

## ACTHA inc. News

October-November 2021

### Newsletter of the ACT Herpetological Association Inc.



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##### Snakes Alive 2022 - cancelled

Unfortunately, due to numbers still being controlled in places such as the ANBG, and the fact that one of our main constituency groups, the under 12 year olds, will still be unable to be vaccinated, we have decided that Snakes Alive will not happen in January 2022.

**[WWW.ACTHA.org.au](http://WWW.ACTHA.org.au)**

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##### ACTHA Committee for 2020-2021

President: Jason Spurr

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Webmaster: Angus Kennedy

Public Officer: **John Wombey\***

Conservation officer: Joe McAuliffe

Committee members: Iris Carter, Greg Flowers, Roy Chamberlain and Peter Child

Youth representatives: Liam Thornton and Jake McAuliffe

*\*denotes life members*

##### Thank you to John Wombey

ACTHA would like to acknowledge John Wombey's wonderful volunteer effort of identifying reptiles, frogs and mammals for QuestaGame. This is a [mobile app](#) game for photographing and identifying fauna, flora, and fungi. Sightings are verified by experts such as John, and gain points for players. The game leverages [citizen science](#) to help document species occurrences, adding data to databases such as [Atlas of Living Australia](#). John donates his QuestaGame fees to ACTHA, which has received donations of almost \$1000 during the last four years. Here's a link to QuestaGame - <https://questagame.com> as well as a link to a Wikipedia entry with more background: <https://en.wikipedia.org/wiki/Questagame>

## Spring has Sprung in the ACT

Here are some snakes recently photographed by our members.



*Eastern Brown Snake (Pseudonaja textilis), a stunning individual. (Angus Cleary.)*





*Dwyer's snake (Suta dwyeri) in Canberra's north. (Brian La Rance)*



*Highlands Copperhead (Austrelaps ramsayi), a common species in the ACT alpine area. (Brian La Rance)*

## **Australian frogs are on the brink of extinction, and four species are likely already lost, scientists say**

ABC Science, Environment reporter Jo Khan, 20 Aug 2021



*The Baw Baw frog of Victoria's central highlands will likely go extinct in the next 20 years, new research shows. (Supplied: Damian Goodall)*

Australian frogs are being pushed towards the precipice of extinction by disease, climate change and invasive animals.

**Key points:**

- Eight Australian frog species are at "high risk" of becoming extinct in the next 20 years
- Chytrid fungal disease, climate change, and invasive species are behind the decline
- Creating safe refuges for frogs in the wild and captive breeding are key to averting more species loss

A team of 29 scientists from across Australia has warned that several frog species will go extinct in the next two decades if no action is taken.

Eight species are at "high risk" of extinction in the next 20 years, but four of those are likely to be already lost, according to the research published in the journal *Pacific Conservation Biology* today.

The study ranked the extinction probability for Australia's threatened frogs to identify the species most in need of intervention, according to study author Graeme Gillespie of the Northern Territory Department of Environment, Parks and Water Security.

Dr Gillespie said frogs would soon follow the path of Australian reptiles, mammals, birds and plants that have already become extinct, adding to the country's already dire biodiversity record.

"The evidence is there, the patterns are there, this study tells us we're about to lose more," he said.

The study's lead author, Hayley Geyle of the NESP Threatened Species Recovery Hub, said urgent action was needed to protect these unique species.

"Current resourcing and management is just not cutting it in terms of preventing declines," she said.

**Disease causing extinction**



*The northern tinker frog normally inhabits montane rainforest in the wet tropics of Queensland but is thought already to be extinct. (Supplied: Hal Cogger)*



The amphibian disease chytridiomycosis (or chytrid for short), caused by the fungal skin pathogen *Batrachochytrium dendrobatidis*, has likely already driven four species extinct, according to Dr Gillespie.

**Species likely extinct:**

- Northern tinker frog, *Taudactylus rheophilus*, QLD.
- Northern gastric-brooding frog, *Rheobatrachus vitellinus*, QLD.
- Mountain mist frog, *Litoria nyakalensis*, QLD.
- Yellow-spotted tree frog, *Litoria castanea*, NSW/ACT.

"This disease has been responsible for the extinction of hundreds of species of frogs around the world, including in Australia, and the decline of many others," he said.

"For the species which we believe are extinct, chytrid is probably the exclusive factor."

But for many of our other critically endangered frogs, the threats of climate change, invasive species and habitat loss are also at play.

"What these things do is they reduce the overall resilience of the species to cope with a new threat," Dr Gillespie said.

"If a frog occurs on one mountaintop like Kosciuszko, there is a chance for the entire species to be knocked out by one event like a fire."



