## **ACTHA Inc. News**

# Newsletter of the ACT Herpetological Association Inc

## January-February and March-April 2023



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#### **ACTHA Committee for 2022-2023**

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Peter Child, Hank Jenkins and Jason Spurr

\*denotes life member

Former Vice President Ric Longmore OAM is also a

life member.

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A request for colouring pencils 2023-24 membership fees Do you like the newsletter?

## Happy days

3 March - World Wildlife Day20 March - World Frog Day29 April - World Veterinary Day

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## **SPECIAL FEATURE**

## **Snakes Alive! 2023**

After two years without it due to bushfires and COVID-19 Snakes Alive finally made a comeback in 2023!

The event was held over 7 days in January at the Australian National Botanic Gardens.

There were displays of 41 species of reptiles and frogs, more than 21 feeding

demonstrations, 3,100 visitors and temperatures above 40°C

by Margaret Ning
Photos by Alison Gee

Late 2022, preliminary discussions were held with the Australian National Botanic Gardens (ANBG) about running Snakes Alive in January 2023. It all sounded promising, as the ANBG was happy for us to use the same two buildings as for our last Snakes Alive in 2020, and also for us to display venomous snakes and include a venomous snake demonstration talk. Eventbrite's ticketing system was used to effectively structure the Snakes Alive day into three two-hour sessions, each with a limit of 150 visitors per session. We were heading into a brave new world!

Setting up Snakes Alive proceeded over the five days prior to 9 January, but things finally came together and looked like an exhibition on Sunday 8 January.



Photo: Australian scrub python (Simalia kinghorni) on loan from the Canberra Reptile Zoo getting ready to shed just in time for Snakes Alive!

#### We opened our doors at 10am Monday 9 January

I was amazed that there were no 'walk ins', although we were ready for them with credit card facilities! The three daily sessions effectively achieved what we have tried to do for years, ie smooth the number of visitors over the course of the day, rather than having them peak between 10am and 1pm.



Photo: One of the monitor lizards on loan from the Canberra Reptile Zoo

We allowed an hour for our visitors to move through the two Crosbie Morrison Building (CMB) rooms, which displayed 41 species of reptiles and frogs, broadly pythons structured into and monitors in the main room and threatened and venomous species in the second room. Government exhibits this year included eight Corroboree Frogs from Tidbinbilla Nature Reserve and two Striped Legless Lizards. Hopefully we can also add a Grassland Earless Dragon next year.

We aimed to have a couple of snakes and lizards available for touching at all times. We observed

that many families had achieved all they wished in the CMB in around 30 minutes, after which they went outside to enjoy a little more space and quiet. Often one of our Snakes Alive volunteers proceeded outside at that stage with additional opportunities for the visitors to get close to one of our exhibits, including ACTHA's president Luke with Steve the wandering goanna (on a leash), one of the crocs, or the beautiful water python. Other children enjoyed colouring in drawings from Larry Brandy's 'W for Wiradjuri' book, which were a great hit. Rosemary also put together a Scavenger Hunt to keep the children occupied, and continue their ecological education.

'I'm an expert'

'You've lost one of your lizards'

'Does your snake have privates?'

kid to Lucinda, discussing the Green Python shed skin at the front desk kid came back into building, after seeing a Water Dragon outside in the Gardens

kid asks on meeting Cookie the Stimson's python

After the first hour of a session, our visitors were led up to the feeding room in the nearby Banks Building, which normally went for about 30 minutes. Then most people moved on to the adjacent venomous snake handling, which always went for another generous 30 minutes. Meanwhile, those of us back in the CMB enjoyed some down time during that hour, as did the animals, of course. Generally, fewer than the original number of visitors for a session proceeded to the feeding sessions, and slightly fewer again to the venomous snake display.



Photo: 'Walter' the Water Python (Liasis fuscus) on loan from the Canberra Reptile Zoo

#### At this Snakes Alive, the species we displayed for the first time were

- two crocodile species happily coexisting in the ANBG's croc tank and promoted much discussion re which was which species,
- a juvenile green tree python,
- an ocellated velvet gecko,
- a broad-headed snake.
- two tiny Manning River turtles,
- coastal and inland taipans, and
- a Collett's snake.

The feeding sessions continued to be an extremely popular part of Snakes Alive. Adults gathered around the edges of the room while the children sat on the floor in the middle. Feedings normally began with a speedy strike, followed by more leisurely consumption of the prey, and were always accompanied by an enlightening educational talk. Shahzad gave his Red-tailed Boa talk once again, which was our only non-native species on display.

