

TIMBER RATTLESNAKES AT WEST POINT

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“Why do you want to protect THOSE animals?”

“They’re a threat to human safety and should be wiped out”

The timber rattlesnake, a New York State-listed Threatened Species, is probably the most misunderstood and feared wildlife species found at West Point. I often hear comments such as the two above from people who don’t know the facts about timber rattlesnakes.

Timber rattlesnakes are not aggressive animals lurking around, waiting to attack an unsuspecting person. Timber rattlesnakes are extremely shy animals and will try to avoid any person if given the opportunity. In fact, most people will never see a timber rattler alive in the wild, even in good habitat. The reason is because the snake often moves off without a sound.

The timber rattlesnake's coloration helps the animal blend in with the forest floor so that it cannot be readily seen. By remaining motionless, the rattlesnake is essentially invisible to the casual observer. People have sometimes stepped right over a snake and never realized it.

Why didn't the snake rattle in that situation? It is because a timber rattlesnake will always avoid a direct confrontation with people if given the opportunity. Rattling might alert the "potential threat" to the snake's presence. A timber rattlesnake would much rather move away unnoticed.

"Still," you wonder, "isn't it possible that I might get bitten out there in the woods?" Well, unless you try to pick up a rattlesnake or insist on harassing the animal, you have a greater chance to be struck by lightning than to be bitten by a timber rattlesnake in New York. Only people attempting to handle timber rattlesnakes have been bitten.

Timber rattlesnakes have several interesting aspects to their life history. They can have a long lifespan, as long as 20 to 30 years. However, because of human persecution, very few snakes live that long. And, contrary to popular myth, you cannot tell how old a rattlesnake is by counting the number of rattles. A new rattle is added every time a snake sheds its skin, which can occur two or three times a year depending on food availability. The rattles are also fragile and easily broken off. No older snakes are likely to be found with all of the rattles intact.

Like other animals with long lifespans, timber rattlesnakes reach sexual maturity at a later age (nine to ten years old). Mating occurs in August - early September and the baby snakes are born the following year. Female timber rattlesnakes hatch their eggs inside their bodies and the young are born alive. Twelve is the average litter size but it can range from five to sixteen. The newborn snakes are born fully capable of a poisonous

bite and, while the volume of poison is smaller, the venom is more concentrated. Only one third of the adult female snakes breed in any one year and once bred, most female timber rattlers will not breed again for two years. Mortality for young rattlers is high with only 40% likely to survive the first year.

With a low reproductive rate, high mortality of young, and being readily killed or captured by uncaring humans, it is no surprise that the timber rattlesnake is in serious trouble in the Northeast. The timber rattlesnake was first listed as **Threatened** by New York State in 1983, but populations continue to decline. The snakes are extinct in Maine and Rhode Island and **Endangered** in the other New England states and New Jersey. The US Fish & Wildlife Service is investigating whether timber rattlesnake populations in the Northeast should be listed under the federal Endangered Species Act

West Point conducted a three-year study to determine the causes for the decline in timber rattlesnake populations on West Point. Rattlesnakes were outfitted with radio transmitters to determine their movement patterns, critical habitat areas, potential risks to the species' survival, and whether training activities might also be a factor in the timber rattlesnake's decline at West Point.

The results of the study revealed that one timber rattlesnake population is probably extinct, two timber rattlesnake populations on West Point are depleted (one seriously) and only one population is healthy. West Point timber rattlers can move up to 2 km from their dens and have home ranges of 70 acres on average. Road mortality is the single most important factor limiting recovery of the two depleted timber rattlesnake populations on West Point. To help the species recover, the "Critical Rattlesnake Habitat-Off Limits" area on the reservation will be maintained (access to this area is prohibited to all personnel without proper authorization).

The Natural Resources Branch, DHPW is asking the West Point community for assistance in protecting this impressive species. Residents and personnel are reminded that timber rattlesnakes are **fully protected** by law and that it is a **violation to harm, harass or kill a rattler**. Anyone found possessing a timber rattlesnake, its skin or rattles or harming or harassing a timber rattlesnake will be turned over to the appropriate law enforcement agency. Fines can be as high as \$10,000 and up to a year in jail. Sightings of timber rattlesnakes at the West Point Military Reservation should be reported as soon as possible to the Wildlife Biologist, Natural Resources Branch at 938-3857/2314 or through the post e-mail (**Beemer, J. Mr.** in the DHPW list). This is particularly important for all sightings west of Route 293. For more information about timber rattlesnakes you can contact the Wildlife Biologist at the same telephone number and e-mail address.