



Lake Erie Watersnake

Nerodia sipedon insularum



The Lake Erie water snake is found only in the western Lake Erie waters of Ohio and Canada.



Photo by U.S. Fish and Wildlife Service

The Lake Erie watersnake was removed from the list of federally endangered and threatened species on August 16, 2011. This species was originally listed as a federally *threatened species* on August 30, 1999.

Threatened species are animals and plants that are likely to become endangered in the foreseeable future. *Endangered species* are animals and plants that are in danger of becoming extinct. Identifying, protecting, and restoring endangered and threatened species is the primary objective of the U.S. Fish and Wildlife Service's endangered species program.

What is the Lake Erie Watersnake?

Lake Erie water snakes are not venomous, but they will protect themselves and may bite if cornered. Treat them with respect, like any wild animal. Island residents can carefully remove the water snakes from yards, boats, and buildings provided they do not hurt the snakes.

Appearance - Adult Lake Erie watersnakes are uniform gray in color or have incomplete band patterns. They resemble the closely related northern watersnake (*Nerodia sipedon sipedon*), but often lack the body markings, or have only a pale version of those patterns. Lake Erie watersnakes grow to 1 1/2 to 3 1/2 feet in length. They are not venomous.

Habitat - In summer, the snakes live on the cliffs, ledges and rocky shorelines of limestone islands and forage in the nearshore waters of Lake Erie. During winter, Lake Erie Watersnakes hibernate underground.

Reproduction - Lake Erie watersnakes mate from late May through early June. During this time they may be found in large "mating balls" which typically consist of one female and several males. Young snakes are born mid-August through September with an average litter size of 23.

Feeding Habits - Historically, the snakes fed on amphibians and native fish such as madtom, stonecat, logperch, and spottail shiners. However, during the 1990's the round goby (*Neogobius melanostomus*), an invasive fish, established itself in the Great Lakes and caused population declines of many native fish. Today, 90 percent of the watersnake's diet is round goby and 10 percent is mudpuppies and native fish.

What is the Lake Erie Watersnake? (continued)

Range - Lake Erie watersnakes can be found on a group of limestone islands in western Lake Erie, and on a portion of the Catawba/Marblehead peninsula in Ohio. Lake Erie watersnakes that lived on islands more than one mile from the Ohio mainland were protected under the Endangered Species Act. Watersnakes on the Ohio mainland, Mouse Island, and Johnson's Island were never protected under the Endangered Species Act. Currently, all Lake Erie watersnakes remain protected under Ohio State wildlife law.

Why was the Lake Erie Water Snake Threatened?

Eradication - The snakes were often killed by humans.

Habitat Loss or Degradation - Lake Erie watersnakes declined because of destruction of their shoreline habitat and excavation of winter hibernation habitat for developments.

What Was Done to Prevent Extinction of the Lake Erie Water Snake?

Listing - The Lake Erie watersnake was added to the U.S. List of Endangered and Threatened Wildlife and Plants and received protections provided by the Endangered Species Act, which included protection from intentional killing and destruction of habitat.

Recovery Plan - The U.S. Fish and Wildlife Service developed a recovery plan that described and prioritized actions that were needed to help the snake survive.

Research - Researchers studied the Lake Erie watersnake to find the best way to manage for the snake and its habitat.

Habitat Protection - Some shoreline areas have been permanently protected as natural areas. New developments incorporated features that provided habitat for the snakes and measures that minimized coastal shoreline habitat loss.

Community Involvement - U.S. Fish and Wildlife Service personnel and partners such as Northern Illinois University and Ohio Department of Natural Resources worked with local communities to develop programs that benefited both the community and the snake.

Public Outreach - Public outreach programs are raised awareness of the snake, its plight, and its role in the ecosystem.

What Can I Do to Help Prevent the Extinction of Species?

Learn - Learn more about endangered and threatened species. Understand how the destruction of habitat leads to loss of endangered and threatened species and our nation's plant and animal diversity. Tell others about what you have learned.

Join or Volunteer - Join a conservation group; many have local chapters. Volunteer at a local National Wildlife Refuge, nature center, or zoo.

Support - Support efforts to protect, conserve, or restore natural areas.

Create - Create backyard habitat for wildlife, especially amphibians.

Protect Water Quality - Protect water quality by safely disposing of unused or expired medicines. Never place medicine down the drain, toilet, or garbage disposal where it could impact surface and ground water quality. Also, properly dispose of all hazardous chemicals such as paint, fertilizer, pesticides, and motor oil.