

Great Lakes Center Newsletter

Fall 2015



Jo Johnson and Josh Fisher electrofishing for emerald shiners in Cattaraugus Creek.

IN THIS ISSUE

Outreach experience for Emerald Shiner Project	2
GLES programs growing	2
Chautauqua Lake outlet survey	3
WNY PRISM collects purple loosestrife beetles	4
International bivalve conference a success	4
Lake Michigan intensive sampling	5
Graduate student bios	6

Emerald Shiner Project: Year Two

by Steve Fleck, Colleen Kolb, and Jo Johnson, graduate students

The second field season of the **Emerald Shiner Project** has come to a close and three graduate students have joined the team: Colleen Kolb and Jo Johnson are new to the project, and Steve Fleck was previously a technician during the 2014 field season. Steve has spent the season sampling marinas for larval fish and mapping aquatic vegetation on the Niagara River. Jo worked this summer as a laboratory technician completing stomach content and stable isotope analysis. Colleen began her position in early September, and will be conducting fatty acid analysis and larval fish identification.

This season, a large effort was focused on mapping vegetation and substrate within shallow areas on the upper Niagara River; Steve coordinated this effort in collaboration with the Army Corps of Engineers and was joined by the University at Buffalo PhD student, Brandon Sansom, who measured water velocity. The crew collected and identified plant species and used a sonar technique to map the vegetation beds. Additionally, a ponar grab was used to collect and categorize substrate.

One of the primary objectives of this project is to determine the emerald shiners' role in the upper Niagara River ecosystem. Jo has finished up identifying the stomach contents of last year's emerald shiners and is working

now on determining the stable isotopes of carbon and nitrogen of shiners and their predators. Colleen will be working on fatty acid analysis of both the emerald shiner and its diet. With this data we will be able to get a better understanding of how fatty acids are transferred up the food web.

Jake, Chris, John, and Steve continued their biweekly rotation of electroshocking and larval seining throughout the upper Niagara for the entirety of the summer. In addition to their field duties, they have been collecting data for their respective theses. Jo fills in for them when needed, and Jake has been teaching both her and Steve how to drive the boats and operate equipment for next year's field season.

This project is a unique experience because we are learning how to be independent scientists both in the field and the laboratory. As graduate students, we are expected to conduct research on our own, while also collaborating with our peers. This summer has been a great opportunity for us all to pool our knowledge, as well as encourage each other to discover new skill sets. •

Please follow the Emerald Shiner project on their [website](#) or on [Facebook](#) and other social media platforms.