



**U.S. Fish & Wildlife Service** 

**Alpena National Fish and Wildlife Conservation Office** 

# **August 2008 Station Activities**

The Alpena National Fish and Wildlife Conservation Office (NFWCO) is located in Alpena, Michigan and works to meet the U. S. Fish and Wildlife Service's Fishery and Ecosystem goals within Lake Huron, Western Lake Erie, and connecting waters of the St. Marys River, St. Clair River, and Detroit River. Activities include Aquatic Species Conservation and Management, Aquatic Habitat Conservation and Management, Aquatic Invasive Species, Cooperation with Native Americans, Leadership in Science and Technology, Partnerships and Accountability, Public Use, and Workforce Management – all of which are conducted in alignment with the Service Fisheries Program's Vision for the Future. The station is one of many field offices located within Region 3, the Midwest Region.

# **Aquatic Species Conservation and Management**

Alpena NFWCO Conducts 2008 Fishery Independent Lake Whitefish Survey in Northern Lake Huron

Submitted by Adam Kowalski Fishery Biologist

During July and August, staff from the Alpena NFWCO and volunteers conducted a fishery independent lake whitefish survey in 1836 Treaty waters of northern Lake Huron. Staff involved included Fishery Biologists Adam Kowalski and Scott Koproski, and Acting Project Leader Aaron Woldt. Volunteers included Jerry McClain, Clarence (Tuffy) Cross, Jerry Kowalski, and Colt Pfaff. The purpose of this survey is to collect fishery independent abundance and biological data on lake whitefish stocks in treaty waters for use in statisticalcatch-at-age population models that are updated annually to determine harvest regulations for tribal commercial fishers



Fishery biologists Kowalski and Woldt set gillnets during the fishery independent whitefish survey in northern Lake Huron. Photo by Scott Koproski.



#### in 1836 Treaty waters.

During the survey we set 24 overnight, variable mesh gill nets at randomly selected sites in lake whitefish management unit WFH 04 (Hammond Bay to Presque Isle) and lake whitefish management unit WFH 05 (Presque Isle to Alpena). All whitefish collected were measured, weighed, checked for lamprey wounds, fin clips, and tags, sexed, and assessed for maturity and visceral fat content. We took scales and otoliths for age determination and removed stomachs whole for diet analysis. Non-target species were worked up in a similar manner.

Twelve additional overnight, small mesh gill nets were set along the selected lake whitefish sites to capture juvenile lake trout. All juvenile lake trout collected were measured, weighed, checked for lamprey wounds and fin clips, sexed, and assessed for visceral fat content, maturity, and stomach contents. Scales and otoliths were taken from coded-wire-tagged and no-clip (presumed wild) lake trout for age determination.

Data collected in this survey will improve the accuracy of population models used to set lake whitefish harvest guidelines in 1836 Treaty waters of northern Lake Huron. Harvest limits allow fisheries to be executed while still protecting the biological integrity of the stocks. This outcome is consistent with the Service's goal of maintaining self-sustaining populations of native fish species while meeting the needs of tribal communities under the "Aquatic Species Conservation and Management" and "Cooperation with Native Americans" priorities of the Fisheries Program Vision for the Future.

## M/V Baird Remains in Dry-Dock

Submitted by Aaron Woldt Fishery Biologist

During the month of August, the *M/V Spencer F*. *Baird* remained in dry-dock at Basic Marine, Inc. in Escanaba, Michigan. The *M/V Baird*, christened in September 2006, is the U.S. Fish and Wildlife Service's lake trout stocking and fisheries assessment vessel in the Great Lakes. On July 15, 2008, the *M/V Spencer F. Baird* entered dry-dock to address paint and mechanical issues covered under the vessel's warranty.

Regional Chief of Hatcheries Todd Turner, Vessel Manager Aaron Woldt, Captain Mike Perry, Marine Engineer Bob Bergstrom, and Seamen Fishermen David Bohn have been working with staff from Basic Marine to address all warranty repairs as well as some optional repairs/upgrades to the vessel. All warranty

work was completed in mid-August, with the exception of repairs to the vessel's trolling gear.



The M/V Spencer F. Baird at dry dock in Escanaba, Michigan. Photo by Aaron Woldt.



