

# How one town learned to live with venomous rattlesnakes

## A SHIFT IN THOUGHT

How do you preserve an endangered species when people instinctively kill the animal on sight? The town of Glastonbury, Conn., offers a potential model for helping people overcome deeply rooted fears.



Josh Stohmeyer/USFWS

**AUGUST 17, 2017 GLASTONBURY, CONN.**—When it comes to snakes, Doug Fraser has always been, well, different.

In the 1940's and 50's when others entered the woods of Glastonbury, Conn., to bag up timber rattlesnakes for disposal, the East Hartford teenager went there looking for a pet.

Mr. Fraser has since redirected his passion into protection of a once-plentiful species now absent from Maine and Rhode Island and endangered in the rest of New England. Over the years, the biologist has become rattlesnake champion, working to dislodge deeply rooted public fears that have persisted for generations. And his efforts appear to be paying off. The species has yet to progress beyond its endangered status in

Connecticut, but the Glastonbury population has stopped shrinking and now holds at “steady,” according to Fraser.

Locally, his methods could become a model for other New England states looking to preserve and protect dwindling timber rattlesnake populations. On a broader scale, he joins conservationists trying to stop a global decline in wildlife populations and attempting to teach people how to live as neighbors, not adversaries, with other species.

Predators like the timber rattlesnake are often the most hated and persecuted wildlife, says William Ripple, a distinguished ecology professor at Oregon State University. This is alarming to scientists, given new research that suggests predators are not only vital to healthy natural environments, but to humanity itself.

To preserve both, Professor Ripple says it ultimately comes down to what the people do. “It’s human behavior, human attitudes, that are crucial in the successful conservation of predators.”

## From persecuted to protected

In Glastonbury, Fraser monitors the region with the Connecticut Department of Energy and Environmental Protection, watching for anyone who tries to kill rattlesnakes or catch them to be sold as pets on the black market. Both DEEP and Fraser fiercely guard the den’s exact location, and even the number of snakes living there is a secret. (In this story, the name of a Glastonbury resident who helped rescue a snake has been changed to avoid revealing the location of the endangered rattlesnakes living there.)

But Fraser will readily share plenty of other details about the timber rattlesnake. He lovingly describes the “magnificent” outcome of 69 million years of evolution: their ability to sense prey through infrared heat, and the scent trail a female timber rattlesnake will leave for her babies to find their way, on their own, back to the den they’ll imprint on forever.

It’s the female snakes, Fraser says, that can keep a population going if they live long enough to reproduce several times, the first time at around eight years old and then every two, three or four years after that.

After following the Glastonbury rattlesnake population for half a century, Fraser has seen firsthand how difficult this can be: As foot-long babies, timber rattlesnakes are vulnerable to being eaten by owls, hawks, or black racer snakes. As adults, they contend with roadways, habitat destruction, and a hatred passed down by Americans’ colonial ancestors.

“The rattlesnakes in this area have been persecuted for a long time,” Fraser says.

Decades ago, when farms outnumbered suburban homes in the area, any timber rattlesnake away from its nearby mountain den and too close to people was usually greeted with a shovel blow, bullet, or Buick tires.

“The farmers back then, they feared them,” says Brett Sawyer, a fourth-generation Glastonbury resident who has decidedly departed from that tradition.

Mr. Sawyer wears his feelings about timber rattlesnakes on his sleeve.

Literally. A tattoo of a timber rattlesnake climbs up his arm, the rattle just poking out of his t-shirt neckline.

Sawyer recently helped remove a female timber rattlesnake from his neighbor’s lawn, found near a male timber rattlesnake that was accidentally run over by a car on the same day. Sawyer held the surviving snake until Fraser could travel from his Massachusetts home to measure, microchip, and mark her rattle before releasing her back into the woods. The male snake was likely in pursuit of mating with the female, Mr. Fraser says.

Thanks to Sawyer and other cooperative locals who form a new generation in Glastonbury, the female snake still stands a chance of having another set of babies.

## Repairing rattler reputations

While Glastonbury’s rattlesnakes enjoy relative peace today, they were in big trouble in the 1970’s and 80’s. That’s when housing developments popped up all over town and some new residents decided they didn’t want the snakes following old paths through their new yards.