*Scientists believe the yellow-spotted tree frog has likely already been wiped out by chytrid. (Supplied: David Hunter)*

Climate change may be impacting lowland frog species too, according to Ed Meyer of the Queensland Frog Society, who has been involved in monitoring frogs in groundwater-dependent wetlands.

"We think the rainfall deficits we've had in south-east Queensland have resulted in the local extirpation of populations of some of those species," Dr Meyer said.

Dr Meyer said the study clarified just how dire the situation was for a large number of Australian frogs.

"We risk losing additional species in a very short time space, perhaps shorter than people realise," said Dr Meyer, who was not one of the authors.

### **Disparity in frog conservation investment**

After the Black Summer bush fires tore across Mt Kosciuszko in 2019/20, a rescue mission was launched to see how the critically endangered southern corroboree frogs had fared in their protected enclosures in the alpine bogs.

Several enclosures were destroyed and close to two-thirds of the frogs died, but scientists hope frog numbers could bounce back thanks to an extensive captive breeding program for the species.



*The southern corroboree frog has decades of research and an extensive captive breeding program behind it. (ABC North Queensland: Sophie Kesteven)*

However, there isn't adequate data on the ecology or populations of many other frog species at risk of extinction, let alone captive management programs.

"There's definitely a big disparity in those frogs on the list in terms of the amount of investment that's gone into securing their future," Ms Geyle said.

"So one of the key actions would be to put in place more research and monitoring of the populations."

Dr Meyer agreed that because some species receive more attention than others, we don't have a good understanding of their vulnerability to threats.

"We perhaps don't appreciate just how much of a knife edge they're on, until they fall over the other side," he said.

### **Captive breeding challenges**

Even for species that do have captive management programs underway, their release into the wild is not immediately guaranteed.

The Kroombit tinker frog that lives in rainforest streams in central Queensland is the species most likely to go extinct by 2040 according to the new study, after the four species already believed to have disappeared.

Dr Meyer has been studying the frog since the mid 1990s and has witnessed its decline in the wild.



*This is the first metamorphosed Kroombit tinker frog in captivity after almost two decades of trying. (Supplied: Mik Vella)*

He said his team faced political and funding challenges when they set up a captive breeding program for the Kroombit tinker frog 13 years ago, but they've now successfully bred the frog in captivity.

"We're currently putting together a formal captive release plan strategy to make sure that we get [the release] right," he said.

"We're going to give it a red-hot go and hopefully we can buy the species some time and maybe give it a brighter future."

Captive breeding programs are expensive, time-consuming and the last resort, said Dr Gillespie, but there are other things that can be done.

"We can build resilience in these species by addressing management issues that we do have some control over," he said.



"In some cases, it's just a matter of putting in appropriate fencing or undertaking appropriate pest management.

"We know how to control pigs. It's not technologically very difficult."

Relocating frogs to safer habitats or even wild refuges is another potential solution.



*The armoured mist frog was thought to be extinct until it was rediscovered in 2008, and has been translocated into an area free from chytrid fungus. (Supplied: Conrad Hoskin)*

Dr Gillespie also thinks crisis funding for threatened species could be put to better use.

"If the resources that were being thrown around in response to those [2019] fires had been spread out uniformly over the previous 10 years, we would've had a better outcome," he said.

"We would have been more informed about the likely impacts, and there would have been more resilience in the system.

"But a big bag of money gets thrown at it. It gets spent in a short period of time, and then it goes back down to being inadequate until the next crisis."

A spokesperson for the federal environment department said they welcomed the research findings, and that the government was committed to recovering threatened species.

They said government programs were "increasingly incorporating monitoring for on-ground projects to better assess the outcomes of Australian government investment and to inform future actions".



# Dishwasher python gives Ballina man a fright

The Daily News



*A Ballina man found a python curled up in his dishwasher. (Photo: Twitter)*

Forget carpet snakes – this dishwasher python gave an early-morning fright to a Ballina man on Thursday.

Keith Williams was unstacking his dishwasher about 5am, eager for a cuppa, before he realised there was a sizeable python curled up among his glassware.

Mr Williams documented his findings on Twitter, and has captivated thousands across the globe.

Mr Williams appeared on *ABC News Breakfast* on Friday to share his reaction to finding his dishwasher was inhabited.

“It’s always a freak-out,” he said.

Despite the initial shock, Mr Williams said he was able to keep his composure.

“When you first see it, you jump a while and the heart races, and then you start to calm down when you realise it is just a lovely python.

“I don’t really need to be scared of it.”

About 9am, Mr Williams said it appeared the python had made its way outside, and he was finally able to grab a well-needed cup of coffee.

All seemed to be back to business as usual, until the python reappeared inside, causing a scene.

