Lake Erie Watersnakes

Shoreline habitats used by Lake Erie watersnakes are also favored by people as sites for homes and cottages, docks and boat launches, and for recreational activities. Consequently, interactions between humans and watersnakes are inevitable. Although non-venomous, watersnakes will strike if cornered and bite if handled.
**LEWS QUICK FACTS**

**Name:** Lake Erie watersnake (LEWS)
*Nerodia sipedon insularum*

**Description:** LEWS are generally dark grey in color, but have highly variable dorsal blotch patterns ranging from full saddle-shaped bands to irregularly shaped blotches along the entire body to solid grey with no bands or blotches at all (see photo). Studies have shown that color pattern is a genetic trait and can affect watersnake survival. Unbanded or less patterned snakes are more likely to survive and produce offspring, since they are able to blend into the rocky shoreline and avoid predators. This is an example of evolution through natural selection.

**Distribution:** LEWS are found only within the island region of Lake Erie—an area that spans less than 25 miles in diameter. Federally protected populations of LEWS are restricted to Lake Erie islands greater than one mile from the mainland shore.

**Temperament:** LEWS are non-venomous but aggressive and will bite if handled!

**Diet:** Non-game fishes and amphibians (mudpuppies). Since the early 2000's, LEWS have been feeding almost exclusively (90%) on the invasive round goby.

**Habitats:** During their active season (May – October), LEWS are typically found close to the shoreline basking on rocks, vines, and docks. In the winter months (November – April), they hibernate in rocky crevices, underground root balls, and occasionally in human structures, such as old foundations, drain tiles, or shoreline protection structures. Hibernation sites have been located as much as ½ mile inland. Adult watersnakes return to the same hibernation site year after year and exhibit strong homing ability toward their active areas as well.

**Reproduction:** Courtship is rather conspicuous in May and June, with snakes forming large, writhing “mating balls” that usually consist of one female and several males. Female snakes give live birth in August and September to an average of 25 young. Young snakes are about the size of a pencil but grow fairly quickly and reach adult size in 2-3 years.

**Conservation Status:** LEWS were protected in Canada in 1977, listed as federally threatened in the U.S. in 1999, and state endangered in 2000. As a consequence, collecting, harming or killing Lake Erie watersnakes is prohibited by law. Watersnakes may be handled briefly to move them from roads, yards, buildings, or boats to adjacent habitat. Current recovery tasks are progressing rapidly and include population monitoring, habitat protection and management, and public outreach and education.
The following tips can help reduce risk to humans and prevent harm to watersnakes.

What to do if...

There is a watersnake on your dock or in the yard:
Watersnakes sometimes use docks, shoreline structures, and grassy or rocky area adjacent to the lake as basking sites. Often, they will flee from humans, and so a “walk-by” may cause them to leave. Gentle prodding with a broom or the spray from a garden hose also works. Keep yards clear of boards and other objects that watersnakes might use as hiding places.

There is a watersnake on your boat:
Cover your boat and keep it tied away from the dock when not in use to help keep watersnakes out. Once a watersnake is in your boat, removal by hand or with a fine mesh net may be necessary (see instructions below).

You encounter a watersnake while swimming:
Watersnakes do not see particularly well and so a swimmer may appear to be a rock or log. Should a curious snake approach, a vigorous splash of water should send it away.

If you must handle a watersnake:
It is sometimes necessary to physically move a watersnake from inside a garage or boat. If available, use a fine mesh, long-handled net, such as a pool skimmer. Do not use a fishing net – watersnakes can slip through or become entangled. Use gloves to pick up a watersnake by hand, try to cover its head with a towel or rag, and use both hands, placing one directly behind the head and the other further down the body. Release the snake out of harm’s way or drop it in the water.

If you are bitten by a watersnake:
A watersnake bite can leave many pin-prick-sized tooth marks and may bleed. Thorough washing is sufficient to prevent infection, and bites heal quickly.

MORE INFORMATION

www.dnr.state.oh.us/wildlife/resources/wildnotes.html
www.fws.gov/midwest/reynoldsburg/endangered/lews.html
www.bios.niu.edu/rking/lab/projects.html
www.respectthesnake.com

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