



U.S. Fish & Wildlife Service - Midwest Region

Fisheries & Aquatic Resources Program

# *fish lines*

## **The River that Binds**

**Prioritizing Restoration  
Efforts within a  
Watershed:  
SHC in Practice**

**Lake Sturgeon  
Restoration Efforts on  
White Earth Reservation**

**Deep Water  
Horizon Oil Spill:  
Carterville FWCO Office  
Assists with Clean Up**



Vol. 8 No. 12  
September 2010

# Fish Lines

Fisheries & Aquatic Resources Program - Midwest Region

The Mission of the U.S. Fish & Wildlife Service: working with others to conserve, protect and enhance fish, wildlife, and plants and their habitats for the continuing benefit of the American people.

The vision of the Service's Fisheries Program is working with partners to restore and maintain fish and other aquatic resources at self-sustaining levels and to support Federal mitigation programs for the benefit of the American public. Implementing this vision will help the Fisheries Program do more for aquatic resources and the people who value and depend on them through enhanced partnerships, scientific integrity, and a balanced approach to conservation.

## Features

### 4 Deep Water Horizon Oil Spill: Carterville FWCO Office Assists with Clean Up

Staff from the Carterville FWCO assisted with the Gulf oil spill.  
BY ROB SIMMONDS, CARTERVILLE FWCO

### 6 Prioritizing Restoration Efforts within a Watershed: SHC in Practice

Partners begin to develop an approach to evaluate road/stream crossings throughout an entire watershed.  
BY STEWART COGSWELL, GREEN BAY FWCO

### 8 Lake Sturgeon Restoration Efforts on the White Earth Reservation

Lake sturgeon have been annually reintroduced to waters of the White Earth Indian Reservation since 2001.  
BY SCOTT YESS, LA CROSSE FWCO

### 9 The River that Binds

On September 11th, 268 volunteers from all walks-of-life joined forces to clean-up one of America's great rivers.  
BY COLBY WRASSE & PATTY HERMAN, COLUMBIA FWCO



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Motorboat Operator Certification Course (MOCC) instructors Adam Kowalski of the Alpena Fish and Wildlife Conservation Office (FWCO), Scott Koproski (Alpena FWCO), Steve Witt (National Park Service), Bob Carr and Tony Velat (U.S. Coast Guard) put on a three day MOCC course in Alpena, Michigan, for nine students, with in-water survival and the proper use of floatation devices a critical part of the training.

To view other issues of "Fish Lines," visit our website at:  
<http://www.fws.gov/midwest/Fisheries/library/fishlines.htm>

# Fish Lines

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**Technician Jacob Nichols of the Sea Lamprey Management Program services a cryptic adult sea lamprey trap in Black Mallard Creek, a tributary of northern Lake Huron.**

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## Conservation Briefs ..... 10-22

- 10 Alpena FWCO Hosts Dinner for Commercial Fishers Helping with the Lake Sturgeon Tagging Project  
BY ADAM KOWALSKI, ALPENA FWCO
- 16 Early Dismissal - Sullivan Creek  
BY JAMES ANDERSON, SULLIVAN'S CREEK NFH
- 10 Small Dams Workshop Held in Grayling, Michigan  
BY RICK WESTERHOF, GREEN BAY FWCO
- 16 Discover Your Sense of Wonder at Genoa NFH  
BY JENNY BAILEY, GENOA NFH
- 11 Fish Health Center Hosts Baitfish Workshop  
BY CORY PUZACH, LA CROSSE FHC
- 18 Jordan River NFH Cooperates with Grand Traverse Band of Ottawa and Chippewa on Fall Feast Fishing Event!  
BY ROGER GORDON, JORDAN RIVER NFH
- 11 Ohio River Basin Alliance Continues to Develop  
BY ROB SIMMONDS, CARTERVILLE FWCO
- 18 Sturgeon Elusive on Awareness Day  
BY JENNA MERRY, LA CROSSE FWCO
- 12 Higgins' Eye Found in the Wapsi  
BY SCOTT YESS, LACROSSE FWCO
- 19 M/V Spencer F. Baird Hydro Acoustic and Trawling Assessments: Ready to Go!  
BY DALE HANSON, GREEN BAY FWCO
- 12 Alpena FWCO Conducts 2010 Fishery Independent Lake Whitefish Survey in Northern Lake Huron  
BY ADAM KOWALSKI, ALPENA FWCO
- 20 Construction Begins! Moving Forward to Improve Fish Passage for Niangua Darters in Dallas County, Missouri  
BY JOANNE GRADY, COLUMBIA FWCO
- 13 Abundant Harvest of Fall fingerling Lake Sturgeon Assists State and Tribal Partners to Restore Midwestern Populations  
BY DOUG ALOISI, GENOA NFH
- 20 The Removal of Nashville Dam and Maple Hill Dam in the Thornapple River Watershed  
BY JOANNE BARNARD, BARRY CONSERVATION DIST. & RICK WESTERHOF, GREEN BAY FWCO
- 14 Hunting and Fishing Days Participants Find that Even a Carp can become a Swan  
BY TERESA CAMPBELL, CARTERVILLE FWCO
- 22 The "Finn Shack" Takes on a New Look  
BY NICK STARZL, IRON RIVER NFH
- 15 Fish Brains a Big Hit  
BY SARAH BAUER, LACROSSE FHC
- 22 River Biologist in Training  
BY KYLE CALCOTE & PATTY HERMAN, COLUMBIA FWCO
- 15 The Green Bay FWCO Assists Marinette County with Environmental Field Day  
BY STEWART COGSWELL, GREEN BAY FWCO