The vessel must be back in the water for these repairs to be finished. Since mid-August, staff have focused their efforts on repairing the vessel's bow thruster, fuel oil system, air intake to the oxygen concentrator room, zinc anodes on the hull exterior, port propeller, transducer seals, and anti-fouling paint. As currently scheduled, the vessel will leave dry-dock in late September/early October and return to its home port in Cheboygan, Michigan prior to the fall stocking and assessment season in Lake Huron.

Since the 1970's, the Service has contributed to multi-agency lake trout rehabilitation efforts in the Great Lakes by planting hatchery reared lake trout. Rehabilitating native lake trout stocks is consistent with the Service's goal of building and maintaining self-sustaining populations of native fish species under the "Aquatic Species Conservation and Management" priority of the Fisheries Program Vision for the Future.

# **Partnerships and Accountability**

### Mussel Blitz at Shiawassee National Wildlife Refuge

Submitted by Jim Boase Fishery Biologist

Researchers from the Michigan Chapter of The Nature Conservancy, Genoa National Fish Hatchery, Jordan River National Fish Hatchery, East Lansing Ecological Services Office, Shiawassee National Wildlife Refuge (Refuge), and Alpena National Fish and Wildlife Conservation Office (NFWCO) met during the week of August 25 to conduct an extensive mussel survey of the rivers in and upstream of the Refuge. We sampled the Cass, Shiawassee, Tittabawassee, and Saginaw rivers. The goal of this survey was to determine the number of species of native mussels that still inhabit these rivers. Prior to the survey, there were five known species of native mussels located within the Refuge. On the first day of the survey we were able to identify eight native species, and by the end of the survey we had found 21 native species including two state listed mussels-the pink papershell and the lilliput.



Biologists Tony Brady (Genoa NFH), Barb Hosler (Lansing ES), George Buining (Genoa NFH), Dave Peters (Shiawassee NWR), Roger Gordon (Jordan River NFH), Jim McFee (Alpena NFWCO), and Jim Dastyck (Shiawassee NWR) sort mussels collected from the Tittabawassee River. Photo by Jim Boase.

Highlights from the survey were picked up by a number of local and regional newspapers, including:



The Detroit Free Press (<u>pdf version</u>) The Chicago Tribune (<u>pdf version</u>) The Flint Journal (<u>pdf version</u>) The Alpena News (<u>pdf version</u>)

In Michigan there are 45 species of native mussels, and one-third of those species are listed as threatened, endangered, or extirpated. This decline is attributed to water pollution, habitat loss, loss of fish host species, and the more recent introduction of zebra mussels.

Although no data have been analyzed at this point, our preliminary survey results indicate that there were variations in abundance and diversity of mussels from one location to another. We were disturbed by the discovery of the remains of thousands of mussel shells along the headwaters of the Saginaw River, which appeared to have died many years ago. However, along this same stretch of the river we did collect a number of live mussels. Also, it does appear that recruitment of mussels is still taking place. We found a number of young (less than five years old) mussels in the watershed. We plan to compare our mussel survey results with other recent and historical fishery survey results to determine if there are any correlations between the absence of native mussels versus the absence host fish species, or to



Biologist Jim McFee (Alpena NFWCO), Tony Brady (Genoa NFH), and Ed Devries (Shiawassee NWR) sort mussels collected from the Shiawassee River. Photo by Jim Boase.

determine if there are other correlations that may explain the decline in the number and diversity of the native mussels.

Funding for this project was provided by the Service's Challenge Cost Share Grant Program with inkind support provided by the Nature Conservancy and the various Service offices involved. Future plans by the group are to continue to identify mussel research needs and knowledge gaps within the Saginaw River and other Great Lakes Regions. The Alpena NFWCO will continue to promote existing partnerships and build new partnerships in an effort to solve ongoing resource problems related to native mussels in the Great Lakes Region.

This effort supports the "Partnerships and Accountability" and "Aquatic Species Conservation and Management" priorities of the Service's Fisheries Program Vision for the Future.

Partners included the following: The Nature Conservancy, Michigan Department of Natural Resources, Michigan Department of Environmental Quality, Michigan Natural Features Inventory, Shiawassee National Wildlife Refuge, and Ecological Services (East Lansing).



