

## Partnership Creates International Success Story for Design & Use of Trawling Technology

**B**ecause fish communities influence the nutrient dynamics and amount of plankton in waterbodies, fish community structure is an excellent indicator of water quality. In the Czech Republic, water quality in large drinking water reservoirs is monitored using fish community indices from trawling operations. Czech scientists, however, have experienced difficulties trawling in inshore areas of large inland reservoirs. This situation provided a unique opportunity for the New York and Rhode Island Sea Grant programs and the Memorial University of Newfoundland (MUN) to organize a joint workshop to bring trawling technology to inland trawlers in the Great Lakes and European Union.

During fall 2008, the three collaborating organizations conducted a three-day trawling gear design workshop for freshwater users. The workshop featured presentations on trawl designs and vessel demonstrations of variable trawl designs on fish catches, and participation aboard a research trawler along the Atlantic Coast.

Among those attending the workshop was Dr. Tomas Juza from the Hydrobiology Institute at Cseka Budejovice. Juza represented the interests of 14 countries. To facilitate his learning, New York Sea Grant organized meetings and participation on trawl sampling with fisheries assessment staff from Lakes Erie and Ontario. Juza took photos and detailed calculations on a variety of design aspects of the trawling vessels he was aboard.

After completing his stay in the U.S., Juza said, "This has been a perfect learning experience for me. My country will use what I and colleagues from Russia and Finland have learned to design and build a trawling vessel for use in assessing



*Above: This new trawling-vessel combination was designed after EU nations sent a representative to a Sea Grant workshop and field tours.  
Photo: Hydrobiology Institute at Cseka Budejovice*

adult fish populations in Czech reservoirs that are stocked for recreational fishing."

As a direct result of the workshop, researchers in the Czech Republic developed a new trawl-vessel combination fabricated in Norway and a revised sampling protocol that allows them to successfully trawl in nearshore areas. The gear and sampling program have been successfully used in a government-supported water quality monitoring program in two drinking water reservoirs in the Czech Republic and in Austrian lakes. The reservoirs supply more than 100,000 people with drinking water.

In 2009, Juza reported to New York Sea Grant staff, "This year was a breakthrough in adult trawling in the Czech Republic. According to the new trawl plan, we successfully caught dominant species (here) and in Austrian lakes. With special thanks to NY Sea Grant...the trawling project in the Czech Republic is developing very well."

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This project meets the performance measures of Sea Grant's Healthy New York Coastal Ecosystems focus area.

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