Congressional Actions .....	23
Midwest Region Fisheries Divisions .....	24
Fisheries Contacts .....	25
Fish Tails .....	26

# Deep Water Horizon Oil Spill: Carterville FWCO Office Assists with Clean Up

BY ROB SIMMONDS, CARTERVILLE FWCO

The volunteer spirit was alive and well in southern Illinois and the opportunities to assist with the oil spill were plentiful. Generally speaking,



-USFWS/BradRogers

**Fish and Wildlife Service employees take airboats through Grand Bay National Wildlife Refuge to rescue an oiled brown pelican as part of the Deep Water Horizon Oil Spill response.**

the Fish and Wildlife Service led in the areas of wildlife recovery (saving oiled wildlife and helping wildlife – especially turtles – avoid the oil spill) and in assessing the damage to wildlife. This required a consistent effort of several hundred people over the course of several months, including many Fish and Wildlife Service employees from across the country. The Carterville Fish and Wildlife Conservation Office (FWCO) provided all of our field staff to assist with this effort, from the biotech to the project leader. In addition, Greg Conover, the Large Rivers Coordinator for the Midwest Region (co-located with the Carterville FWCO), was also deployed to assist.

Greg Conover was deployed to Venice, Louisiana, for two weeks in late August as a technical specialist. He worked as a bio team leader supervising Wildlife Recovery and Reconnaissance teams working

throughout the Mississippi River Delta area in Plaquemines Parish. He assisted with the demobilization of the Dennis Pass Barge that was co-located with the Louisiana Department of Wildlife and Fisheries at the Pass a Loutre Wildlife Management Area and then worked with wildlife recovery teams operating out of Buras, Louisiana.

Biotech Brad Rogers was stationed out of Moss Point, Mississippi, working on a wildlife recovery team for two weeks in early August. The team was responsible for surveying the Pascagoula, Gautier, Ocean Springs and Biloxi, Mississippi, areas. A typical day involved a briefing at 6:00 AM where orders for the day were received, taking a “VOO” (Vehicle of Opportunity) boat out to the assigned barrier island to survey for dead, injured and oiled wildlife, responding to



-USFWS/NateCaswell

**In response to an injured wildlife call, a sea turtle hatchling was found on West Ship Island.**



-USFWS/BradRogers

**An oil covered boom washed ashore on Round Island, while a Fish and Wildlife Service biologist walks the beach in search of oiled wildlife (background).**

dispatch calls, and walking beaches on the mainland. At the time Brad was deployed, about 30 birds a day were located throughout the entire spill area. Nevertheless, he was able to recover around 20 dead birds and three live birds throughout his deployment. This was also an opportunity for many firsts for Brad: first visit to the Mississippi Gulf Coast, first time working on an oil spill, first time riding in an airboat, and the first time after receiving his bachelor's degree in wildlife resources that he worked with wildlife and not fish.

