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ACTHA Inc. News
Feb - Mar '18
Newsletter of the ACT Herpetological Association Inc.

Your Committee for 2016 - 2017

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Secretary	Dennis Dyer
Treasurer	Margaret Ning
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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*

Lainey and Shahzad made a great team at Snakes Alive! 2018!

In this issue

Diary date

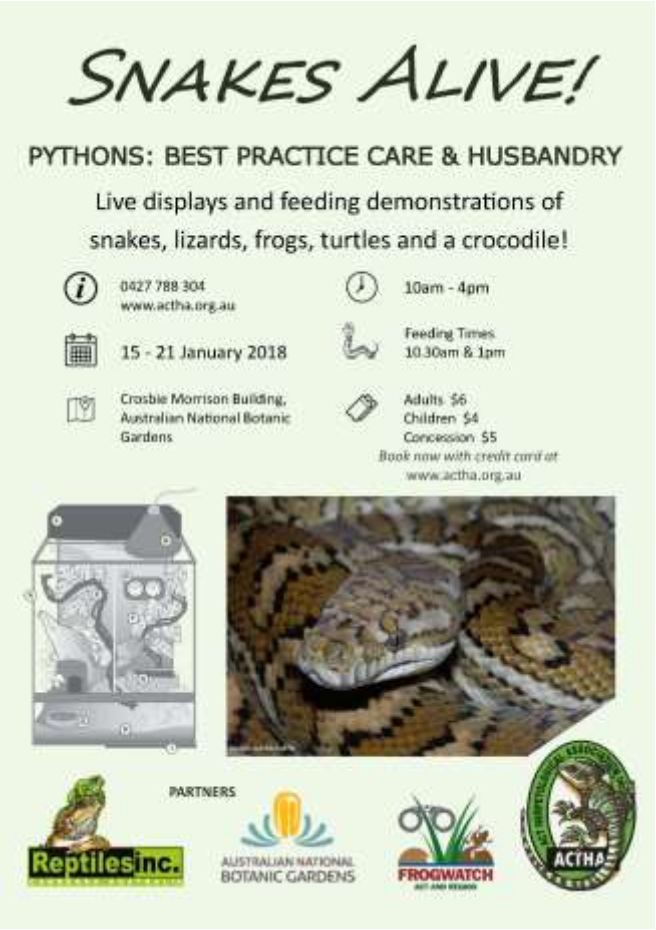
The *bi-monthly* meetings of the Association are usually held on the **third Tuesday of the month at 7.30pm**. Our usual venue is:

***Belconnen Soccer Club*, Hawker**
(cnr Belconnen Way & Springvale Drive)

Upcoming meeting

Tuesday, 20 February 2018

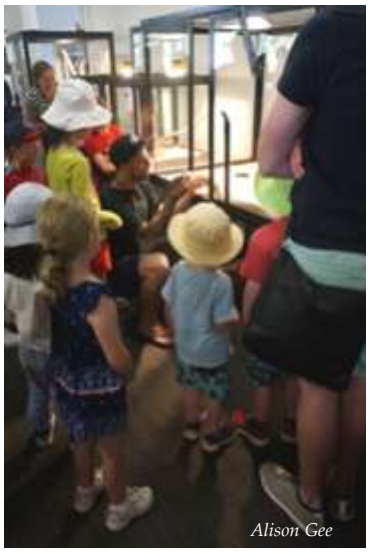
Brett McNamara, ACT Parks and Conservation Service, will discuss the role surveyors and water catchments played in shaping the true nature of Canberra and the challenges of the custodianship we have for such places as Namadgi National Park.



Snakes Alive! 2018

Well the Snakes Alive! Exhibition has come and gone and once again deemed a popular event.
This article by Margaret Ning.

This year's *Snakes Alive!* was very successful, and everyone should be very proud of their contribution. We had **3100** visitors; 2150 in the first four days, and 950 in the final three (39 degree!) days. This is 500 more people than the previous three years. The increase largely resulted from our 'publicity' stars aligning this year. Publicity included 'generous' articles in the Canberra Times (especially Tim the Yowie Man's article on errant pythons in Canberra's bushland), interviews and announcements on 666 and other radio stations, street signage in front of the ANBG, publicity through the ACTHA and ANBG Facebook sites and websites, and general distribution of our fliers through many networks.


Alison Gee

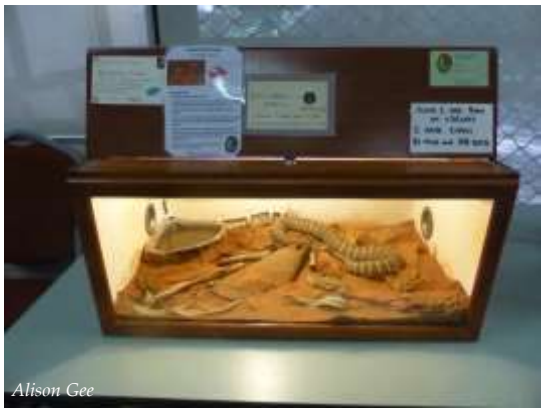
Once again, Peter Child and his team of many helpers played the indispensable role of setting up *Snakes Alive!* in the Crosbie Morrison Building at the ANBG. Seven of his huge enclosures helped to house our largest animals in the main room, where the pythons and most lizards were displayed. Room two became the elapid room, which was rounded out with a Freshwater Crocodile, a pair of Eastern Long-necked Turtles and a pair of Pygmy Bearded Dragons, one of which was gravid and spent the week digging potential nest sites in the red sand. The threatened species room (room 3), remained unchanged, although shock-horror, there were no Corroboree Frogs this year.

