

Lake Erie Water Snake *Nerodia sipedon insularum*



Description: The Lake Erie Water Snake's (LEWS) color is variable, ranging from a solid gray to regularly patterned (banded) blotches. They have a stocky build and may be as long as 5 feet.

Distribution and Status in Ohio: Listed as a "threatened" species by the U.S. Fish and Wildlife Service and "endangered" by the Ohio Division of Wildlife, the Lake Erie Water Snake is found only the islands of western Lake Erie. Results of surveys estimate that the 2002 U.S. population of the Lake Erie Water Snake was more than 5,000 adults, up from 2,000 in 1999.



A gray, unpatterned Lake Erie Water Snake.

Habitat: In the summer, snakes prefer to spend time near the water's edge basking on the rocky shoreline (within 13 meters (42.7 feet) of the water's edge) or foraging just off shore. Overwintering sites are typically located within 69 meters (226 feet) of the shore in rocky substrates and are sometimes covered with soil, leaf litter, decaying wood, and grass. Overwintering sites include natural and man-made structures in open and wooded areas.



Distribution of the Lake Erie Water Snake.

Life History: Lake Erie water snakes are active primarily between early May and early October. They mate from late May to early June by forming "mating balls" consisting of one female and several males. Live birth of 30 pencil-sized young occurs in early September. The snake's diet is composed mainly of fish & amphibians. LEWS return to the same area of shoreline each summer and the same overwintering location.

Did You Know?

The Lake Erie Water Snake has one of the smallest geographic ranges of any vertebrate in the world!



LEWS are found only on the Lake Erie Islands.

Management Recommendations for Properties with Lake Erie Water Snake Habitat



Thanks to the efforts of island residents, the Lake Erie Water Snake's population is doing well. Only through the continued commitment of island residents and appreciation of the snakes by island tourists will the snake persist. Landowners who have these snakes on their property should consider themselves fortunate because the entire worldwide population of this vertebrate animal is only found on the islands of Lake Erie. By making management decisions that can successfully minimize unnecessary impacts to the Lake Erie Water Snake and its habitat, you will be contributing in a very positive way to their continued presence in Ohio.

Conserving shoreline habitat and areas where the snake overwinter will be critical to its preservation. The highest priority areas will be within 69 meters (226 feet) of the water's edge as well as along the immediate shoreline (13 meters (42.7 feet) from the water's edge).

➤ **Within 69 meters of the shoreline, excavation activity should not occur during the overwintering season (Oct. 15th—April 15th) or when the air temperature is below 60° F.** Activities to be avoided include, but are not limited to, digging foundations, burying utility lines, removing suitable tree roots or hollow tree bases, and destroying suitable human-made structures used for hibernation (walls, foundations, etc.).

➤ **Rock-filled timber or steel crib docks and riprap shoreline protection are always preferred to sheet steel. If you already have a sheet steel dock, drilling holes larger than 3.5 inches will provide escape cover for the snakes.**

The Lake Erie water snake uses rock-filled timber or steel crib docks for summer basking and resting habitat. Snakes remain in or near the docks throughout the summer and return to the same docks each year after emerging from overwintering.

➤ **Remove only the above-ground portion of trees cut within the 69 meter zone.** The root mass should be left underground, so as not to disturb overwintering locations.

For more information about Lake Erie Water Snakes:



Gibbons, J. W. and M. E. Dorcas. 2004. North American Watersnakes: A Natural History. University of Oklahoma Press.



<http://www.fws.gov/midwest/reynoldsburg/endangered/lews.html>