cars, boats, buildings, bridges and many other structures.

"We found that mandible shape correlated consistently with jaw biomechanics. This means that the lower jaws of long-snouted species were not as strong and more likely to break during feeding on large prey. It's therefore no surprise that they tend to concentrate on small, agile, aquatic prey whilst shorter and more robust-snouted animals are capable of taking much larger prey."

Dr McHenry said the findings were relevant to a broad range of aquatic predators including dolphins and fossil marine reptiles.

"Interestingly the amount of strain a jaw was under was directly proportional to the length of the symphysis, which is the joint between two halves of the lower jaw. This means the animal's biomechanical response to force could be accurately predicted by knowing the length of its chin.

"Killer whales, alligators and salt-water crocodiles can all feed on large prey. In all of these species the symphysis is a small



Above: Dr Colin McHenry, School of Biomedical Sciences, Monash University

proportion of the length of the jaw. Whereas, fish-eating crocodiles and dolphins have long, narrow chins."

Dr McHenry said further research was needed to explain why crocodiles that feed on small prey had elongated snouts.

"We suspect the answer lies in the hydrodynamic efficiency of the elongate jaws, and we plan to explore this further using other computational engineering techniques," Dr McHenry said.

The study was led by Monash University in collaboration with the University of Newcastle, the University of New South Wales and the University of Chicago, US.