“About an hour and a half later, it reappeared while the restaurant was open, and started going across the floor. So, we opened a different window and it went out, but it did cause quite a ruckus for a few minutes there.”

At the end of a dramatic morning, Mr Williams said it was time to get back to business.

“Now, if you’ll excuse me, I’ve got a lot of washing up to redo.”

It’s not the first time Mr Williams has spotted a reptilian spectacle in close quarters. He documented finding two snakes tangled up in front of his kitchen window at a different property back in 2017.

He also said he had three pythons living in the ceiling at the time.

“I always figured it was better to have the pythons up there than to have rats and mice around the house, so we let them be.”

Sssssscary stuff!

## **Shocking moment two HUGE red-bellied black snakes duel it in a Sunshine Coast backyard**

Two huge red-bellied black snakes have been captured fighting, tangling themselves together and attempting to assert dominance.

Stuart McKenzie was called to a home in Woombye, west of the Sunshine Coast, after the owners spotted the terrifying duel taking place in their backyard.



'I just received a call for two huge red bellied black snakes fighting, I've only seen this happen once' Mr McKenzie from Sunshine Coast Snake Catchers said excitedly.

Upon arriving Mr McKenzie exclaims 'Oh yes, they are still going' as he approaches the massive one-and-a half-metre snakes in footage posted to Facebook on September 17.



*Stuart McKenzie from Sunshine Coast Snake Catchers posted footage to Facebook of two huge red-bellied black snakes fighting.*

The serpents are fully coiled around each other, fighting for dominance by attempting to push the other's head to the ground in the backyard.

The reptile expert explains that he is going to try and 'attempt to grab them at the same time' before running in to grab only one of the snake's tails.

He lifts the reptile safely into a bag without a struggle, before running around to try and get to the other which attempts to flee.

'They are big snakes, some of the biggest red-bellied black snakes I've ever seen,' he says calmly.



*The snakes, which he said were the biggest red-bellied blacks he had ever seen, were fighting over a potential mate nearby. Mr McKenzie was called to the home in Woombye, west of the Sunshine Coast after the home owners spotted the snakes duelling (pictured above)*

He leans in and grabs the other snake, holding it up to the camera in amazement.

'There is potentially a female nearby, just because there are two males, but that thing is nearly 5 foot long,' Mr McKenzie explains.

He then puts the huge snake in the bag before saying 'You two can biff it out in there'.

The reptile expert takes the snakes away for relocation, holding the two shimmering black creatures before letting them slither away safely into a bush area.

## The sun's shining and snakes are emerging, but they're not out to get you. Here's what they're up to.

By Timothy Jackson (Postdoctoral Research Fellow, Australian Venom Research Unit, The University of Melbourne), Chris Jolly (Postdoctoral Research Fellow, Charles Sturt University), and Damian Lettoof (PhD Candidate, Curtin University). Damian is also a former ACTHA member. Previously published in The Conversation, 24 Sept. 2021



It's early spring in southern Australia and the sun is gloriously, out. You decide to head to your local patch of greenery – by the creek, lake, or foreshore – with the sun on your face, the breeze in your hair, and your dog's tongue blissfully lolling.

Suddenly you see it. Paused on the path just a few meters in front of your feet, soaking up those same springtime rays — a snake.

Love them or loathe them, snakes have been co-existing with, and haunting us, since well before our ancestors called themselves “human”. From the [subtle tempter of Genesis](#) to the [feathered serpent deities of Mesoamerica](#), snakes have always been potent symbols of otherness.

Today, to encounter a snake is to brush up against the wild and mysterious heart of the natural world. Snakes are important members of every terrestrial ecosystem across Australia. Even in the most populous parts of the country, snakes inhabit the remnant bushland dispersed throughout our major cities.

But what exactly influences human–snake interactions? Whether you're hoping to maximise your chances of seeing one of these shy, fascinating critters or wanting to avoid them at all costs, this article is for you.

### Snakes in southern springtime

In southern Australia, a flurry of animal activity occurs in spring. As resources start becoming plentiful after the relatively lean months of winter, spring is the reproductive season for many plants and animals.



One such resource is heat — a particularly crucial resource for organisms such as reptiles, which don't make their own body heat (unlike mammals). It's a common misconception, however, that snakes want as much heat as they can get. Like Goldilocks, snakes want the temperature to be just right.

Southern springs are the right temperature for snakes to bask during the times of day we humans are also out and about. In summer, snakes, including venomous species such as tiger snakes and brown snakes, are typically more active very early in the morning, late in the evening, or during the night when temperatures are not too high for them.



