

U.S Fish & Wildlife Service

Live and Let Live:

*People and the Eastern
Massasauga Rattlesnake*



R. A. Seigel/Towson University



Bill Peterson/USFWS



© Bruce Kingsbury

Live and Let Live

The eastern massasauga rattlesnake (sometimes called the swamp rattler) is a rare and unique snake that lives in the upper Midwest and southern Ontario. By learning a little bit about these shy, docile snakes and following some simple guidelines, people and massasaugas can live in the same areas without causing problems for each other. This brochure contains everything you need to know!

Massasauga Habitat and Diet

Massasaugas live in shallow wetland areas that have grassy upland areas nearby. They use the grassy areas (with few trees and shrubs) to hunt and to bask in the sun. They eat mostly mice and other small rodents, which is a benefit to people. During winter, they hibernate inside crayfish burrows or beneath vegetation in the wetland area.



Bill Peterson/USFWS

Massasaugas use crayfish burrows for hibernating

When they are not hibernating, massasaugas are often traveling. Most do not spend the entire year in one wetland habitat. Instead, they prefer to move from one wetland to another. This is one of the reasons they are so rare—many are killed crossing roads and many die because of habitat destruction. To learn more about the biology and natural history of massasaugas, visit these web sites:

<http://herpcenter.ipfw.edu/outreach/accounts/index.htm>

<http://www.dnr.state.wi.us/org/land/er/factsh>

<http://www.dnr.state.oh.us/wildlife/resources/reptiles/reptiles.html>



The wetlands that massasaugas need to survive are also excellent habitat for ducks and other wildlife.

Benefits To People

Massasaugas provide direct benefits to people by eating mice and other small rodent pests, and their venom is being studied by doctors and medical researchers for use in drugs and medicines. In addition, the wetland habitats that massasaugas prefer provide tremendous benefits to people—purifying the water we drink, preventing flooding, recharging wells and groundwater systems, and providing a home for ducks, songbirds, otters, and many other wildlife species that people love.

Preventing Negative Encounters

Massasaugas are shy and secretive, and usually prefer to retreat from a threat (you) if at all possible. At times, they hide under leaves, rocks, and logs, so if you stay on trails and don't root around under these objects, you will likely never even see one. If you walk in massasauga habitat, wearing hiking boots greatly reduces your chance of being injured. Snakes can't bite through boots. Check the area before you sit on the ground or reach down to the ground for something. If you get too close and the snake can't escape, it will usually buzz its rattle as a warning (because of its small size, the rattle isn't very loud, but sounds like a bee buzzing). If you hear rattling, be very still until you can determine where the snake is; then move away slowly and leave the snake alone. They rarely strike unless they are cornered or are being attacked. Very few people are bitten by massasaugas each year, and most of these bites occur when people try to handle or harass snakes.

Keeping Massasaugas Away From Your Home

Massasaugas live in areas that have good habitat. If you're concerned that they might be living too close to you for comfort, here are a few tips that will help keep the snakes where you want them—away from your home and yard.



© 2002 Photos To Go

No Vacancy In areas where you do NOT want snakes:

- *cut the grass often and cut it short*
- *remove any structures that a snake might view as nice habitat: leaf litter, brush piles, dead logs, rocks, stacks of firewood, etc.*
- *remove any food or habitat that might attract small rodents (a snake's food)*
- *if a structure cannot be removed, you might try to make it snake-proof (call your state wildlife agency for more information)*



Bill Peterson/USFWS

Snake Space Create a separate area where you can tolerate snakes. Providing good habitat here will help keep them out of other areas. To provide space for snakes:

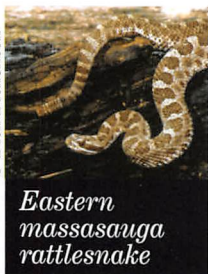
- *do not mow the grass or ground cover*
- *create or leave brush and leaf piles, dead logs, and rocky areas*
- *if your house is near a wetland, do not create snake space in an area that will leave your house between the wetland and the snake space; otherwise, snakes will have to pass your house to reach the habitat*

Remember, massasaugas like to travel, so even if you see one, it is likely just passing through. Leave it alone and it will probably move on, and you may never see it again.

Is That a Massasauga?

In most parts of the Midwest, it is very unlikely that you will ever see or encounter a massasauga. But if you see a snake, how can you tell if it is a massasauga or not?