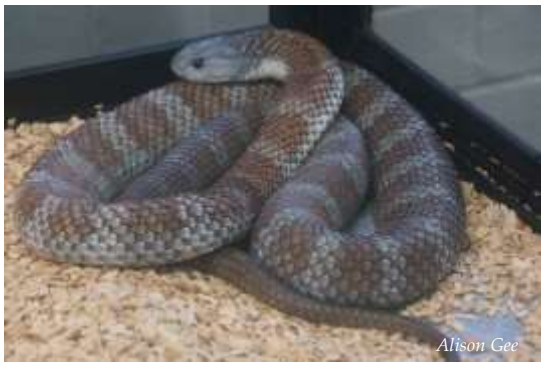

Alison Gee

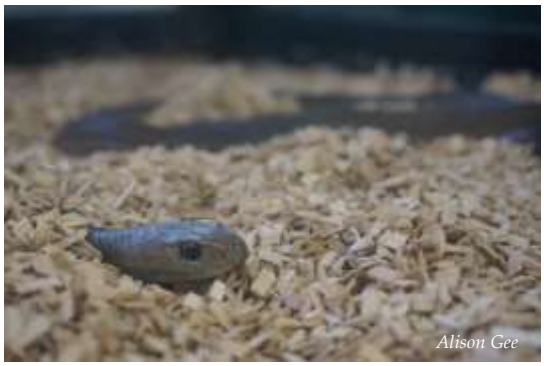
Almost 40 species of reptiles and frogs were displayed - Peter Child providing just over half the species, and ACTHA members and the ACT Government the remainder. New species this year were Collett's Black Snake, a Rough-scaled Python and a striking albino Carpet Python that wowed us all.

The set up in the main room maximised the floor space available for viewing our feeding talks and demonstrations at peak times, especially the 10.30am feed. Our ambitious program of feeding times was very successful, with three to four sessions held each day, using the feeding tree whenever possible to maximise viewing for the younger visitors. We had sufficient animals for this, although we had to feed substitute animals a couple of times. A special thank you to our members whose animals were available for feeding, including those who brought them in solely for feeding and then took them home again. I shall continue trying to find the optimal feeding times that spread our visitor numbers so it is not too crowded first up, and people come later in the day when it is more 'relaxed'. I think our 'air-conditioned comfort' should form part of our publicity next year.

The elapid room contained a record six elapid species, half of which were local species (Tiger Snake, Eastern Brown Snake and Red-bellied


Alison Gee


Alison Gee


Alison Gee

Black Snake). Ric's Desert Death Adder was back after a two year absence, and has grown into a very attractive animal. Peter's Tiger Snake had unusual bronze and 'light blue' bands and displayed beautifully too. I think having an elapid room, where a volunteer was always stationed, encouraged visitors to stay longer this year. There was also always a volunteer in the threatened species room, who answered many questions on the much-appreciated Striped Legless Lizard, Grassland Earless Dragon and Green and Golden Bell Frog exhibits, on loan from the ACT Government and Ginninderra Catchment Group.

And once again our volunteers were generous with their time, with 15 members present for five to seven days, and another 20 members there for a couple of hours to a few days. Geoff and Dennis did a great job in organising the onerous task of arranging feeding demonstrations, which apart from being entertaining, are our main opportunity to get our messages across to our visitors, especially the younger ones. Geoff warmed up the audience, spoke about Snakes Alive, explained the safety rules, and then introduced the speakers and feeders who included: Ali and Lainey, Anam, Dennis, Greg, Iris, Jake, Liam, Mandy, Mark, Roy and Shahzad. Greg's talks on snake bite were also well received. The microphone and sound system worked well.

We had a formidable team of young volunteers, and in addition to the young ones above who helped at the feeding times, there was also Alisdair, Angus, Ben, Peter and William. Their responsibilities included keeping the enclosures clean, watered and sweet smelling. They then did a wonderful job of introducing the animals to the visitors, and enthusiastically answered all the questions directed at them. Angus' effort to research information for additional enclosure tags was a great help.

The number of pre-paid entries to Snakes Alive more than doubled this year, and Lucinda and her assistants Ali and Helen at the front desk were dealing with two rather large queues most mornings. Mark facilitated the pre-paid queue's express entry, and access to credit card payment at the front desk enabled a smooth flow there as well. A kiddies' colouring-in table outside provided an excellent alternative for some to delay their entry until the numbers inside thinned out a little. And at the end of a long day the day's takings had to be counted, and that was a tad more complicated because of the different payment methods we now offer.

A couple of members came over from Wagga Wagga to help for two days, and a few others took a day off work or came in on their days off to contribute their time.

Other member contributions included Jo supplying the Aqium for all our hygiene needs, Geoff setting up our slide show of Southern Tableland snakes and lizards, and a couple of


Alison Gee


Alison Gee

members providing extra enclosures for our extensive exhibits.

Another first, was our dealing with NSW and ACT Licensing in order to bring Joe's two beautiful carpet pythons, Mel and Po, into Snakes Alive from NSW. Po is a hypomelanistic carpet python (having a reduced level of black pigmentation), and both animals are over two metres these days.


Alison Gee

No shop this year, but another first was Rosemary stepping up and providing a tableful of suggestions of outdoor activities kids could pursue, conservation brochures, and other nature-related content. She manned the table for the whole week, attracting a constant stream of interested youngsters and parents. A handful of conservation-related field guides were provided for display by the Botanical Bookshop.