The state of Connecticut contracted Mr. Fraser, a Siena College professor at the time, to study relocating the native snakes. But he found that, because the species imprints on a den, they wouldn’t survive a move; no matter how far away, they would try to go back home.

With the passage of the Connecticut Endangered Species Act in 1989, timber rattlesnakes and other species received new state-level regulatory protection, and Glastonbury continued its ongoing conservation and public education work.

Fraser and his partner, herpetologist and former local police officer Bob Fritsch, gradually educated area residents about the endangered species through one-on-one conversations, public presentations, letters to the editor, and informal talks in the basements of neighborhood homes.

According to data from the Centers for Disease Control and Prevention, between 7,000 and 8,000 people in the United States receive bites from venomous snakes each year,

five of whom die. There are no breakdowns by individual species, and the state of Connecticut Department of Health doesn't track snakebites.

"If the snake strikes, it strikes because it absolutely has no choice but to strike," Mr. Fritsch says. "It would much rather lie still or retreat than strike."

Soon, people began calling Fritsch or local residents like Sawyer for help whenever they saw a timber rattlesnake, rather than trying to handle or kill it.

Former Glastonbury "town planner slash rattlesnake guy" John Rook says that over his 27-year tenure, local residents were generally supportive as the town acquired about 1,000 acres of land to conserve key habitat areas for the timber rattlesnake and other species.

"I think there were some people that had the heebie-jeebies about rattlesnakes a little bit, but knew this was the right thing to do," he says.

Mr. Rook says the town continues to work with developers to mitigate harm to the snakes and with real estate agents to let any homebuyers know what they're getting into.

"I think a lot of the people that live in that area now are pro-rattlesnake," he says. Before retiring a few years ago, he received multiple calls from people sitting in their cars as they blocked the road, letting a timber rattlesnake slither on by.

## Finding political will

Rattlesnakes are already gone in two other New England states. Massachusetts doesn't want to be next.

The Bay State's first attempt to boost the population did not go well. Residents living near the Quabbin Reservoir rejected a proposal to place a captive-bred timber rattlesnake colony on Mt. Zion, a restricted island in the 39-square-mile public water body.

The last recorded death from a rattlesnake bite in Massachusetts occurred in 1791. But to many residents, the possible sake-bite risk to boaters who use the port-o-potty on the island was too great.

In April, the Massachusetts Fisheries and Wildlife Board recommended that the state stop pursuing the Mt. Zion plan. That board's chairman, University of Massachusetts professor emeritus Joseph Larson, says the state had solid information on the rattlesnake. The challenge was understanding the people.

"It's the interaction between people and wildlife, and so much of our work boils down to managing people," Dr. Larson says.

Environmental scientists are starting to study the “managing people” part more. And the Glastonbury experience offers researchers valuable insight.

“It takes a lot of political will to protect a venomous snake,” says Ted Levin, author of “America’s Snake: The Rise and Fall of the Timber Rattlesnake.”

Through education, he adds, people in Glastonbury have overcome a natural, biological fear of a venomous snake.

“They’re willing to live with them,” Mr. Levin says. He is optimistic that other communities can follow suit.

In Massachusetts, state officials are now working on a new plan focusing on the existing five rattlesnake populations. Berkshire Community College environmental science professor Tom Tynning says it will likely look similar to the Glastonbury model: habitat conservation, monitoring dens, and educating residents.

The southern Berkshires area already appears to be approaching that goal. Professor Tynning says there are volunteers who people can call to come pick up nuisance snakes found wandering from their local den.

“Here in New England, the last rattle of a rattlesnake is yet to be heard,” he says.

Given a recent consensus within the scientific community that predators have a big role in regulating ecosystems, it’s more important now than ever to biologists like Oregon State’s Ripple that these species continue to exist.

The scientific community is also just starting to understand the range of “ecosystem services” that wildlife can provide, he says. Timber rattlesnakes, for instance, prey on the white-footed mouse, a host for Lyme disease.

“I think it’s important for us to be humble and acknowledge these animals have roles in nature, and humanity is part of nature,” Ripple says.