#### Venomous snake demonstrations

Gavin or Alex from Canberra Snake Removals, or Liam from the Canberra Reptile Zoo, generally displayed five venomous snakes per session, except on the occasion when Alex had collected an eastern brown snake earlier in the day from within the Gardens (part of Gavin's tracking project), and added that to the display. There were always two handlers, other than on a couple of occasions when an ANBG person with a current first aid certificate was on standby.

Gavin and Alex always stressed how non-threatening their charges were, including that they don't chase people! Every venomous session contained a vital explanation of what to do in the event of snake bite, accompanied by a demonstration of one of the 'smart' snake bandages that make it easy to determine how tightly to apply such a bandage. The audience were enthralled. At the end of the handling, Liam's container of freebie snake sheds delighted the young ones.

For more about the Canberra snake tracking project with Gavin, read the story in this newsletter on the <u>ACTHA</u>

<u>February meetina</u> providing a recap of the presentation given by Gavin and Alex



Photo: Snakes Alive Eventbrite promotional image reproduced

Publicity for the event was interesting..... A certain amount came from the Eventbrite platform itself, as well as the ANBG's website, to which we added a Facebook 'boost', numerous emails to media

outlets, texts to 666, and whatever promotion our members inspired with their own efforts. The use of Eventbrite reduced the workload for some volunteers, including with door entry and counting money. Lucinda used the opportunity to take some excellent photos of the event, and Geoff started directing traffic with the microphone.

Photo: One of the Water Dragons at the ANBG in shed

We really couldn't complain about the weather, as it didn't rain, and the daily maximum temperatures ranged from 30 degrees to 33. However, attendance was possibly a little lower on the hotter days. And our attendance was a very satisfactory 'just under' 3100 visitors, which compares favourably with previous years. (E.g. just under 3300 at the last Snakes Alive in 2020, and 2650 in 2019, when every day was 35 degrees or over and four days were 40 degrees or over!!!).



#### Thank you to all our volunteers for their unfailing enthusiasm!

We always had an impressive number of volunteers, who were allocated a variety of responsibilities, with some taking on multiple roles. One moment Lainey was marking off names at the door, the next she was handling one of her own animals, and later again conducting a feeding session with another of her animals. Special thanks go to members who provided their animals for feeding and/or display, as our commitment to three feeding sessions each day put the pressure on us to find a minimum of 21 (python) species throughout the week. It took a whiteboard and a bit of juggling and shuffling to set up, and there was always the need for a back up, just in case the first one didn't 'perform'.



Photo: One of Dennis Dyer's baby Centralian or Bredl's pythons (Morelia Bredli).

These were a hit with Snakes Alive visitors ... and volunteers!

The ANBG was unbelievably helpful with every request we put their way, and a couple were pretty weird; including a hose and umbrellas for the snake pit, and providing a ranger with a first aid certificate a couple of times as back up during the venomous displays. They also generally printed off the Eventbrite list for us, and met many other photocopying requests.

Once again, we couldn't have held Snakes Alive without the continued support of Peter and his team at the Canberra Reptile Zoo, with Liam ably deputising all along the way with set up, provision of animals, husbandry support and keeping a seriously close eye on the venomous species.

For one reason or another, we broke with tradition and held our 'mid week' party on the Saturday evening. Everyone was delighted when both of ACTHA's life members, Ric Longmore and John Wombey attended, and everyone gathered around to exchange herp-type anecdotes.

#### Save the dates for Snakes Alive! 2024

Visitor feedback was very positive. We were complimented on the new 'format' and 'evolution', and thanked for our efforts. The Gardens is keen to have us back again, so we committed to Monday 8 January to Sunday 14 January 2024 for our next Snakes Alive.

Photo: 'Patch', on loan from the Canberra Reptile Zoo



## **ACTHA main meeting - Tuesday 21 February, 2023**

Twenty people were present at ACTHA's main meeting on Tuesday 21 February, including three new ACTHA member families of dads with their sons (6 people); plus 12 other members; and two friends.

## Tracking Snakes on the Urban Fringe, Canberra Snake Tracking project Presentation by A/Prof Gavin Smith and Alex Borg

by Margaret Ning
Photos supplied by Gavin Smith



Gavin Smith introduced himself and Alex Borg. Gavin is an environmental sociologist by profession at the ANU who studies people and their relationship to the environment, and he has reasonably recently bridged out to include ecology in his repertoire. Alex is a forensic scientist by profession but is now the President of the Australian Federal Police Association. As Gavin explained, their brown snake ecology project is still a developing work in progress.

Gavin informed us that the analysis of the project's data is incredibly complex, with them generating numerous and diverse data points relating to the catching and releasing of snakes locally – from biological data that are obtained from each snake they catch on call outs to geolocational and climatic data relating to the movement behaviour of those in the tracking sample. Lots of team members and supporters are involved these days, too.