Alison Gee

Our link with the YMCA holiday program continues to flourish, with a group each day from them. The ANBG had its own school holiday program this year, and their groups came in on three afternoons. Rather unexpectedly, another holiday group came in without having made a booking, but luckily that was on Friday when the smallest YMCA group was there. Never a dull moment; but they did think that a booking had been made.


Alison Gee

The raffle was also very successful this year, and a cheque for $1000 will wend its way to Corroboree Frog research.

A *Snakes Alive!* colouring competition returned for the first time in a few years and proved very successful. Three reptile/frog drawings from "W is for Wiradjuri" (written by Larry Brandy and illustrated by Kristie Peters) were used for three different age categories, and the winners received free family entry to *Snakes Alive!*

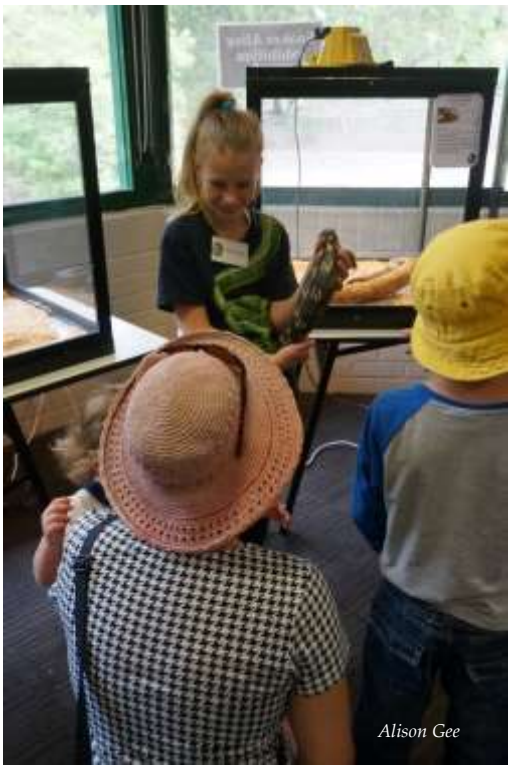
The ANBG was wonderfully supportive, including at the planning stage, with street signage and other fliers and posters, media contacts, enhanced access to the building this year, photocopying, running the colouring competition, providing the sound equipment and Snakes Alive 'furniture', and always being amenable to ad hoc requests as they arose.

Peter Child's role extends beyond set up, which not only includes providing his very large enclosures and half a dozen smaller ones, but the transportation of the dozen medium-sized collapsible ACTHA enclosures that he stores for us for the rest of the year. He also brings the products required to set up the animals in the enclosures, and we obtain our animal food supply from him. It is also very reassuring to know that he is going to drop by a couple of times in the course of the event, and that he is only a phone call away if any issues arise. He also provides the subsidised raffle first prize and donates all the second prizes. It is a truly generous and enthusiastic effort on behalf of him and his extensive team.

So, a huge thank you to everyone for all your wonderful contributions this year. Without you and your animals it couldn't happen. You already know that the event was very well attended, and one of our out-of-town members has commented "Just think of the 3100 people whose attitudes you changed towards snakes and reptiles. Then if they influence an average of 3 people each, plus the media coverage, you've improved attitudes towards snakes and reptiles in over 10,000 people around Canberra. Well done." It was a nice sentiment.


Alison Gee

(Snakes Alive! 2018, cont'd,...)

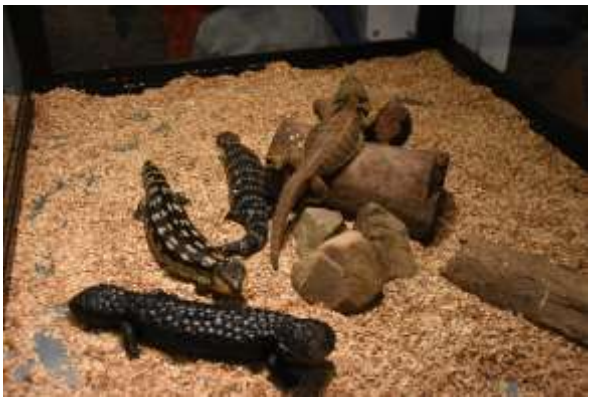

Alison Gee


Alison Gee

By Lainey Ford (*right*)

In *Snakes Alive!* this year were a million things I liked, so I narrowed it down. I loved talking to people about reptiles so they had a better understanding about reptiles. I loved seeing my friends again and talking together. I loved showing off Cookie my Stimson's Python and Treasure my Blotched Blue-tongue Lizard and feeding Cookie #superstar I loved watching the feedings. I think this *Snakes Alive!* was the best *Snakes Alive!*


Alison Gee



Why Frogs Count

Australia has over 240 known species of frog, almost all of which are found nowhere else in the world. Some species are flourishing, like the Striped Marsh Frog. But others have declined dramatically since the 1980s, and four have become extinct.

FrogID is a national citizen science project that is helping us learn more about what is happening to Australia's frogs. All around the country, people are recording frog calls with nothing more than a smartphone.

With the data obtained through FrogID we are able to track the Cane Toad and identify where frogs are thriving and where they aren't. And by matching calls to weather and habitat, we are learning more about how different frog species are responding to a changing environment.

