



## U.S. Fish & Wildlife Service

### Alpena Fish and Wildlife Conservation Office

#### FY 2008 Station Activities

## Aquatic Invasive Species

Aquatic invasive species are one of the most significant threats to fish and wildlife and their habitats. Local and regional economies are severely affected with control costs exceeding \$123 billion annually. The Fisheries Program has focused its efforts on preventing introductions of new aquatic invasive species, detecting and monitoring new and established invasives, controlling established invasives, providing coordination and technical assistance to organizations that respond to invasive species problems, and developing comprehensive, integrated plans to fight aquatic invasive species.

## Lake Huron and St. Marys River Ports Surveyed for New Populations of Invasive Species

*Submitted by Anjanette Bowen  
Fishery Biologist*

The Alpena FWCO conducted surveillance for new populations of invasive species and documented the existing fish community at shipping ports and rivers in northwestern Lake Huron and the St. Marys River during early October 2007.

Thirteen locations, including seven sites in Lake Huron and six sites in the St. Marys River, were surveyed with bottom trawling gear. Thirty minutes of effort was targeted at each sampling site.

Thirty-three species were captured, including 29 species in Lake Huron and 19 species in the St. Marys River in 185 and 115 minutes of effort respectively. Bottom water temperatures ranged from 14.0°C to 21.2°C and averaged 17.4°C in Lake Huron and 15.2°C in the St. Marys River.

No new populations of invasive species were detected. Eurasian ruffe were not found at any locations, and round goby continue to persist at Lake Huron locations. Neither ruffe nor goby have been found in the St. Marys River to date. Biologist Bowen coordinated survey efforts with assistance from Biologists Kowalski, Ania, and Boase.



Alpena FWCO is committed to the conservation of native species through the monitoring and control of aquatic invasive species. This effort is consistent with “Aquatic Invasive Species” and “Aquatic Species Conservation and Management” priorities of the Service’s Fisheries Program Vision for the Future.

## **Invasive Species Information Provided at Great Lakes Captains Association Conference**

*Submitted by Anjanette Bowen  
Fishery Biologist*

On January 17, 2008 Anjanette Bowen of the Alpena Fish and Wildlife Conservation Office presented information on Aquatic Invasive Species at the Great Lakes Captain's Association’s annual "Industry Days" conference held in Traverse City, Michigan.

Bowen provided a PowerPoint presentation on problems associated with some invasive species currently found in the Great Lakes. She also provided information on Asian Carp, carp species that are not found in the Great Lakes but are within 50 miles of entering the system via the Mississippi and Illinois River systems. Information on the Chicago Shipping and Sanitary Canal Dispersal Barrier Project in Illinois was provided as well. Approximately 150 people attended the event.



Public education regarding invasive species is an important means of preventing their spread and helps promote healthy native species populations. This effort is consistent with the Fisheries Program’s Vision for the Future priorities of “Aquatic Invasive Species” and “Public Use.”

## **Asian Carp Information Provided at Michigan Environmental Health Association’s Annual Education Conference**

*Submitted by Anjanette Bowen  
Fishery Biologist*

Alpena Fish and Wildlife Conservation Office (Alpena FWCO) Biologist Anjanette Bowen was invited to provide information on Asian carp at the Michigan Environmental Health Association’s Annual Education Conference held March 11-14, 2008 in Bay City, Michigan. The focus of her presentation was to educate the environmental health community about Asian carp and the concerns associated with their spread within the United States, and potential spread into the Great Lakes.

The term “Asian carp” refers to four species of non-native carp (bighead carp, silver carp, black carp, and grass carp) that have become established and are spreading within the Mississippi River and its tributaries. Asian carp may reduce the diversity of native species and be hazardous to water users. There is also growing concern that Asian carp may spread into the Great Lakes.

Approximately 20 people attended the PowerPoint presentation which included topics on the identifying characteristics of Asian carp, their current distribution, and concerns associated with their increase in numbers and spread to new areas.



Efforts to slow the spread of Asian carp into the Great Lakes via the Chicago Dispersal Barrier Project were discussed. Bowen also provided information on what the public can do to prevent the spread of Asian carp and other invasive species.

At the end of the presentation, a short DVD was played that detailed the jumping behaviors and problems associated with Asian carp. The DVD, titled "Nuisance Fish," is an outreach tool that was recorded in partnership with Bill Dance, the Tennessee Wildlife Resources Agency, and the U. S. Fish and Wildlife Service. It is available for viewing from the Asian Carp Management website at the following web address: <http://www.asiancarp.org/>.