© Dick Dickenson



Eastern massasauga rattlesnake

The massasauga is small for a rattlesnake—most are about two feet long. It has a thick, gray or brown body with large, dark spots running down the middle of its back, and smaller spots on each side. The spots in the middle are shaped something like little bowties. The head is triangular in shape and has black and white stripes running from the face toward the neck. The eyes have vertical pupils (not round). There are two heat-sensing pits (one on each side of the head between the eye and the nostril), and rattle segments at the tip of the tail.

Look-Alikes

There are several snakes in the Midwest that look similar to the massasauga, but all of them are non-venomous, and all play an important role in the ecosystem.

Gary M. Stolz/USFWS



Northern water snake



Eastern hognose snake

© John White

© Scott Gibson



Rattlesnake tail

Many non-venomous snakes (including fox and milk snakes) will vibrate the tips of their tails to make predators think they are rattlesnakes. Don't be fooled! Go to the web sites listed on page 2 for more information on these convincing actors.

If you do see a massasauga on your property, consider yourself lucky! This unique animal is providing you free rodent control and contributing to the health of the ecosystem.



*Eastern milk
snake*

*Eastern massasauga
rattlesnake*

*Eastern fox
snake*

Massasaugas in the Midwest



Massasaugas are rare throughout most of their range. The table below shows how they are listed by the various state and provincial agencies. Your support is critical in saving this unique and fascinating species from extinction.

Endangered		Threatened or Special Concern
Indiana	Missouri	Michigan
Illinois	Ohio	Ontario, Canada
Wisconsin	Pennsylvania	
Minnesota	New York	
Iowa		

Why is the Massasauga So Rare?

Because it is so rare over such a large area, the U.S. Fish & Wildlife Service is currently considering adding the eastern massasauga rattlesnake to the Federal List of Threatened and Endangered Species.

Habitat loss is one of the primary factors in the decline of the eastern massasauga rattlesnake. Massasaugas depend on wetlands for food and shelter, but also use nearby upland areas during part of the year. Draining wetlands for farms, roads, homes, and urban development has eliminated much of the massasauga's habitat. And because massasaugas may travel between several different habitat areas, human developments such as roads, towns, and large farm fields create barriers to their movements or make these movements very risky. These barriers also separate and isolate remaining populations, and small, isolated populations often die out easily.

Another big factor in the decline of this species is human fear and dislike of snakes. Countless snakes of all types are unnecessarily killed by humans each year.



Bill Peterson/USFWS

Massasaugas live in wetlands and the grassy, open areas around wetlands.



USFWS photo

The loss of wetland habitat is the primary reason massasaugas are rare.

The Real Scoop on Snake Bites

Massasaugas rarely bite humans, and even when they do it is hardly ever life-threatening. Snakes don't always inject venom when they bite because venom is "expensive" for them to produce, and they will try to save it for use on prey. In fact, 25-50% of all rattlesnake bites to humans contain no venom. However, if you are bitten, remain calm, move as little as possible, and seek medical help immediately. Being bitten by a rattlesnake is considered a medical emergency, but there is no need to panic. Doctors will sometimes even wait one or two hours to observe a patient before beginning any treatment.



If you have a pet that has been bitten by a rattlesnake, keep it calm, restrict its movement as much as possible, and seek help from a veterinarian immediately. Snakebites to the head or neck can be serious because the venom and swelling from the bite can hinder breathing. However, if the pet is transported to a veterinarian right away, its chances of survival are good.

Larger domestic livestock such as horses, cattle, and hogs are at reduced risk from massasauga bites due to their size, but contact a veterinarian if you think one has been bitten.



Bill Peterson/USFWS

The massasauga is a shy, docile snake that is an important part of the ecosystem. Live and let live!

Don't Kill It!

If you find a massasauga in an area where you don't want it, *don't kill it!*

If you leave it alone, it will likely go away on its own, and you may never see it again. If you need it moved, contact your state or provincial fish and wildlife agency. They might be able to help you directly or recommend an animal damage control company that can help.

Equal opportunity to participate in and benefit from the programs and activities of the U.S. Fish and Wildlife Service is available to all individuals regardless of age, color, disability, national origin, race, religion, sex and sexual orientation. If you have questions, contact the U.S. Department of the Interior, Office of Equal Employment Opportunity, 1849 C Street, N.W., Washington, D.C. 20240.

Alternative formats of this publication are available upon request.

U.S. Department of the Interior
U.S. Fish & Wildlife Service
Endangered Species Division
1 Federal Drive
Fort Snelling, MN 55111

Indiana Department of Natural Resources
Division of Fish and Wildlife
402 W. Washington St., Rm. W273
Indianapolis, IN 46204