*During spring in south-eastern Australia, red-bellied blacksnakes are common in suburban areas. (Damian Lettoof)*

After a slow winter, snakes are both hungry (they may have been fasting for months!) and on the lookout for eligible members of the opposite sex. Basking, hunting, and searching for a mate brings snakes out into the open in spring a bit more than at other times of year, so we're most likely to encounter them during this time.

### **Snake activity in northern Australia**

Like all things, snake activity is a little different in the north. Spare a thought for those poor northern Australians who will never know the joys of a snake-filled springtime.

Still, the north has far more snake species than the south, including many species of non-venomous python — the farther south you go, the more our snake fauna is dominated by venomous species (check out [Australian Reptile Online Database](#) for distribution maps).

Because of the unforgiving year-round heat across northern Australia, temperature doesn't drive snake activity as much as it does in the south. You will rarely see a basking snake in Australia's Top End, they're too busy avoiding the heat.

Instead, snake activity is driven by another important resource – rain. In the Top End, this means [snakes are most often encountered following the wet season](#) (April–June) when prey and water abound.



*Darwin carpet pythons (Morelia spilota variegata) are most often encountered in the cooler months of the year following the annual wet season. (Chris Jolly)*

In other, more arid “boom and bust” systems, large rainfall events may only happen every five to ten years. When they do, they can trigger huge flurries of snake activity as the serpents emerge to take advantage of fleetingly available prey.



*Shovel-nosed snakes prey only on eggs. (Damian Lettoof)*

### **Snakes indicate ecosystem health**

From the moment of birth, all species of snake are predatory, although some, like [shovel-nosed snakes](#), prey only upon eggs.

In some terrestrial Australian ecosystems, snakes are near the top of the food chain. After reaching a certain size, they have few predators of their own. A two-metre coastal taipan in the cane fields of northern Queensland, for example, has more to fear from harvesters than it does from any natural predator.



For large snakes to persist in an environment, they need an abundance of their prey (mice, frogs and lizards), as well as all the species their prey feed upon (invertebrates, even smaller animals, or plants).



*Coastal taipans (Oxyuranus scutellatus) are exceptionally elusive, but when they are (rarely) encountered, it is most often males seen while they are hunting for females during northern Australia's winter. (Chris Jolly)*

Snakes often also have specific habitat requirements. In general, they need shelter and protection from bigger predators, which might include birds of prey, predatory mammals such as native marsupials, introduced cats and foxes, or other snakes. They also need opportunities for safely regulating their body temperature.

This means a snake will only call a place home if it has both a functioning food-web and the necessary habitat complexity. So, remember, if you see snakes in your backyard or local park, it's a sign the ecosystem is doing pretty well.

### **Snakes don't want to bite you**

Snakes are awesome predators, but no Australian snake is interested in eating a human. In fact, they want as little to do with us giant hairless apes as possible.

Why? Because snakes are actually quite vulnerable animals. Compared to many other species, they are small, have no sharp claws or strong limbs, and limited energy to put up a fight — they are basically limbless lizards with different teeth.

For those that possess it, venom is a last resort and only a minority of species —such as taipans, brown snakes, tiger snakes, and death adders — can deliver a life-threatening bite to a person. But snakes would much rather use their venom to subdue prey (that's what they have it for) than to defend themselves.

When snakes bite humans in Australia, it's a defensive reaction to a large animal they view as a potential predator. Remember, they can't understand your intentions, even if those intentions are good.



*Tiger snakes and other venomous snakes won't bite you if you respect their boundaries.  
(Damian Lettoof)*

If you're lucky enough to see a wild snake, and if you respect its boundaries and give it personal space, it's sure to do the same for you. Keep dogs on the lead in snakey areas and educate your kids to be snake-smart from as young as possible.

Even though snakes don't want to bite, snakebite envenomation can be a life-threatening emergency. Learn [first aid](#), and when you go for a walk in one of those sanctuaries of greenery that snakes like as much as we do, carry a compression bandage (or three).

It's almost certain you will never need it, but it could just save a life.

<https://theconversation.com/the-suns-shining-and-snakes-are-emerging-but-theyre-not-out-to-get-you-heres-what-theyre-really-up-to-168089>

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### **Several Memberships Still Due:**

We are well into the current 2021-22 membership year, and several ACTHA members have not renewed their subs. If you haven't paid, Margaret would love to receive your renewal: \$20 for individuals/families, or \$10 for student (including at university) renewal.

**On the ACTHA website - <http://www.actha.org.au/renew-membership.html> - you can pay by Direct Deposit.**

**Please** use your name as a reference, so that we know you have paid.

Or cheques can be sent to PO Box 440, Jamison Centre, ACT 2614.

**PLEASE NOTE - DON'T SEND ANY PAYMENT FOR HERPETOFAUNA** this time, as we are still waiting for the next issue, and many people have already paid well in advance!! Thank you.