This information could be crucial in saving Australia's frogs. Please check out the website below for all the ways you too can get involved!

www.frogid.net.au

The Australian & International Scene

Reptile Surveys in the Cowra Region

By Dave Smith, 14 December 2017

"Recently we received funding to conduct targeted surveys for reptiles, including the threatened Pink-tailed Worm-lizard *Aprasia parapulchella*, in the NSW Central Tablelands (Cowra, Canowindra, Woodstock and Darby's Falls areas). Pink-tailed Worm-lizards are listed as vulnerable in Australia and are found in grasslands and woodlands of SE Australia. This legless lizard can grow to approximately 14cm in length and is often found living in ant or termite nests where it feeds on their larvae and eggs. Pink-tailed Worm-lizards are generally found in rocky outcrops or areas with scattered surface rocks and can be very difficult to detect. Even in areas of suitable habitat, there are only a few known records for this poorly understood species; with many records coming from our group's own research on privately owned farmland. The same is true for many species of reptile found in the woodlands.

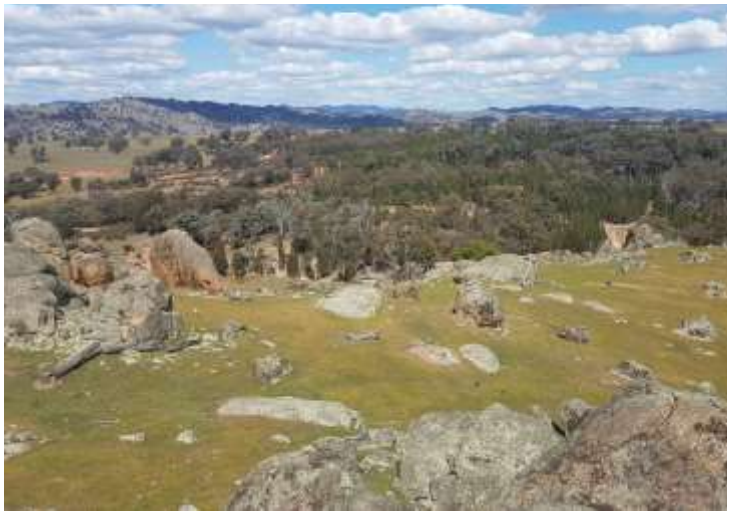
The project is funded by Central Tablelands Local Land Services NSW. The primary aim is to obtain new location records for some of the reptile species in the study area, including Pink-tailed Worm-lizard, and gain a better understanding of their habitat requirements and local distribution.

Above: Pink-tailed Worm-lizard in a burrow and Right, the lizard's preferred habitat.

Due to a hot, dry spring, which seemed to be affecting survey success, we've now completed these surveys for 2017 and are pleased to report that they were a great success. Over the course of 5 weeks in spring, we intensively surveyed around 40 sites, mostly on private farmland, finding over 350 individual reptiles and many frogs as well. In all we found 22 species of herpetofauna (reptiles and frogs) including our species of special interest—the Pink-tailed Worm-lizard. We found 33 Pink-tailed Worm-lizards during our surveys and uncovered three previously unknown populations. Of particular interest are sites where we detected Pink-tailed Worm-lizards on a hill range where they have not previously been recorded. Other interesting species that we found in good numbers were the Thick-tailed Gecko *Underwoodisaurus milii* and Dwyer's Snake *Parasuta dwyeri.*

Little is known about reptile distribution patterns and habitat use on private farmland in the region and the data we have collected will be important in filling in some of the gaps in that knowledge. Looking forward, we plan to install stock exclusion fencing in areas with key populations to assess the reptiles' sensitivity to grazing. If we can secure more funding we aim to continue the surveys and visit more of the many keen landholders who expressed an interest in these reptile surveys. We also plan to expand these surveys beyond the Cowra region in the coming years and experiment with the use of artificial substrates as a habitat restoration technique. Our hope is that this project will complement our existing work and allow us to further inform management strategies for the conservation of reptiles in agricultural landscapes.

Many thanks to all the interested and engaged landholders who are involved in this study."



How one man's passion for lizards and snakes grew into Canberra Reptile Zoo

By Penny Travers, ABC News, 20 January 2018

While snakes and lizards make many people's skin crawl, Peter Child can't get enough of them.

"When you talk about native Australian fauna, everyone falls all over koalas and kangaroos but don't realise that 90 per cent of the reptiles in Australia are just as unique," he said.

"We have well over 800 individual families of reptiles, but instead of revering these beautiful amazing creatures we're afraid of them."

Mr Child's love of reptiles began when he was 10 years old and his father brought home two turtles. He did his research and learnt how to care for his new pets and before long he found himself a local turtle expert.

When Mr Child finished school, he got his first pet lizards and snakes and started working in the pet industry.

"I found lots of people in the industry didn't understand reptiles and all of a sudden I found myself as a centre of information," he said. "People were coming from everywhere to ask me advice about reptiles."

Love of lizards leads to crocs in lounge room

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

But his love for native lizards turned to one of protection, after he went to a Canberra pet expo in the early 1990s with a blue-tongue lizard in hand and discovered how misunderstood reptiles were.

"Everyone had their dogs and cats and I had a blue-tongue and everyone cleared the room because everyone was afraid of my blue-tongue," he said.

"It turned out that most people thought the blue-tongue's blue tongue was a sign of venom."

"What's scary about it is how that kind of ignorance translated into a gentleman in the audience saying, 'So I guess I should stop killing them'. "He owned a dog and every time a blue-tongue entered his yard he'd kill it because he thought it would hurt his dog."

Mr Child then turned his focus to educating the community about native reptiles.

While working as graphic designer he started running a reptile pet business from his garage in 2003 and began doing reptile shows at schools across the capital.

"[This] grew the business even further and included me having crocodiles in my lounge room and everything — under special permits of course."

Backyard collection becomes reptile zoo

Mr Child's backyard collection of native reptiles grew so big that he started the Canberra Reptile Zoo at Gold Creek five years ago.

The zoo's focus remains on education.