“The Michigan Environmental Health Association (MEHA) is a volunteer, non-profit organization dedicated to the improvement of health through management of the environment. It consists of over 750 professionals throughout the State of Michigan.” For more information about the Michigan Environmental Health Association visit their website at <http://www.meha.net/>.

Public education regarding invasive species is an important means of preventing their spread and helps promote healthy native species populations. This effort is consistent with the Fisheries Program’s Vision for the Future priorities for “Aquatic Invasive Species”, “Public Use”, “Partnerships and Accountability”, and “Aquatic Species Conservation and Management”.

## Michigan DEQ Hosts Annual Earth Day Celebration in Lansing

*Submitted by Anjanette Bowen  
Fishery Biologist*

The Michigan Department of Environmental Quality (DEQ) hosted their annual Earth Day Celebration at Constitution Hall in Lansing, Michigan on April 19, 2008. The celebration brought together over 14 organizations and agencies to staff 55 educational displays that helped teach

children about the Earth and issues impacting the Earth. Over 2,700 children attended the event from 31 area schools.

The USFWS was invited to participate in the celebration. Service Biologists Barbara Hosler (East Lansing Field Office) and Anjanette Bowen (Alpena Fish and Wildlife Conservation Office), along with Emily Finnell of the MDEQ Office of Great Lakes, staffed a display on Great Lakes Aquatic Invasive Species. The display included live sea lamprey, hands-on invasive species specimens, and fish games. The lamprey were provided by the USGS Hammond Bay Biological Station located in Millersburg, Michigan.



For more information on the Earth Day Celebration, visit the Michigan DEQ's website at <http://www.michigan.gov/deq>.

Public education is important to increase awareness about the problems associated with aquatic invasive species and to prevent or slow their spread to new areas. The Earth Day Celebration provided a great opportunity to partner with state conservation programs for a unified approach regarding aquatic invasive species issues. This activity supports the "Aquatic Invasive Species", "Public Use" and "Partnerships and Accountability" priorities of the Fisheries Program Vision for the Future.

## **Alpena FWCO Staff Conduct Annual Spring Ruffe Surveillance in Thunder Bay Area of Lake Huron**

***Submitted by Anjanette Bowen  
Fishery Biologist***

The Alpena FWCO conducted annual spring surveillance and monitoring to detect the presence of adult spawning Eurasian ruffe (ruffe) in the Thunder Bay River in Alpena, Michigan during the month of April 2008.

Small mesh (1.3cm) gill nets (33 x 1.6m) were used during the survey. Nets were set overnight for two nights a week during the week of April 14 through the week of April 28, and were fished at three to four index locations per set. Sampling targeted water temperatures and timing corresponding to when ruffe were captured in past years. No ruffe were captured following a total of 21 nights of sampling effort.

All bycatch were measured and released. Tissue samples were collected from yellow perch and walleye for a genetic study conducted by The University of Toledo - Great Lakes Genetic Laboratory to determine unique DNA markers for spawning populations of these native species.

Alpena FWCO staff that participated in this project included the following: Heather Rawlings, Scott Koproski, Adam Kowalski, and Anjanette Bowen.

Ruffe are an aquatic invasive species native to north central Europe that were accidentally introduced into the Great Lakes via ballast water from an ocean-going vessel. They resemble and are related to yellow perch but do not attain a size that is desirable for sportfishing harvest and consumption and are thought to compete with native species for food and habitat resources. Ruffe were designated an aquatic nuisance species in 1992 by the Aquatic Nuisance Species Task Force.



Ruffe were first found in the Thunder Bay area (Thunder Bay River) during monitoring efforts in 1995 and by 1999 they had become the most abundant bottom dwelling fish species captured from the Thunder Bay River. In 2002 the Alpena FWCO initiated this effort to remove spawning adults prior to egg release. Spawning phase ruffe were captured in 2002 and 2003, but have not been captured since. This survey has continued in an effort to detect the presence of ruffe that may persist in the area.

Aquatic nuisance species monitoring and control is essential to promoting healthy native species populations. This project is consistent with the “Aquatic Invasive Species” and “Aquatic Species Conservation and Management” priorities of the Fisheries Program Vision for the Future.

