

CURRENT STATUS OF EASTERN MASSASAUGA RATTLESNAKES IN MICHIGAN

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LEGAL STATUS

The eastern massasauga rattlesnake (*Sistrurus catenatus catenatus*) is not listed as Endangered or Threatened in the State of Michigan. Due to its status in the remainder of its out-of-state range, it is being considered for listing as a Species of Special Concern (SSC). SSC status would make it illegal to take the massasauga from the wild without a scientific permit issued by the state. Currently all of Michigan's reptiles are protected under Public Act 373 of 1988 which prohibits the taking or possession of more than six individuals of any native species. Specimens may not be taken for commercial purposes without a state commercial reptile licence, which lists maximum numbers to be taken for each species. Endangered, Threatened or SSC animals may not be taken for commercial purposes.

HABITATS

The habitat of eastern massasauga rattlesnakes in Michigan varies somewhat from locality to locality, but generally includes a wintering area of low woods, bogs, fens, or marshes and a summering area of drier ground, usually grassy with low shrubs. Animals hibernate singly or in small groups of two or three. In the lower part of the state, they utilize mammal or crayfish burrows while more northerly populations utilize more rock crevasses and tree root systems. Opportunistic animals have been known to utilize partially submerged trash, barn floors and several Michigan basements. During summer months, the animals migrate up to drier ground where they feed primarily on small mammals and give birth in late July or August before heading back to their wintering spots. This duality of lifestyle requires that massasauga populations have two different types of habitat available in close proximity.

RANGE REDUCTION

Unfortunately for the eastern massasauga, Michigan's undeveloped areas are steadily shrinking. Areas that were once prime rattlesnake habitat are now regularly cultivated fields or developed land and rattlesnake populations are steadily declining with the habitat loss. Many populations of rattlesnakes are becoming disjunct as corridors of acceptable habitat disappear. Most hibernating areas are too small to qualify under Michigan's wetland protection laws and dry unforested land near any water is actively sought for building new homes. The complexity of the massasauga's biorequirements makes it difficult to pinpoint a specific habitat for protection, and protected areas are susceptible to succession and may naturally develop into unsuitable habit for rattlesnakes. This reduction of their available habitat is unlikely to be halted in the foreseeable future.

HUMAN THREATS

Surprisingly, eastern massasauga rattlesnakes have never been overly popular with private hobbyists so commercial collecting has been virtually unknown. Individual collecting has occurred on a low level, usually with private individuals who take only an animal or two, often releasing them after several months to a few years. Eastern massasauga rattlesnakes adapt quite well to captivity and usually thrive. Captive breeding has been regularly observed and often head-started juveniles are released to the wild. Scientific collecting has been minimal and largely opportunistic with no detailed populations studies having been documented. The limited number of eastern massasauga rattlesnakes in museum collections can hardly have any direct impact on the rattlesnake population as a whole.

The largest direct threat to rattlesnakes in Michigan is accidental and deliberate killing by human beings. As roads divide hibernating areas from summer ranges, more and more rattlesnakes are killed by automobiles. As natural grasslands become cultivated, still more animals fall to mechanical farm equipment. Many residents of Michigan are still not aware of the relative harmlessness of massasauga rattlesnakes and go out of their way to kill them whenever they are found. Rationale varies from protection of children all the way to destroying a sportsman's competition for fish.

CURRENT POPULATIONS

Wherever suitable habitats still remain, massasauga rattlesnakes do exist, and populations seem to be very stable. Michigan has enough varied habitats that areas suitable for massasaugas are still numerous and healthy populations of rattlesnakes occur in most counties of the lower peninsula. In some protected tracts of land, rattlesnake populations are spreading into areas where they were thought extirpated for decades. Although many people still unjustly destroy the rattlesnakes, the general increase of American environmental awareness coupled with a recent move towards better education of our wildlife enforcement personnel are steps in the right direction towards reducing the numbers of massasaugas needlessly killed in Michigan. While never common, and in recent times less so, the Michigan populations of eastern massasauga rattlesnake probably remain a safe stronghold for the subspecies.