"While reptiles are much more accepted and much bigger in people's homes than they were 20 years ago, every day we still come across people who say they're horrible or dangerous."

He said giving people the opportunity to get up close with snakes and lizards, and even keep them as pets, increased their empathy for reptiles in the wild. "If they get close to it and see they're not vicious and trying to kill them, when they see that animal in the wild they're calm.

"They see a snake and remember, 'the reptile guy said to just stand still and leave it alone'"

"They're not panicking, they're thinking logically and rationally and they don't feel the desire to kill the animal."

So why keep a reptile as a pet?

Mr Child said it was becoming increasingly popular to keep reptiles as pets, particularly because they made the perfect companion for those who didn't have backyards and were short on time. "Reptiles live a very sedentary lifestyle; they lie around in the sun, get warm and they eat," he said.

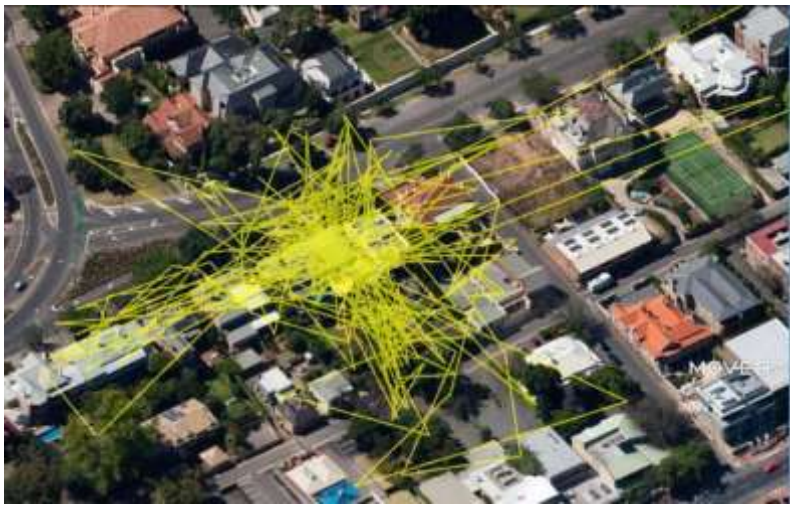
"That ease of maintenance means that people in this day and age with their busy lifestyles, can keep the animal without sacrificing the animal's needs and feeling bad about it."

Mr Child said it was essential to understand the reptile's needs before buying one — how big it grows and what kind of housing, temperature and humidity it needs.

Despite only buying one lace monitor (a native goanna), the Zoo now has seven, each of them 1.5 to 2 metres long.

"The rest were donations because people bought them as cute little lizards that fit in the palm of your hand and realised they couldn't handle them 5 years later," Mr Child said

There are also different licensing requirements for different reptiles in each state and territory, so Mr Child recommended people do their research before deciding to take a lizard or snake home.



Above: No place like home: the wanderings of one particular tracked cat. Owners are often surprised with how far their pets travel.
Image: Discovery Circle.

The secret life of aloof Albury cats tracked and exposed

By Sophie Boyd, The Land, 26 December 2017

Owners might soon have more of an insight into the mysterious lives of Australia's most covert pet, the cat.

As a part of a national study, residents will soon be able to discover whether 'Snowy' or 'Simba' have another family, a long-distance lover, or simply like to nap in the backyard.

The Albury Conservation Company has funding to track 80 pet cats in Thurgoona and surrounds to contribute to a national study on feline behaviour and help owners care for their pet.

Coordinator Sam Niedra said Dr Philip Roetman of the University of South Australia successfully trialed a pilot study which will now be expanded to track 1400 pet cats nationally.

The median distance travelled by cats in the pilot was one hectare, the size of eight Olympic-sized swimming pools.

The most adventurous cat travelled about 30 hectares. Mr Niedra said participating cats were fitted with a GPS collar for a week.

"I've been a cat owner before and know that you really have no idea where they go if they're out during the day," he said.

"It gives owners a really strong understanding of where their cat goes – does it stay around the house or did it cross the freeway and travel to the tip?

"It equips owners with real feedback on how they can manage their cat's behaviour in the future and whether they should be concerned they might be at risk."

The study also can identify whether a cat has wandering eyes.

"There's definitely scope to pick up things like whether there's a particular location they frequent or another household," Mr Neidra said. "It also provides insight into cat behaviours on a national level."

Mr Neidra said new developments in Thurgoona had cat containment regulations, meaning cats must be confined to the owner's property.

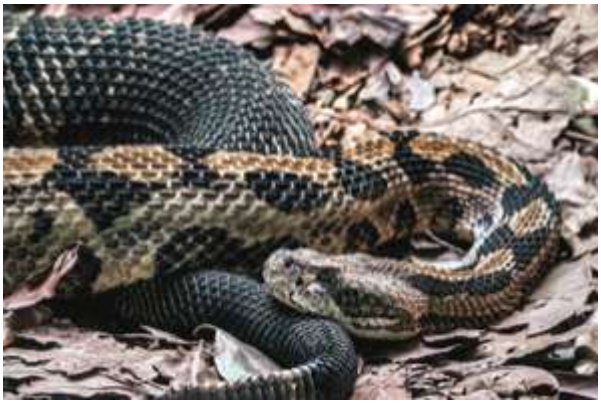
He said it would be particularly interesting to see the findings in light of that policy.

The company has worked for 18 months to bring the program to Albury, investing money and partnering with Murray Local Landcare Services and the NSW Department of Industry Land.

Interested residents can register their pet by completing a questionnaire on the Discover Circle's website.

