Mudpuppies studied at Wolf Lake

Research conducted by Chicago's Shedd Aquarium scientists and researchers from Southern Illinois University (SIU) has focused on the newest threatened species at Wolf Lake–the mudpuppy.

Their research of the large salamander, a long-time resident of Wolf Lake which grows to 11 to 18 inches long, has piqued the curiosity of local fishermen, including Joe Kruczek of Hammond, IN. Kruczek, a member of the Association for the Wolf Lake Initiative (AWLI), has hunted and fished there for much of his 60 years.

He had never given much thought to mudpuppies, which were declared a threatened species in Illinois in 2010 because of its declining population there. In fact this decline is true for all of Great Lakes Region.

However, there exists little scientific information about the salamander.

On March 30, Kruczek came across a group of about a half-dozen hip wader-clad individuals along Wolf Lake's northwest shoreline. When he learned they were researching mudpuppies, he returned to his vehicle for his waders and joined the effort through April 4.

Kruczek had wandered into part of a multi-year research project launched last year by Dr. Phil Willink, senior research biologist at the Shedd Aquarium, and Alicia Beattie, a Shedd research associate and master's degree student at SIU. They are studying the biology and ecology of the mudpuppy population in Wolf Lake and along Chicago's Lake Michigan shoreline.

Research team leader Alicia Beattie holds a mudpuppy collected with the help of volunteer Joe Kruczek.

Specifically, they are gathering such baseline information as the amphibians' population dynamics, feeding habits and contributions to ecosystem functions. The team at Wolf Lake on April 4 was led by Beattie and included folks from the Shedd Aquarium, the University of Chicago, the University of Illinois, Southeast Sportsmen's Club and the Nature Conservancy, Chicago Office.

The research team had been there for about a week, with the team's composition changing daily. But this wasn't Beattie's first visit to William Powers State Fish & Wildlife Area in Chicago. She had visited the lake in the autumn and again several times more during the winter.

Willink is even more familiar with Wolf Lake. He is the author of *A Century of Shifting Fish Assemblages in Wolf Lake, Illinois-Indiana,* published in the *Proceedings of the Indiana Academy of Science, 2009*. He has conducted research at Wolf Lake for decades.

But it is Beattie who now is spending more time at Wolf Lake. During this latest visit, her team retrieved 18 new mudpuppies. This brought the total to 58 over the winter season and 79 thus far at Wolf Lake.

She said there were quite a few recaptures of mudpuppies which had been examined during earlier visits.

"After some success finding juvenile mudpuppies while flipping rocks during the autumn months," she writes in an early report, "I tried my luck drilling holes and setting funnel traps

Wolf Lake during the past summer. He and his nephew cleaned up hundreds of wooden and metal stakes, wire, and netting mesh left from Wolf Lake's shoreline restoration in 2005-2007. He plans to return this summer to complete the task.

Team member Melanie Nelson displays modified minnow trap used to collect mudpuppies at Wolf Lake. Photo by Joe Kruczek.

His ties to Wolf Lake were developed early. He recalls skating and playing ice hockey and tag through the numerous cattail/muskrat houses in the marsh during Christmas vacation, teal hunting in early September in the early 1970s before high school classes at George Rogers Clark, great duck hunting adventures off the islands, and numerous other memorable hunts in duck blinds that dotted the north and south ends of Wolf Lake.

The two-year, $50,000 study of mudpuppies is funded by the Daniel P. Haerther Center for Conservation and Research at Shedd Aquarium. The Illinois Natural History Survey and the U.S. Army Corps of Engineers also are collaborating on the project.

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