

Conserving Spotted Turtles in Ohio

Ohio's wetlands are home to one of the state's most elusive and charismatic reptiles, the Spotted Turtle (*Clemmys guttata*). Recognizable by the bright yellow spots adorning its dark shell, this small, semi-aquatic turtle is listed as Threatened in Ohio and is currently being considered for federal listing under the Endangered Species Act. Declines have largely been caused by habitat loss, illegal collection, and increasing predation. While once widespread, Spotted Turtles are now disappearing from many of their historic habitats, making conservation action critical.

In 2025, the Columbus Zoo and Aquarium will support a new research effort to assess the status of Spotted Turtles in southwest Ohio and investigate the impact of predators on their populations. Led by conservation biologist Greg Lipps in collaboration with multiple partners, including the Shores Department, ODNR Divisions of Wildlife and Natural Areas and Preserves, West Liberty University, Wittenberg University, and several other institutions, this project will provide essential data to guide future conservation actions.

The objectives in this first year are: (1) surveying four key sites to determine whether Spotted Turtles still persist in these areas and (2) testing a new method for measuring predation pressure on turtle populations. Researchers will use aquatic funnel traps and visual encounter surveys to document the presence of turtles, while motion-triggered cameras will be deployed to monitor interactions between predators and lifelike turtle models. The goal is to understand how mesopredators, like raccoons, are impacting turtle populations.

This project builds on previous surveys, which found that the Spotted Turtle in southwest Ohio is in a precarious position. At some sites, researchers found only a single turtle, and in others, the species may already be gone. The data collected through this effort will help inform which conservation strategies are needed and where. This may include habitat management, mesopredator management, and head-starting animals for release back into Ohio.

The role of the Columbus Zoo and Aquarium in this initiative extends beyond funding. Zoo staff will have opportunities to assist in fieldwork, and the Zoo will provide materials such as bait for the traps and model turtles for the predation study. Additionally, the Zoo is committed to supporting a head-start program that will help increase Spotted Turtle numbers in the future.

Wetland conservation benefits not only Spotted Turtles but also countless other species that depend on these critical habitats. By working together, we can help ensure that Ohio's Spotted Turtles remain a part of our natural heritage for generations to come.

For more information about this project or how you can get involved, feel free to reach out to me (greg.lipps@columbuszoo.org)!

Photos (all by Greg Lipps):

1. GLipps_2009-09-23_20-33-28.JPG. An adult Spotted Turtle.
2. P1010013.JPG. Scars on this Spotted Turtle's shell are likely the result of an encounter with a predator. Raccoon populations in Ohio are estimated to have nearly quadrupled since the late 1970s due to human subsidies.
3. P1010079.JPG. Spotted Turtles live in shallow water wetlands such as fens and wet prairies.

4. 2011-05-01_14-13-16.JPG. Without management, Spotted Turtle habitat can become degraded by vegetative succession or invasive plant species, such as Buckthorn or *Phragmites*.