Researchers warn of a spreading fungus deadly to snakes

By James Gorman, The New York Times, 20 December 2017



Above: The timber rattlesnake, one of about two dozen species of snakes that are susceptible to infection with a deadly fungus. The fungus may decimate snake populations, scientists say. CreditArterra/UIG, via Getty Images.

One of the first hints that yet another fungal disease that could devastate wildlife was emerging in the United States came in 2006 with a report that an isolated winter den of timber rattlesnakes in New Hampshire had suffered a population crash.

Those snakes were on the far northern edge of their species' habitat, and showed signs they had suffered from inbreeding. But they also had skin lesions, often called hibernation blisters or hibernation sores, that caught the attention of scientists.

Similar cases popped up in Massachusetts, said Jeffrey Lorch, a microbiologist at the United States Geological Survey's National Wildlife Health Center in Madison, Wis. Then rattlesnakes in Illinois, called massasaugas, began to suffer. "People started being on the lookout," he said. The health center started getting a lot of calls.

By 2009, *Ophidiomyces ophiodiicola*, the fungus that causes the lesions, had been named. And it has been found to infect more than two dozen species of snakes in this country.

Sometimes the snakes recover quickly, but sometimes the fungus is fatal. "I've seen it go really, really rapidly," said Frank Burbrink, a curator at the American Museum of Natural History in New York and an author of a new report on the disease published Wednesday in Science Advances.

"If it were a human, it would be one day Grandpa had a sore on his face and the next day it's like 'Night of the Living Dead.'"

Dr. Burbrink, Dr. Lorch and Karen Lips, a conservation biologist at the University of Maryland, collaborated on an analysis that concluded that any species of snake, anywhere, could be vulnerable.

Based on a mathematical analysis of the evolutionary relationships of 23 wild-infected species in the United States and two in Europe, the research found that nothing distinguished these species from most other snakes.

What is the trait that makes a species susceptible? The trait is being a snake," Dr. Burbrink said.

He described the paper as 'a call to arms' for intense monitoring of an infection that has the potential to be as devastating to snakes as white nose syndrome has been to bats, and other fungal diseases to frogs and salamanders.

He emphasized that the new fungus may not be as bad as those other infections. But the potential is there, he said, and now is the time to get ahead of the disease.

"We know so little," he said, including how severe the fungus may be, about its origins, about how it affects different snakes.

But it is already clear, he added, that this is "another emerging fungal disease that has really broad host ranges."

Other fungal infections that have hit wildlife recently fuel the sense of urgency among snake biologists. Since 2007, white nose syndrome, a fungal disease that seems to have come from Europe, has killed millions of bats in 31 states and Canada.

Chytrid fungi have killed millions of frogs since the late 1990s, devastating some populations. And a number of salamander species have been banned from import because a chytrid fungus threatens them, as well.

The extent of the damage to snake populations so far is unclear. Dr. Burbrink and others say that's because snakes are often hidden and not well studied, and the disease is new. Some individual snakes survive the fungus well, shedding their skin. But the fungus can get beneath the skin and become fatal.

Matthew Allender, a veterinarian and epidemiologist at the University of Illinois who has published with his colleagues more than a dozen papers on the fungal disease, said he agreed with the paper's call for greater monitoring and study.

"I was glad to see that somebody took a new approach to quantify what we've been seeing in the field," said Dr. Allender, who did not take part in the new research. "We see it in just about everything." That includes snakes that live in all habitats, he said: on land, in water, in forests and on beaches, and even among burrowing snakes.

The history of the fungal disease is not known. "We really just don't know the answers to many of these questions," Dr. Lorch said.

It is likely that the fungus can live in the soil, at least for a short time, he said, and reports in the scientific literature of lesions that resemble the fungal infection go back at least to the 1950s. Evidence of the disease itself in captive snakes, he said, goes back to around 1980.

The fungus may be native to North America, but it has also been found in wild snakes in Europe.

It may be, Dr. Lorch said, "that what we're looking at is the tip of the iceberg of this disease." The new analysis "supports the notion that no species is safe."

It may turn out that snakes are more resistant to this infection than bats or frogs have been to the fungal diseases that have devastated their populations. But additional monitoring of snake populations and research on the disease itself is necessary, he added.

"Let's start doing our homework," he said, "so if the sky does start falling, we can respond quickly."

Correction: December 26, 2017
An earlier version of this article misspelled the name of a fungus. It is Ophidiomyces ophiodiicola, not Ophidiomyces ophidiodiicola.

American corn snakes sighted in the South East NSW

By Kylie Challen, Local Land Services South East, NSW Government, December 2017/January 2018

The NSW Government is asking that land managers and members of the community keep an eye out for the invasive American corn snake (*below*) after six specimens were detected in South East NSW in 2017. The snake, which originates in the US and Mexico grows up to 180cm in length and is non-venomous, although will strike if disturbed.

The snake is a potential host for exotic pests and diseases which threaten native and domestic animals, such as the reptile tick spread bacterium (*Cowdria ruminantium*) which can result in the death of grazing animals thereby representing a risk to Australian agricultural industries. The corn snake is also known to carry the parasite, *Cryptosporidium* which can infect humans, domestic and native animals with diarrhoeal disease.

This constrictor snake may have vibrant reddish or orange blotches edged in black on grey or orange background (the skin colour may deepen with age). The snake takes its name from the pattern on its underside which resembles multi-coloured corn. These snakes can also be light in coloured, or albino.

As a predator, the corn snake threatens many species of fauna including rodents, ground nesting birds and lizards.

The corn snake is a known invasive species (and cannot be imported legally into Australia); it is classified as a Prohibited Dealing under the NSW *Biosecurity Act 2015*.