# Lake Huron PIT Tag Detection Enhanced

#### Submitted by Adam Kowalski Fishery Biologist

During the month of August, Fishery Biologist Adam Kowalski received a grant for \$17,575 from the Great Lakes Fishery Trust to purchase PIT tag readers and tagging equipment for commercial fishers in Lake Huron and western Lake Erie. Currently, the Alpena National Fish and Wildlife Conservation Office (NFWCO) partners with nine state-licensed commercial fishers operating 14 vessels primarily in Saginaw Bay that record bio-data and externally tag lake sturgeon encountered as by-catch in their trap nets. An additional 15 vessels, consisting of state, tribal, and provincial commercial fishers, have agreed to participate in this project, expanding the fishing area from western Lake Erie to northern Lake Huron. This grant will allow twenty three PIT tag readers to be purchased to enhance PIT tag detection capabilities in Lake Huron and Lake Erie. The new PIT tag readers will be distributed as follows: 8 to Saginaw Bay fishers, 6 to Tribal fishers in northern Lake Huron, and 5 to U.S. and 4 to Canadian commercial fishers in western Lake Erie. In addition, 700 PIT tags and 84 PIT tag injectors will be purchased for this expanded program.

This project will also supply the15 new commercial fishers with Floy cinch tags, cinch tag applicators, a soft measuring tape, hacksaw, fin ray envelopes/data sheets, and a waterproof storage box. The Alpena NFWCO will enter all PIT tags (new and recaptured) into the lake sturgeon tag identification database, a project also funded by the Great Lakes Fishery Trust in 2004.

This project will improve information sharing between agencies and commercial fishers that may encounter tagged lake sturgeon. Improved data sharing will lead to a better understanding of the population trends and movement patterns of lake sturgeon in the Great Lakes. The multi-partner nature of this work is consistent with the Service's goal of establishing and maintaining open, interactive communication with its partners under the "Partnerships and Accountability" priority of the Fisheries Program Vision for the Future.

## Secretary Kempthorn Visits Detroit River International Wildlife Refuge for Signing Ceremony

#### Submitted by Jim Boase Fishery Biologist

Plum Creek Bay was added to the Detroit River International Wildlife Refuge (Refuge) on Saturday, July 26, 2008. In a signing ceremony at Monroe County Community College with Secretary of the Interior Dirk Kempthorn, Congressman John D. Dingell (D-MI15), Congresswoman Marcy Kaptur (D-OH09), and Michigan Lt. Governor John D. Cherry, Jr. (D), Plum Creek was transferred from Monroe County to the U.S. Fish and Wildlife Service.



Plum Creek Bay is comprised of 126 acres of unique coastal wetland habitat that serves migratory birds as they migrate each year through the Great Lakes Flyway and fish that use the wetland as spawning and nursery habitat. With over 90% of coastal wetlands either lost or destroyed in the region, saving places like Plum Creek is critical to the health of fish and wildlife species that depend on coastal wetland areas.

The importance of Plum Creek Bay was identified in 2005 when biologists from the Alpena National Fish and Wildlife Conservation Office met with partners from the Refuge, the East Lansing Ecological Services Office, the Michigan Department of Natural Resources, and the USGS Great Lakes Science Center to identify the best



Congressman John D. Dingell speaks at Monroe Community College for the sighing of Plum Creek from the County of Monroe to the Detroit River International Wildlife Refuge. Photo by Jim Boase.

remaining wetlands in Michigan waters of western Lake Erie. With monies secured through the Service's Challenge Cost Share Grant Program, a near-shore fishery survey was conducted in the fall of 2005 and again in the summer of 2007. Prior to that survey, Plum Creek had last been surveyed in the 1980's.