Gavin reiterated the key principles and points underpinning the project: that snakes belong here, that they are not out of place, that we've changed their space, and that they are much maligned!

However snakes often act as click bait for media institutions as well as individuals, and with that goes a lot of exposure and myths!! "They'll chase you", "they're aggressive"!! 'NOT' true, says Gavin, emphatically!!!

An examination of the stats shows that there are roughly 1000 snake bites reported in Australia every year, as collected by hospitals. These likely include python bites as well as of course dry bites and envenomation. This results in an average of two deaths per year, and Gavin, to put things in perspective, reminded us of the myriad deaths that occur from other sources such as *car crashes or accidents at work, etc.* 

The response to take if one encounters a snake is to stand still, give the snake room and don't threaten or interact with the animal. Gavin illustrated this many times at his, Alex's and Liam's venomous snake demonstrations during *Snakes Alive!* recently.

Gavin briefly discussed how snakes fitted into various cultures, both historically and currently. Australia's First Nations people understand the critical role these animals play in many senses, respecting and not fearing them. They are a food item in some cultures. They can be revered.

Gavin told us there had been a lot of snakes inside buildings this season and explained some ecological reasons for this. Snakes are opportunistic users of urban spaces and have a complex relationship with human-dominated spaces that is affected by various environmental and ecological variables. Gavin went through the extensive list of key threats to snakes, such as humans, cats and dogs (potentially foxes), forced relocation by snake catchers(!!!), mowers, vehicles, raptors and other birds, and bacteria, viruses, parasites and poisoning.

Another area of discussion was snakes' vulnerability to predation, i.e. they are very sensitive to violent shaking, for example, a fate suffered if a dog grabs and bites them, an action that fractures their spinal cord and sometimes vertebrae, which leads to paralysis and slow death. If bites puncture the skin, they are likely to cause infection, again a slow and painful death unless treated. But they are also resilient and adaptive creatures!

Locally, Gavin and Alex's main subject is the urban-adapted Eastern Brown Snake (EBS), which is curious and cautious – and deeply misunderstood culturally. Every EBS captured or collected during a call out, is 'tubed' (PIC, below) and data is taken.



Interestingly, in the ACT and under current legislation, snake catchers are not permitted to treat captured animals for any observed ailments (ticks, burns, tears, etc.) and may only hold an injured or displaced snake for a maximum of 48 hours.

Apparently the situation is different across the border and in most other state jurisdictions.

Locally, around 220 snakes have been measured, microchipped, and their DNA taken, in order to measure re-catch rates, and their growth over time and in relation to various environmental factors.

There was discussion of how the sample of EBSs are tracked, the types of transmitter used, etc. Questions included how often are they re-caught, do they operate differently depending on factors such as habitat and snake size and character, and outcomes (including fatalities)? What happens if they are relocated to a few kilometres away?

Currently there are 7 specimens implanted and being actively tracked around Canberra, but 18 different individuals have featured in the project over the past two years for different periods of time.

Throughout the presentation, Gavin and Alex shared videos of, and discussed some amazing encounters.



## Observations from the project included:

- It was discovered that when snakes hit an urban setting, the signal can be distorted.
- From their data collection, illustrated by images and videos of data points, Gavin and Alex can tell how snakes spend their time and how they use habitat in diverse ways that are affected by environmental forces and pressures, and can estimate range size and range utilization, noting how it differs between resident and translocated snakes.
- Males generally move around more, and the range size is generally smaller for females.
- There are data showing how sensitive snakes are to their home ranges and how short range translocated snakes are often observed orientating back to their home range.
- Snakes lead incredibly risky lives, and Gavin told us of an EBS mown to death, and another run over by a motor bike, both at Jerrabomberra Wetlands: supposedly a nature reserve. We were also given many other observations of the risks and harms snakes face.
- Gavin shared a few sad stories from the study. A poignant example of two control group EBSs being caught and tracked was given Tyrone (m) and Bev (f). When experimentally relocated around 1.1km, the female (Bev) seemingly encountered territorial issues, became disoriented, lost condition as evidenced by her uncharacteristically moving erratically and travelling relatively huge distances. She ultimately ended up, tragically, as road kill after having been tracked and observed by the team for 14 months.
- 5/14 of the micro-chipped, non-tracked snakes (i.e. 35.7%) that have been recaught were fatally injured.
- And rather fascinatingly, another anecdote centred around an EBS's behaviour and reactions when being caught for the second time ('Gary', a former tracked snake). From that occasion, Gavin is confident that they have a memory and can recollect things.

The Q&A was a fascinating discussion.

