



News Release

FOR IMMEDIATE RELEASE

May 19, 2014

MEDIA CONTACTS:

Nicole Minadeo
Shedd Aquarium
312-692-3365

nminadeo@sheddaquarium.org

Catherine Gatenby
US Fish and Wildlife Service
716-263-2992

catherine_gatenby@fws.gov

SHEDD AQUARIUM AND U.S. FISH AND WILDLIFE SERVICE STUDY
MIGRATION PATTERNS OF LAKE ERIE STURGEON

Shedd and US Fish and Wildlife Service Field Researchers Studying Movements and Health of Native Fish Species

BUFFALO, N.Y. – Advancing our commitment to Great Lakes conservation, [Shedd Aquarium](#) and the [U.S. Fish and Wildlife Service’s Northeast Fishery Center and Lower Great Lakes Fish and Wildlife Conservation Office](#), with assistance from the New York Department of Environmental Conservation, will study the movements, habitats and health of Lake Sturgeon in the Niagara River, Lake Erie and Lake Ontario. The research team will gather data using pop-off satellite (PSAT) tags, which will log real-time information on the routes the fish travel, and the types of habitats they frequent in order to better inform conservation efforts.

Lake Sturgeon – the largest fish in the Great Lakes – have been identified as endangered throughout most of their range. The health of these populations affects the entire Great Lakes basin and the more than 36 million people living in the region.

“Little is known about the migration pattern of the iconic lake sturgeon following their spring spawning season,” said [Dr. Philip Willink](#), Shedd Aquarium’s senior research biologist. “The more we know about the region’s lake sturgeon habitats and migratory patterns, the better we can manage, protect and potentially restore critical areas. Through partnerships such as this one with the U.S. Fish and Wildlife Service, we can influence real change to conserve this species.”

Researchers will collect data on sturgeon found above and below Niagara Falls, areas that serve as annual spawning grounds for the prehistoric Great Lakes fish that can live to up to 100 years. Each fish will be fitted with a PSAT tag that analyzes movement and the temperature as well as depth of the water in which the fish swims.

“Lake Sturgeon live in the waters in our own backyard, yet there are still so many questions about what is happening with the fish beneath the surface,” said Dr. Bill Van Bonn, Shedd’s vice president for animal health. “To help study them, our veterinary experts and biologists will fit each fish with a PSAT tag comfortably near the bottom of the dorsal fin, where the tag trails behind the fish like a tether to ensure natural movement is not affected. The team is using materials and devices designed for orthopedic surgery that allows for rapid and secure tag attachment with minimal handling of the fish.”

The tags are grouped in two data collection cycles starting in May when they are attached to fish – one group of tags collects data for three months, and a second group for 15 months. Researchers will return to the area to collect the tags, which automatically release from the fish and float to the surface of the water. At the surface, the tags immediately start beaming their location and their data via a satellite network.

“While attached to the fish, PSAT tags will gather data every minute and store those data on its internal memory,” said Greg Jacobs, a fish biologist with the U.S. Fish and Wildlife Service. “Once the tags pop off at the end of their deployment and transmit their data back to us, we will relate measurements of light, magnetic field, depth and temperature to environmental conditions in the Great Lakes over the duration of the tags’ deployment to infer location, movement and habitat preferences.”

In addition to tagging, Shedd animal health experts will analyze overall health of the fish from blood and tissue samples collected on site. Samples will also be sent to several reference research laboratories to determine genetic relatedness and

investigate nutrients from the diet. As well, Shedd animal health experts will use a noninvasive ultrasound scan to determine the gender of each fish, which is not externally identifiable, and to determine if a female is producing eggs.

The research findings will provide critical information about lake sturgeon that will help us identify ways to better protect the species and their habitat.

Shedd connects people to the Great Lakes and conservation issues through exhibits such as *At Home on the Great Lakes*. The exhibit features 60 non-native and native species including a sturgeon touch pool experience. By touching a swimming sturgeon and seeing the fish that live beneath the water's surface, Shedd seeks to inspire guests to make a difference in the health of the Great Lakes ecosystem. For more information about Shedd's Great Lakes conservation initiative, please visit www.sheddaquarium.org/GreatLakes. For more information about the U.S. Fish and Wildlife Service's work in the lower Great Lakes, visit www.fws.gov/northeast/lowergreatlakes and <http://www.fws.gov/northeast/fisherycenter/>.

NOTE: High resolution photos and videos are available for download:

<https://backup.filesanywhere.com/fs/v.aspx?v=8c706989616273ac73a3>

Photo and video credit: ©Shedd Aquarium/US Fish and Wildlife Service

ABOUT SHEDD AQUARIUM

Shedd Aquarium is dedicated to preserving and protecting Great Lakes wildlife and habitats through conservation science, education and awareness programs generously supported by the following Conservator Partners: ArcelorMittal and Coca-Cola. For more information visit: sheddaquarium.org/GreatLakes,

ABOUT US FISH AND WILDLIFE SERVICE

The mission of the U.S. Fish and Wildlife Service is working with others to conserve, protect, and enhance fish, wildlife, plants, and their habitats for the continuing benefit of the American people. We are both a leader and trusted partner in fish and wildlife conservation, known for our scientific excellence, stewardship of lands and natural resources, dedicated professionals, and commitment to public service. For more information on our work and the people who make it happen, visit www.fws.gov or visit us on [Facebook](#).

###