

Rattlesnake Camouflage

By

Dr Eric Nordberg



Living in Australia, it's not uncommon to hear people talk about how dangerous the snakes are – which is true, Australia is home to some of the most venomous snakes in the world, including taipans and brown snakes. However, there are so many myths and misconceptions about snake behaviour (e.g., they will chase you!). Before moving to Australia, I studied Timber Rattlesnakes (*Crotalus horridus*) in America for my MSc – even the name, horridus, means horrid or dreadful! The sound of a rattlesnake rattling its tail is one that sends chills down many people's spines, but it's an amazing behavioural adaption – a warning sign to potential predators.

Rattlesnakes are some of the most persecuted animals in America; they are captured in the thousands during rattlesnake round-ups – a longstanding horrific tradition where people make a 'festival' out of catching and slaughtering thousands of rattlesnakes (<https://www.rattlesnakeroundups.com/>). There has been a recent push by conservation groups to stop the incessant killing of rattlesnakes during these festivals. As a result, some have been successfully changed to non-kill events and educational festivals (with captive rattlesnakes – not wild caught) which dispel snake myths and educate people on the ecological and biomedical importance of rattlesnakes.

People often think rattlesnakes are aggressive and will rattle at you when encountered – sometimes that's true, but I feel like it is very species/individual-specific. During my time studying these beautiful snakes, I relocated 20+ snakes three times a week for at least a year and a half using radio telemetry. In all those observations (upwards of 4000 relocations), I can't recall a single time a snake rattled at me (unless I had to capture it for measurements). Timber rattlesnakes have amazing camouflage and despite being a large snake (a meter long and as thick as your arm), they are very difficult to see when they are not crossing a road or basking on a rocky outcrop. They often coil under leaf litter (photo above) or beside a fallen log, waiting for small mammals to wander by. This insane cryptic ability may allow them to forego detection by a potential predator (including a human) as long as they don't give away their position (by rattling). I have colleagues that have even accidentally stepped on adult rattlesnakes and they have not rattled or tried to bite!

I often wonder if rattling will be an evolutionary adaption that is lost because rattling makes rattlesnakes more visible to predators (particularly rattlesnake round-up hunters). Snakes that rattle are more likely to be captured during rattlesnake round-ups, while the individuals that sit quietly are much harder to find and may survive to spread their genes.



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A wildlife ecologist and leader of the Reptile Ecology and Environmental Disturbance (REED) lab, Eric is interested in the impacts of environmental disturbance and land-use change on wildlife communities.