Our goal in 2005 and 2007 was to provide baseline information for the Refuge about what species, both native and exotic, were found in places like Plum Creek. The Refuge provides some of the last remaining natural wetland areas available in the Detroit River and western Lake Erie. Those nursery areas are critical to the early life stages of many species of sport fish, as well as for some state listed species. Historical records from past surveys identified over thirty species of fish using those wetland habitats for either spawning or nursery areas. Results from the 2005 and 2007 survey work determined that a total of 46 different fish species were collected in the near-shore habitats of Lake Erie. More importantly, young-of-the-year age groups of major sport fish species like walleye, large mouth bass, small mouth bass, northern pike, and other sunfishes were collected along with one state listed species

Those fishery results proved helpful in convincing Monroe County that Plum Creek Bay would be best protected if it became part of the Detroit River International Wildlife Refuge. On July 26, Secretary Kempthorn was very pleased to "accept Plum Creek Bay into the Detroit River International Wildlife Refuge. The Department of the Interior is grateful for Michigan's generosity and we look forward to preserving this land so generations of Americans and Canadians will be able to enjoy it for years to come." Congressman Dingell added: "Plum Creek Bay site is precious – one of Michigan's great treasures. Now, we can be sure it will be protected for future generations."

This ceremonial event provided an excellent opportunity to interact with federal, state, and local governing officials along with interest groups working in southern Michigan. This meeting at the



Monroe Community College Campus provided the opportunity to explain the Service's mission and efforts to manage resources in the Great Lakes. This outreach event supports the "Partnerships and Accountability" and "Aquatic Species Conservation and Management" priorities of the Fisheries Program Vision for the Future.

Partners included Michigan DNR, USGS, Michigan Sea Grant, University of Michigan, Michigan State University, Eastern Michigan University, DTE Energy Foundation, BASF Corp., DaimlerChrysler, Ford Motor Company/AutoAlliance, General Motors Corp., ITC Transmission, Hamilton Anderson Associates, Praxair, and Wade Trim, Metropolitan Affairs Coalition International Wildlife Refuge Alliance, Wild Bird Unlimited, CN Railroad, Riverside Kayak Connection, Community Foundation for Southeast Michigan, and Friends of the Detroit River.

### Congressional Staff Tour Visits Huron Erie Corridor

Submitted by Jim Boase Fishery Biologist

On August 29, Fishery Biologist James Boase from the Alpena National Fish and Wildlife Conservation Office was invited to present information about ongoing projects in the Huron-Erie Corridor to congressional staff members. The meeting was hosted by members from USGS including Dave Bornholdt (Acting Regional Executive, Midwest Area), Leon Carl (Great Lakes Research Center Director), Norm Grannemann (Great Lakes Project Coordinator), Bill Lukas (Congressional Liaison), and Tim West (Congressional Affairs Director). Congressional staff members present

included Chris Adamo (Legislative Counsel, Sen. Debbie Stabenow), Harold Chase (Regional Representative, Sen. Carl Levin), Mary Cronin (Legislative Director, Midwest-Northeast Coalition),



Bruce Manny (USGS) talks about the lake sturgeon research during the Congressional Staff Tour along the Detroit River. Photo by Ben Gielo.

Ben Gielow (Legislative Assistant, Rep. Vernon Ehlers), Chris Salotti (Assistant Legislative Counsel, Department of the Interior), Pervaze Sheikh (Natural Resources Policy Analyst, Congressional Research Service), and Harold Upton (Natural Resources Policy Analyst, Congressional Research Service).

The group met on the Diamond Belle Boat at Hart Plaza in front of the Renaissance Center on the Detroit River. The party shuttled along the Detroit River from Hart Plaza downriver to Fighting Island. Along the way, guest speakers including Bruce Manny (USGS), Gary Towns (Michigan



DNR), Kurt Kowalski (USGS), and Jim Boase presented information about the Huron Erie Corridor Initiative and the Fighting Fish Island Habitat Project that have been ongoing for the past two years.

This project is an example of the Alpena NFWCO's commitment to the following Fisheries Vision Priorities: "Partnerships and Accountability" and "Aquatic Species Conservation and Management."

Partners included the following: USGS Great Lakes Science Center, Michigan DNR Lake Erie Management Unit, Detroit River International Wildlife Refuge, Ontario Ministry of Natural Resources, Department of Fisheries and Oceans Canada, DTE Energy, BASF Corporation, and Friends of the Detroit River.