Advice given that you avoid handling snakes unless trained to do so. The variable markings, as described above, mean that it is easy to misidentify. If you do encounter what you suspect to be an American corn snake make a note of the location and, if safe to do so, take a photo which can later be used for identification purposes.

If you have seen or are in possession of an American corn snake please contact the biosecurity team at your nearest Local Land Services office.

Students find snake eggs in Laurieton school sand pit

By Liz Langdale, The Canberra Times, 2 Jan 2018

Students at a school on the NSW Mid North Coast got more than they bargained for when they discovered snake eggs in their sand pit.

Wildlife volunteers were called to the school in Laurieton on December 20 and removed 12 eggs from the sandpit.

Later that same afternoon, the students discovered more eggs buried in the sand.

The sand pit was closed for safety reasons so that volunteers could thoroughly search the area and remove the eggs.

She said it was estimated the eggs would have hatched within two weeks of the discovery.

The volunteers identified the eggs as being brown snake eggs, but later clarified in a Facebook post that they had identified the eggs on the basis they appeared to contain snake hatchlings and the fact there were "a couple of sightings of large brown snakes behind the area".

Above: ,A Fauna Wildlife Rescue volunteer said after three days of digging they discovered seven nests and 43 eggs. Image: Yvette Attleir.

Snake expert Bryan Fry of the University of Queensland's school of biological sciences has since confirmed to *The Guardian* that they are snake eggs, after looking at the photos, but said which species won't be known until the eggs hatch.

Ms Attleir said the sand pit was the perfect place for the snakes to nest as the sand had recently just been laid.

"The sand was still fresh and loose and would have provided the perfect place for snakes to regulate the eggs due to the temperature," she said.

The school's sand pit backs on to a reserve and the Fawna volunteers believe the eggs could have been laid by up to two brown snakes.

Yvette said once the eggs were laid by the mother, the baby snakes are then left to hatch independently. She said when the babies hatched they were already an inch long and could pose a threat to humans.

All the eggs were carefully removed by volunteers.

A salty cure for a deadly frog disease

By Annabelle Regan, ABC Newcastle, 5 Feb 2018

It's been described by scientists as the "most devastating wildlife disease ever known" - a deadly fungus that has caused the mass global extinction of hundreds of frog species.

But researchers at the University of Newcastle have discovered a simple solution in the form of salt.

The deadly disease

Chytridiomycosis is an infectious disease caused by the chytrid fungus and blamed for wiping out more than a third of the world's frog species.

It is a type of fungus that spreads infection by releasing small bodies known as "zoospores."

It gets into the skin of frogs, disrupting the flow of electrolytes and eventually gives them a heart attack.

University of Newcastle ecologist Simon Clulow said it was devastating the world's frog populations.

It is continuing to devastate populations in Australia, the Americas, Asia, Europe and Africa.

A new hope for survival

Dr Clulow said they focused their study on "one species we're particularly fond of that occurs in our area, that's suffered huge, dramatic declines by 90 per cent" - the Green and Golden Bell fFrog.

Above: Two endangered Green and Golden Bell Frogs, ABC News: Colin Kerr

Chytrid fungus has devastated the frog's numbers across Australia, but there is hope to repopulate the species.

And the solution may be a simple one.

"We use pool salt ... It's predominantly sodium chloride, which is your most common salt."

"The study established that by elevating salt levels very slightly, we're still talking fresh water that you could drink, we can block the disease and lower the transmission rate," Dr Clulow said.

The discovery has led to staggering results.

"It had a 70 per cent increased survival rate when translocated into habitats where small amounts of salt were added to the water," he said.

A global impact

Dr Clulow now plans to team up with scientists in Ecuador to further test the study.

Habitat is being constructed for a translocation program for the endangered Riobamba Marsupial Frog.

"This offers an ideal system to further test our salt strategy," Dr Clulow said.

Remotely sensed agricultural modification improves prediction of suitable habitat for a threatened lizard

David T. Y. Wong, William S. Osborne, Stephen D. Sarre & Bernd Gruber, Institute for Applied Ecology, University of Canberra

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Abstract

The geographical distribution of a species is limited by factors such as climate, resources, disturbances and species interactions. Environmental niche models attempt to encapsulate these limits and represent them spatially but do not always incorporate disturbance factors. We constructed MaxEnt models derived from a remotely sensed vegetation classification with, and without, an agricultural modification variable. Including agricultural modification improved model

performance and led to more sites with native vegetation and fewer sites with exotic or degraded native vegetation being predicted suitable for A. *parapulchella*. Analysis of a relatively well-surveyed sub-area indicated that including agricultural modification led to slightly higher omission rates but markedly fewer likely false positives. Expert assessment of the model based on mapped habitat also suggested that including agricultural modification improved predictions. We estimate that agricultural modification has led to the destruction or decline of approximately 30–35% of the most suitable habitat in the sub-area studied and approximately 20–25% of suitable habitat across the entire study area, located in the Australian Capital Territory, Australia. Environmental niche models for a range of species, particularly habitat specialists, are likely to benefit from incorporating agricultural modification. Our findings are therefore relevant to threatened species planning and management, particularly at finer spatial scales.