Many thanks to Gavin and Alex for such an interesting presentation. Their excitement, passion and enthusiasm shone through the whole presentation.

Like with all original data collection, the project is evolving and consolidating all the time, so we at ACTHA look forward to the next riveting update!

## **GUEST WRITER**

## The Border Mail - Eastern Blue-tongue

Merlin Tzaros is a Wangaratta 14-year old, who has had a keen interest in nature, especially reptiles, for several years.

#### by Merlin Tzaros

One of the most iconic, well-known, and likeable reptiles in Australia can be found in most backyards in north-east Victoria. The Eastern Blue-tongue is a species of skink ranging in many different colour forms and patterns. It is the largest species of blue-tongue in Australia.

These popular little critters are known for their spectacular defence display, where they flatten their bodies to look more imposing to potential threats, make a deep, low, hissing noise, and open their mouths wide and stick out that brilliant blue tongue.



True Blue – the Eastern Blue-tongue. Photo by Chris Tzaros (Birds, Bush and Beyond).

These vibrant hues are a universal symbol in the natural world: the more colourful it is, the more deadly it is. However, some creatures can trick predators into believing that they are dangerous, when really, they are absolutely harmless, and the Eastern Blue-tongue is no exception.

They eat mainly vegetable matter (up to 90% of their diet is made up of plants), particularly berries and flowers. However, the Eastern Blue-tongue sometimes preys on insects, such as slow-moving beetles, and snails. This can cause quite a problem, as many people use snail pellets, which, like many other poisons, stays in a snail's system even after it has died.

This means that when any unlucky Blue-tongue consumes a poisoned snail, it too is poisoned. There are many alternatives to snail pellets, such as lime, crushed eggshells, and wood ash, which can be scattered in rings around certain areas to act as barriers against snails. Utilising these other options will make a huge difference when it comes to keeping our little friends safe.

The Eastern Blue-tongue is monogamous, meaning that it mates with the same partner for life. They spend most of the year by themselves, but when spring comes, they follow scent tracks left by their partner, and, amazingly, find their way back to their mate to reproduce. The Eastern Blue-tongue is a common but cute little beast with complex and intriguing behaviour.

Please help these lizards by using the alternative options to snail pellets, keeping small patches of blue-tongue habitat in your backyard - bits of leaf litter, bark, and fallen logs - and keeping your dog away from the lizards if you see one.

## IN THE NEWS

## Seven fishhooks found in Lake Macquarie turtle

Taronga Zoo pleads with fishers for caution after vets find seven fishhooks in a turtle brought into the Sydney animal hospital by a local. The turtle required 5 hours of surgery to remove the hooks from its intestines. To read the news story and see images of the turtle and its recovery, including an x-ray of the ingested hooks, follow this link to the ABC News website.

https://www.abc.net.au/news/2023-04-05/taronga-zoo-warns-fishers-after-seven-hooks-found-in-turtle/102184998

## Scientific discovery in female snakes

Recent scientific research offers a breakthrough in understanding the anatomy of female snakes. Australian researchers have discovered that snakes have a clitoris (two, actually) known as hemiclitore in snakes and lizards. It has been found in nine species of snake, from four different families, including the cantil viper, death adder and carpet python. This leads to lots of questions about our understanding of the reproductive anatomy and behaviour of snakes. To read more about the discovery, follow this link to the ABC News website.

https://www.abc.net.au/news/science/2022-12-14/snake-clitoris-female-anatomy-mating-reproductive-organs/101765340

Originally published in the Conversation, the discovery has also been picked up by Scientific American.

https://www.scientificamerican.com/article/why-snakes-have-two-clitorises-and-other-mysteries-of-female-animal-genitalia/

#### **NOTICES**

#### A request for donations

There was such happy news that Snakes Alive was able to go ahead this year for the first time since 2020! There are always a lot of activities for families and children, including colouring and activity pages. If you have pencils at home that are no longer used, please consider donating them to ACTHA for future Snakes Alives.

#### Annual membership fees

2023-24 membership fees will be due soon. Please make your payment by 30 June to ensure you stay a financial member and continue to be part of the ACTHA community. We love having you!

- \$20 for individual / couple / family
- \$10 for students (incl. university).

Bank account details for direct deposit:

Name: ACT Herpetological Association Inc.

Account Number: 486822880

BSB: 112-908

Please add your name to the reference field for the payment, and record the date of payment and receipt number.

#### Do you like the newsletter?

Feedback always helps improve it. We have a new Newsletter Editor, so please tell us what content you would like to see.

#### Until next time!

Enjoy the rest of our beautiful autumn weather and think of our beloved reptiles. Some are babies, some will be getting ready to bunker down for the winter, and some don't get autumn at all!