# Alpena NFWCO Biologists Participate in Wild Wetlands Day at Partridge Point

Submitted by Andrea Ania Fishery Biologist

Alpena NFWCO Biologists Anjanette Bowen and Andrea Ania participated in Wild Wetlands Day on August 22, 2008 in Alpena. The event was organized by Erin Riopelle, a Huron Pines Americorps Member currently working for HeadWaters Land Conservancy in Gaylord, and held at Partridge Point Wetland. Partridge Point Wetland is a ten acre piece of prime coastal wetland that is protected by the HeadWaters Land Conservancy through a conservation

easement with a private land owner. The goal of this event was to provide children an opportunity to explore and learn about wetland habitats, plants, and animals. Approximately four children attended the event.



Wild Wetlands Day participants watch for wildlife and learn about the Partridge Point wetland. Photo by Terri Riopelle.

Bowen taught participants to use field observation skills to identify fish species, how different adaptations help fish survive, and how aquatic invasive species affect the food web. Ania and Brandon Schroeder, District Sea Grant Extension Educator, led participants on a nature hike to explore the wetland habitats present on the property and associated plant and animal communities. They emphasized the significant impact invasive species can have on wetland communities.

Service participation in events like the Wild Wetlands Day is consistent with the "Partnerships and Accountability" and "Public Use" priorities of the Service's Fisheries Program Vision for the Future.



## Animal Impression Tracks Acquired for Outreach Activities

Submitted by Scott Koproski Fishery Biologist

Children are our future! Without capturing young minds during outreach events, the importance of our natural resources may be lost on future generations. Today, families are lucky to have dinner together, let alone get outside for hikes in the woods, fishing, hunting, or wildlife viewing.

With this in mind, biologists from the Alpena National Fish and Wildlife Conservation Office (NFWCO) have been brainstorming on how to get children outside so they can touch, feel, smell, and experience all the wonderful things that the natural resources have to offer. As a result, the Alpena NFWCO has enhanced its outreach activities to capture the interest of kids.

Over this past summer, biologist Scott Koproski contacted Dr. John Roese, a wildlife biologist from Lake Superior State University (LSSU). Biologist Koproski was enrolled in Dr. Roese's mammalogy class when he attended LSSU. One emphasis of the class was to learn to identify animals by their pelts, skulls, and tracks. The Alpena NFWCO had already developed an animal pelt and skull collection to augment their outreach activities, so biologist Koproski contacted Dr. Roese to see if he could provide positive impression tracks of animals from the region. Dr. Roese provided the Alpena NFWCO with over 80 positive track impressions representing 22 different species.

The animal pelts, skulls, and tracks have been used during recent outreach events. These visual aids have really captured children's interest, resulting in more meaningful and captivating experiences for both event participants and Alpena NFWCO staff.

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

# **Aquatic Invasive Species**

### Alpena NFWCO 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.

# **Public Use**

### Alpena NFWCO Skull Collection Ready for Use

#### Submitted by Adam Kowalski Fishery Biologist

The Alpena National Fish and Wildlife Conservation Office (NFWCO) prepared an animal skull collection of North American mammals for use as an outreach tool to connect children with nature. The skulls were donated by a local taxidermy and trapping supplier. Currently the Alpena NFWCO has 28 skulls from 15 different animals. The collection is broken up into two sets. Set 1 is for the children to handle and examine, and Set 2 is for display only.

Fishery Biologists Adam Kowalski and Scott Koproski observed the process of preparing and cleaning animal skulls, and Kowalski led the skull preparation efforts. The skulls were boiled, and all fur and flesh were removed. The skulls then went into a degreasing solution before being bleached and clear-coat varnished for protection. The process took about two weeks per skull to complete, with multiple skulls being completed at one time. This collection is not yet complete, as there are many more local mammal species to collect. The office's goal is to have three skulls of every species to complete the collection.

This project will be used to help connect children with nature by describing some of the animals they may see in their home area and allowing them to touch and see the different sizes, colors, and characteristics of these animals. This project is consistent with the Service's Fisheries Program Vision for the Future priority of working with partners to identify and implement outreach and educational activities.

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

U.S. Fish and Wildlife Service Alpena National Fish and Wildlife Conservation Office 145 Water Street, Federal Building Rm. 204 Alpena, MI 49707 Phone: 989-356-5102 Web site: http://www.fws.gov/midwest/alpena/