

Elusive snakes challenge conservationists

Nailing down snake habitat can be difficult

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Alanna Smolarz of Brantford is part of a research team that is trying to come up with better methods of confirming habitat ranges for elusive reptiles such as the Massasauga rattler and eastern fox snake. In Smolarz's line of work, shedded snake leather found in the wild is on par with a live sighting.

MONTE SONNENBERG / SIMCOE REFORMER

Certain snakes in southern Ontario are an enigma to wildlife biologists.

Most everyone agrees that the Massasauga rattler and the eastern fox snake are species-at-risk.

But these snakes are also stealthy and elusive. These characteristics leave conservationists wondering if these species are scarce due to low numbers or simply because they are good at avoiding human contact.

Answers to these questions have implications for habitat preservation. Just because a species doesn't present itself on a regular basis doesn't mean it isn't there.

The Ministry of Natural Resources and Forests has protocols for determining if rare reptiles frequent a given area. But a conference in Simcoe last week was told that many consider these standards inadequate and in need of improvement.

One of the people working toward a reliable standard is Alanna Smolarz of Brantford, an employee of Blazing Star Environmental in Oshawa.

An aspiring herpetologist, Smolarz's field work in recent years includes hunting for the elusive Massasauga rattler – Canada's only poisonous snake – in Georgian Bay, the Bruce Peninsula, the Windsor area and in Wainfleet east of Haldimand. Her quest for eastern fox snakes takes her on occasion to the Long Point area.

“When you go to a site, just because you don't detect a species doesn't mean it isn't there,” Smolarz said. “In that sense the situation has something in common with ‘Where's Waldo?’”

Ultimately, Smolarz and her team hope to come up with reliable search protocols that will allow wildlife officials to declare, with confidence, that a particular location is or is not habitat for rare snakes.

A reliable protocol is important because it would create a clearer picture of a given area's biodiversity.

The rule-of-thumb in conservation circles is the greater the biodiversity, the healthier the ecosystem. Conversely, declining biodiversity is a symptom of problems that could ultimately impact public health.

Improved electronic tracking could be key to determining once and for all the extent of a given species' range. Snakes congregate during breeding season and when they hibernate. Snakes fitted with radio transmitters will lead researchers to other snakes.

As far as toxicity is concerned, Massasauga rattlers are noteworthy for the mildness of their venom.

Smolarz says two deaths over the past 50 years have been attributed to Massasauga bites. In both instances, Smolarz said the victims had pre-existing medical conditions and didn't seek immediate help for their injuries.

Veterinarians treat pets bitten by Massasauga rattlers with an antihistamine. As for humans, they shouldn't panic if bitten but should see a doctor just in case.

“If you get to a hospital within four hours you'll be OK,” Smolarz said. “People should not be scared of them. Massasaugas will do a dry bite when they defend themselves because injecting venom is a lot of effort. They save that for their prey. With us, we're big and they just want to scare us away.”

Rattlesnakes get large in the southern United States but Massasaugas tend to be short and thick.

Smolarz says Canada's cold winters are a factor in limiting the number of venomous snakes in this part of the world as well as their size. At two metres long, the biggest snake in Ontario is the grey rat snake.

Massasauga rattlers eat rodents, frogs and – in a pinch – other snakes. The eastern fox snake is a tree climber that will eat birds and nestlings as well as ground prey.

Smolarz was one of nearly two dozen speakers taking part in the Long Point World Biosphere Foundation's sixth annual Research and Conservation Conference. The day-long event was held at the Simcoe Recreation Centre Nov. 9 and attracted a crowd of academics and conservationists from across Ontario and beyond.

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