From Dave: Wong "Many thanks to all who helped in any way. Please feel free to forward to others you think may be interested. There are 50 free e-prints, but if you cannot get access, feel free to email me and I will organise a copy for you. http://www.tandfonline.com/eprint/JazBKaRRNkWQw8mssxc4/full

The paper's focus is on identifying the highest quality habitat for Pink-Tailed Worm-Lizard. However, it is important to note that habitat coinciding with native pasture without C4 species also important habitat. It is possible this model will not pick up some of these areas. Such C3 native areas would be good candidates for restoring to C4 dominated vegetation where possible. Areas outside of the ACT area also underrepresented in terms of survey, so it is likely that the model is less reliable outside of the ACT"

Why a 1.5m carpet python was loose in Canberra Nature Park

By Tim the Yowie Man, The Canberra Times, 13 January 2018

Above: Carpet python found last year on walking track on Mt Majura. Photo: Carlos Pavon.

When you go for a stroll in Canberra Nature Park, one of the last sights you'd expect to see would be a 1.5 metre long carpet python dangling out a tree.

However, for a number of bushwalkers that's exactly what they would have seen while trekking up the popular Mount Majura walking track behind Jukes Street in Hackett.

"It would have been a great shock to anyone walking past who caught a glimpse of it," the ACT Herpetological Society's Margaret Ning says.

Although Ning didn't see the snake in situ, she was "utterly amazed when shown the spot where it was found hiding under a log, less than a metre from the edge of the track".

"Apparently it was sighted up a tree on at least a few occasions right next to the track where everyone walks with their dogs," Ning says.

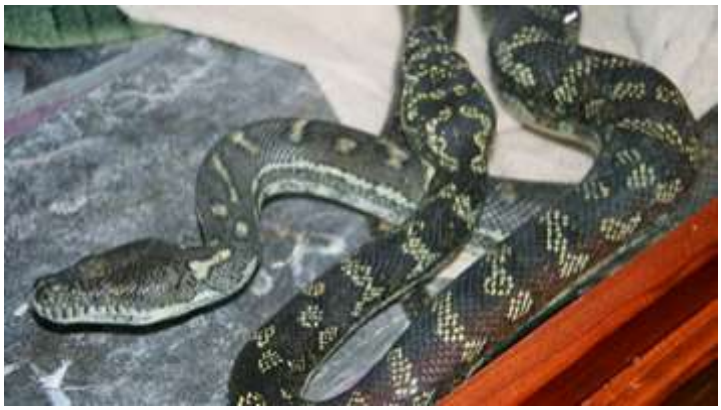
"Reports suggest that the poor python was there for a month before it was eventually rescued in April last year," Ning says.

"And thank goodness for that, because as a specially bred domesticated snake it wouldn't have survived the cold Canberra winter."

Sadly the discovery of an out-of-place python isn't a one-off. According to Ning, "over the last couple of years there have been half a dozen other cases of domesticated pythons being found on Canberra's urban fringe, including one that had become blind in one eye."

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

"Thankfully the rescued snakes are now in the care of a licensed snake owner, but there may be other pythons we are unaware of," she says.



Above: Two pythons recently found in the bush around Canberra over the last two years. Photo: Supplied.

Not only are there serious concerns for the welfare of domesticated snakes let loose in our bushland but there are also biosecurity issues with possible spreading of disease. In an attempt to raise awareness of these concerns, the ACT Herpetological Society is throwing the spotlight on "best practise python care husbandry" at Snakes Alive, its annual snake and reptile exhibition. It opens January 15 at the Australian National Botanical Gardens.

"Reptiles are not as easy to care for as a dog or cat and can easily become ill when fed incorrectly or not kept warm," says Ning who suspects the pythons being found on Canberra's urban fringe are "either escapees or deliberate releases, pets lets loose by owner no longer able or willing to look after them".

Schoolgirl finds snake inside backpack during morning tea

By Amy Mitchell-Whittington, Brisbane Times, 14 Feb 2018

A young Ipswich schoolgirl found more than her morning tea as she reached into her backpack and felt a snake move across her hand on Tuesday.

Snake catcher Lana Field was called out to Augusta State School just after morning tea after the young girl told her teacher there was a red-bellied black snake in her backpack.

"A young girl and her friend were putting their hands in their bags to get lunch out and the snake went over her hands," Ms Field said.

"The snake went into the smaller top pocket on the bag (and) the teacher was smart enough to gently zip it closed and then took the bag out of the area away from the children and put it in a staff-only area."

The two-foot-long sub-adult snake was released into a wildlife corridor a couple of kilometres from the school.

"It was a bit disorientated and a bit out of its comfort zone in and around the bag and so it must have felt secure in the dark bag.

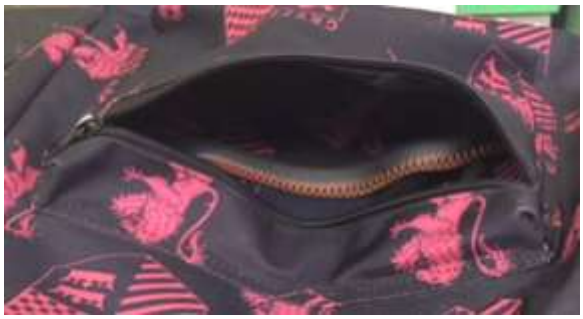
"Ms Field said a creek running down the back of the school and a rock retaining wall out the front created the "perfect habitat" for red-bellied black snakes.

"It is not the first time I have been to that school and they are very proactive about minimising what they can in terms of habitats for snakes," she said.

"They mention it to the kids quite often to be snake aware and are also on top of their first aid requirements.

Ms Field said while no-one has ever died from a red-bellied black snake bite in Australia, you could get a "nasty infection" and be "in a lot of pain" from their venom.

"They are really reluctant to bite and they are one of the most gentlest venomous snakes that we handle," she said.



Above: Red-bellied Black Snake found in school bag. Photo: Snake Catchers Brisbane.

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