

U.S. Fish & Wildlife Service

ONE Voice

Outreach, News, and Events

Iroquois National Wildlife Refuge / Lower Great Lakes Fish & Wildlife Conservation Office

November 2015



Going High Tech for Fish (October-November): For the first time ever we are able to collect information on lake trout habitat use in Lake Ontario over time. Four pop-up and pop-off satellite tags (PSAT), which were attached to lake trout in the Niagara River last spring and were scheduled to pop off this past summer, were recovered. We are currently analyzing that data including depth, temperature and time of year. The remaining tags are scheduled to pop off in May 2016. We are looking forward to learning what the data tell us about lake trout behavior and habitat use in Lake Ontario. (Contact: Dimitry Gorsky)

Lake Trout Acoustic Telemetry in Lower Niagara River Update

(November): In a time of year when only the most die-hard lake trout and steelhead fishermen flock to the Niagara Gorge, it is rare to see fish biologists plying the waters alongside them. On a cold rainy day in November, however, biologists from the Lower Great Lakes Fish and Wildlife Conservation Office did just that, relying on the knowledge and skill of a local charter captain to help catch lake trout for a study of spawning habitat use. Understanding the spawning behavior and habitat preference of these trout in the Niagara Gorge will help us make better decisions on stocking and habitat conservation that will ultimately lead to a self-sustaining fishery. In spite of the weather, we collected 22 lake trout, from which we measured length, weight, age and identified gender. Then we anesthetized ten females and surgically implanted them with acoustic tags. The acoustic tags transmit a series of pings that can be decoded by underwater receivers, and the pings deliver information on individual fish. As the tagged fish move through the gorge and the lower Niagara River, an array of acoustic receivers will detect the pings sent out by the tags, helping us identify location, spawning aggregations and preferred habitat. The long battery life of the acoustic tags makes it possible to track the fish for several years, providing key information on seasonal spawning behavior (Contact: Curtis Karboski)



Waterfowl Wrap-Up (November): The 2015 Iroquois NWR waterfowl season was, to say the least, a study in contrast. On the positive side, we had the second highest total harvest (1,709 total birds) in the history of the hunt and the highest average hunters per day (61 hunters/day) since 1990. Habitat conditions in September and October were exceptional, with hundreds of acres of feeding and roosting habitats in close proximity. By mid-October, this habitat had attracted thousands of staging waterfowl. Waterfowl hunters lucky enough to have been drawn for the opening day hunt found an abundance of ducks in every marsh. On the negative side,

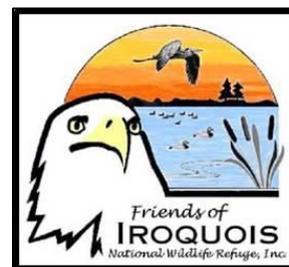
unseasonably warm temperatures along with windless or south wind dominated days and clear sunny skies resulted in essentially no new birds migrating into the area for the entire season. As a result, the birds harvested per average hunter declined steadily throughout the season. (Contact: Madeline Prush)



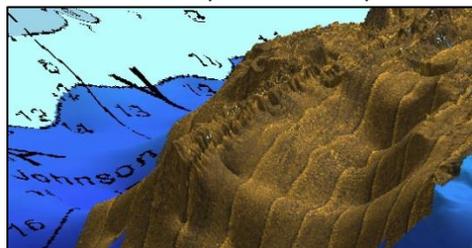
Another Successful Year of Early Detection and Monitoring (November 4):

The Lower Great Lakes FWCO wrapped up another successful year of Early Detection and Monitoring for invasive species. This year, the aquatic invasive species crew identified 21,022 fish; including 55 distinct species! Sampling was conducted in Lake Erie, Niagara River, Lake Ontario, Genesee River, and Irondequoit Bay. No new invasive species were detected. Early Detection and Monitoring for invasive species is an on-going and important program that spans the Great Lakes basin. The data our biologists collect can be used to monitor changes in the fish community, help guide management plans, and provide a baseline of information that would otherwise not be collected. (Contact: Robert Haltner)

Gathering of the Friends of Iroquois NWR for Annual Meeting (November 7): With a great turnout of 45 people from the public and discussion of the past year's accomplishments, the Friends of Iroquois NWR, Inc. 2015 Annual Meeting was a success! Updates on previous projects as well as expectations for projects in the coming year were presented. Winners of the 2015 Annual Photo Contest, jointly hosted by the Refuge and the Friends of Iroquois NWR, Inc. also were announced and prizes were awarded to the winners. Winning photos can be seen on our Facebook page. (Contact: Tom Roster)



Celebrating National GIS Day (November 18): The Lower Great Lakes FWCO uses Geographic information System (GIS) in a variety of ways to support our resource management objectives. One of the more interesting ways we have used GIS is to identify Cisco, *Coregonus artedii*, habitat in Chaumont Bay, Lake Ontario. Cisco was once an abundant and important fish species in the Great Lakes system and Chaumont Bay is one of the historical spawning grounds of the species. Shown here is a compilation of habitat information collected with our Side Scan Sonar and Multibeam Echosounder equipment and analyzed within a GIS. It shows the important shallow area of Johnson Shoal along with our habitat imagery used to determine possible spawning/rearing grounds. This information will be used in other embayments along Lake Ontario to find new areas of possible re-introduction. (Contact: Chris Castiglione)



Progress with Hydrilla in the Erie Canal (November): The Lower Great Lakes FWCO partnered with the U.S. Army Corps of Engineers to treat and monitor *Hydrilla verticillata* in the Erie Canal this year. The pre-treatment monitoring this year showed a reduction in the biomass of Hydrilla when compared to 2014. A large section of the canal was successfully treated with Aquathol-K in July. The post-treatment monitoring, conducted from August through October, showed that the treatment was very effective. The success of the treatments in the last two years may indicate that the U.S. Army Corps of Engineers could implement a more targeted, smaller scale treatment next year. (Contact: Heidi Himes)