## **Alpena FWCO Participates in Michigan Sea Grant Sponsored Fun Day for Alcona Community Schools**

*Submitted by Scott Koproski  
Fishery Biologist*

Michigan Sea Grant sponsored a workshop for the 4<sup>th</sup> graders of Alcona Community Schools at the Sturgeon Point Lighthouse in Harrisville, Michigan on May 28, 2008. Fishery Biologist Scott Koproski of the Alpena Fish and Wildlife Conservation Office (FWCO) participated in the event, and his presentation focused on Aquatic Invasive Species (AIS) in Lake Huron. Biologist Koproski used visual aids to show students the differences between native species and the various AIS that have invaded the Great Lakes. Round goby, Eurasian ruffe, zebra mussels, and sea lamprey were just a few species that were discussed. Students were quite interested in the plasto-mounts and

specimens preserved in alcohol jars. Students were very inquisitive regarding how invasive species entered the Great Lakes, and biologist Koproski gave them suggestions on how to prevent the unintentional spread of these animals. Koproski explained how important it is for recreational fishermen not to release unused minnows (i.e. bait bucket transfer) and how proper boat cleaning can prevent the spread of AIS. A total of 75 students and 16 adults visited the Alpena NFWCO presentation.

This work is another example of the Alpena FWCO's commitment to the following Fisheries Program Vision Priorities: "Partnerships and Accountability", "Aquatic Invasive Species" and "Public Use."

## Aquatic Invasive Fish Species Awareness on Lake Huron

*Submitted by Anjanette Bowen  
Fishery Biologist*

The Great Lakes harbor a number of aquatic invasive species that are detrimental to the health and economy of the state. To help protect our waters from aquatic invaders, Michigan's Governor Jennifer Granholm declared June 1 through 8, 2008 as Aquatic Invasive Species Awareness week in Michigan. In early July, the Alpena Fish and Wildlife Conservation Office (FWCO) made efforts to raise public awareness about aquatic invasive species along the coast of Lake Huron through the distribution of WATCH identification cards for round goby, Eurasian ruffe, and bighead and silver carp.

In Lake Huron, both round goby and Eurasian ruffe have been found. They are considered nuisance species because they

compete with native species for food and habitat resources, and they grow and reproduce more rapidly than their native counterparts. Bighead and silver carp have not become established within the Great Lakes, but are within approximately 50 miles from Lake Michigan in the Illinois River system. The carp are thought to jeopardize the long term sustainability of native species by competing for food resources. They grow quickly to large sizes, and silver carp can jump at least 10 ft out of the water and thus threaten the safety of water users.

Alpena FWCO Biologist Bowen distributed the aquatic invasive species WATCH identification cards to over 39 bait and fishing license vendors along the coast of Lake Huron from Sault Ste. Marie to Bay City, Michigan from July 7 to 9, 2008. Cooperation with bait and tackle dealers is the key to getting the word out to the public who frequent these shops for fishing and boating supplies. Over 6,200 aquatic invasive species educational materials were distributed.



Alpena FWCO education efforts are focused on increasing public recognition of invasive species and providing information on what precautions should be taken to prevent the spread of these species. The ultimate goal is to prevent or slow the spread of aquatic invasive species to inland waters and new areas. Citizens can prevent the spread of unwanted aquatic invasive fish species by learning to recognize them, reporting any unusual fish to your local conservation office, disposing of unwanted live bait in the trash, and never releasing fish from one body of water into another.

For more information on Aquatic Invasive Species and how to protect your waters, visit the Protect Your Waters web site at <http://www.protectyourwaters.net/>. For more information on Michigan's Aquatic Species Awareness week visit the Michigan DEQ web site at [http://www.michigan.gov/deq/0,1607,7-135-3313\\_3677\\_8314-191392--,00.html](http://www.michigan.gov/deq/0,1607,7-135-3313_3677_8314-191392--,00.html).

## Alpena FWCO Participates in Invasive Species Workshop Hosted by Inland Seas Education Association

*Submitted by Anjanette Bowen  
Fishery Biologist*

On August 14, 2008, Fishery Biologist Anjanette Bowen provided a presentation about the Great Lakes Ruffe and Invasive Fish Surveillance and Monitoring Program during an Aquatic Invasive Species Workshop hosted by Inland Seas Education Association. The workshop was held in Traverse City at Northwestern Michigan College's Great Lakes Water Studies Institute and was designed to educate Americorps and Power Squadron members about aquatic invasive species. The workshop involved a number of speakers, including speakers from the Service's Sea Lamprey Management Office in Ludington, the University of Windsor, and others. Participants also conducted sampling aboard the Schooner Inland Seas. Sixteen people attended the event.

Public education is an important tool to prevent or delay the spread of invasive species to new areas, and it is an important role of the "Aquatic Invasive Species" and "Aquatic Species Conservation and Management" priorities of the Fisheries Vision for the Future.

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For more information about Alpena FWCO programs and activities contact us at:

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