Researchers are attempting to increase the population size of the eastern massasauga rattlesnake in New York... Should you be concerned?

By John Lake

It is okay to admit that you became worried once you heard a species of rattlesnake may become more abundant. Most people would. However, is there any reason to be concerned? The answer, plain and simple, is no.

Many people have a fear of snakes, let alone rattlesnakes, but what many people do not realize is the importance of snakes in the ecosystem. Snakes help to control species of animals that we consider to be pests, such as mice and rats. Without snakes, the populations of small rodents would increase, and since small rodents can live in urban environments, we would potentially have more problems with mice and rats in and around our homes. Who wants that? No one! So you may be asking yourself “How do we make sure this does not happen?” The answer is to make sure snake populations, like the eastern massasauga rattlesnake, stop decreasing.

An individual who devotes their time to making sure the populations of the eastern massasauga rattlesnake (also known as the swamp rattler) stop declining is Brent Johnson. Brent studies conservation biology at SUNY College of Environmental Science and Forestry. He aims to graduate with his Masters this May. Being fond of reptiles and amphibians for as long as he can remember, Brent plans on helping to maintain the survival of these creatures, which is why he

Why the concern for this species in particular? Well, the eastern massasauga rattlesnake is an important component to the swamp ecosystem, hence the name swamp rattler, and its population size is diminishing. There used to be six genetically distinct populations in the state of New York, and now there are only two. This caused them to be labeled as endangered in New York. Since there are only three species of rattlesnakes in our state, it would be devastating to have one become extinct.

Brent to the rescue! The research being conducted by Brent takes place in Cicero Swamp, NY. With the help of a recent graduate (Kevin Shoemaker), Brent decided that he would cut down on the amount of
shrubs in the area. This area used to be more open, but shrubs and woody plants started encroaching on these spacious plots of land. This reduced the amount of basking sites for the snakes. Snakes need to partake in a behavior known as basking in order to increase their body temperature and stay healthy. Without these basking sites, the health of the snakes would dwindle. An unhealthy snake cannot produce fit, successful offspring, which would lead to an even greater decrease in the population size of the swamp rattler.

Is it Working? So far the experiment conducted by Brent has proven to be successful. The rattlesnakes choose the plots that have been cut down versus the plots of land that are left unmanaged. As of right now, Brent cannot make an accurate estimate on the population size of this species, however, it is a goal he is working towards. On top of creating these basking areas for the swamp rattlers, Brent performs what is called mark and recapture. This is when a scientist captures the animal, marks it with a tag (or sometimes inserts a device into the animal) in order to discern one individual from the other, and releases them back out into the wild. Tagging the animal allows the researcher to know which individuals they have collected and which individuals have not been accounted for. The performance of this task allows for future researchers to be able to estimate the population size of the eastern massasauga rattlesnake in Cicero Swamp.

I live nearby Cicero Swamp, does that mean I will see more rattlesnakes around my home? No need to worry. They have food, shelter, breeding areas, and now basking sites, so traveling outside of the vicinity of Cicero Swamp would not be beneficial to them.

What can I do to help out? Do not harm snakes! Although many people fear snakes, especially rattlesnakes, there is no need to kill them. Chances are that they are more afraid of you than you are of them. A lot of times, snake populations start to decline because people that do not understand their usefulness exterminate them. If you do not harm them, they will not harm you, and in the long run, the increasing population of the eastern massasauga rattlesnake will benefit you by decreasing the population of those pesky rodents.