Biologist Nate Caswell was the first to deploy from our office, spending two weeks in mid-July working on a wildlife recovery crew in western Mississippi. Nate and his partner Joe Metzmeier of the U.S. Forest Service spent a good deal of their time scouring the beaches of the Gulfport, Mississippi, area for dead or oiled birds. They also spent time working on West Ship Island, one unit of the Gulf Islands National Seashore. Nate and Joe were able to recover several sick birds that were hopefully able to recover.

Assistant Project Leader Sam Finney was deployed for two weeks starting in late August. He worked in the Natural Resources Damage Assessment and Restoration office in Daphne, Alabama, as the Shoreline Assessment Coordinator. He worked with refuge managers, National Sea Shore managers and Bureau of Land Management staff to assure that all fieldwork of the shoreline assessment group was done properly on Department of the Interior (DOI) lands with full communication between all groups. He also worked with the U.S. Geological Survey, National Oceanic and Atmospheric Administration and all other interested parties to begin development of a benthic sampling plan that will account for ecosystem damage to DOI trust resources (in particular: gulf sturgeon, piping plover, DOI sensitive

lands, listed beach mice, migratory waterfowl, and other water birds) through food chain impacts beginning at the benthic levels and carrying through to higher trophic guilds.

Project Leader Rob Simmonds was deployed to the Regional Support Center in Atlanta, Georgia, for three weeks beginning on July 21. It was an interesting experience given he never saw any oiled wildlife, any oiled beaches, nor any other signs of an oil spill. As the Assistant to the Oil Spill Response Lead, his role was to help provide assistance and general trouble-shooting to the folks on the ground. Days were filled with calls, meetings and discussions to keep the flow of responders coming to the oil spill and to address issues raised by the field.

We are all glad to have been a part of the Fish and Wildlife Service response to this disaster, but for the sake of our natural resources, hope that there is not a need to be called again anytime soon.

For further info about the Carterville FWCO: <http://www.fws.gov/midwest/Fisheries/library/StationFactSheets/carterville.pdf>

# Prioritizing Restoration Efforts within a Watershed: Strategic Habitat Conservation in Practice

BY STEWART COGSWELL, GREEN BAY FWCO

Which watershed is most important? Why work on a particular stream? How many road/stream crossings are barriers? Where do I start?



-USFWS

The three principle investigators pose for a photo at Washburn Falls on the Popple River while collecting data for a road/stream crossing and barrier inventory. (Lt. to Rt.) Stewart Cogswell-Fish and Wildlife Service, Matt Diebel-Wisconsin Department of Natural Resources and Mark Fedora-U.S. Forest Service/The Nature Conservancy.

These are many of the persistent questions asked by habitat restoration biologists across the country. In order to address these and other questions, a group of natural resource professionals in northeastern Wisconsin and upper Michigan began to develop an approach to evaluate road/stream crossings throughout an entire watershed. The objective of this project was to develop methods that could be used to quantify connectivity patterns and prioritize remediation efforts across the Great Lakes basin. The Pine-Popple watershed case study illustrates the application of these methods and provides a first look at watershed-scale patterns of stream connectivity that are functionally relevant for stream-resident fishes. We hope that as these methods are applied across larger areas, we may begin to understand the broad scope of influence that road crossings have on stream connectivity, and to make progress toward remediating the most significant negative effects. Population persistence of aquatic organisms is influenced by connectivity of habitats across the stream

network. Connectivity allows for movement away from disturbance or predation, and movement toward seasonal mating areas and food sources. Road crossings over streams can act as barriers to movement.

This in turn may prevent recovery of populations following disturbance and increase extinction risk by fragmenting populations. Proper road crossing design can minimize these impacts. Reconstruction of existing crossings can also facilitate passage of organisms. This has the potential to be one of the most productive ways of improving habitat because minimal manipulation – the width of a road – can open up large reaches of connected habitat. However, because there are so many existing crossings (e.g., 62,000 in Wisconsin), methods are needed to prioritize restoration efforts. The objective of this project



-USFWS

Perched culverts like this inhibit or eliminate the ability of many fish species to move upstream within watersheds. This potentially limits access to critical habitat needed for key life history stages such as spawning and juvenile refuge areas.

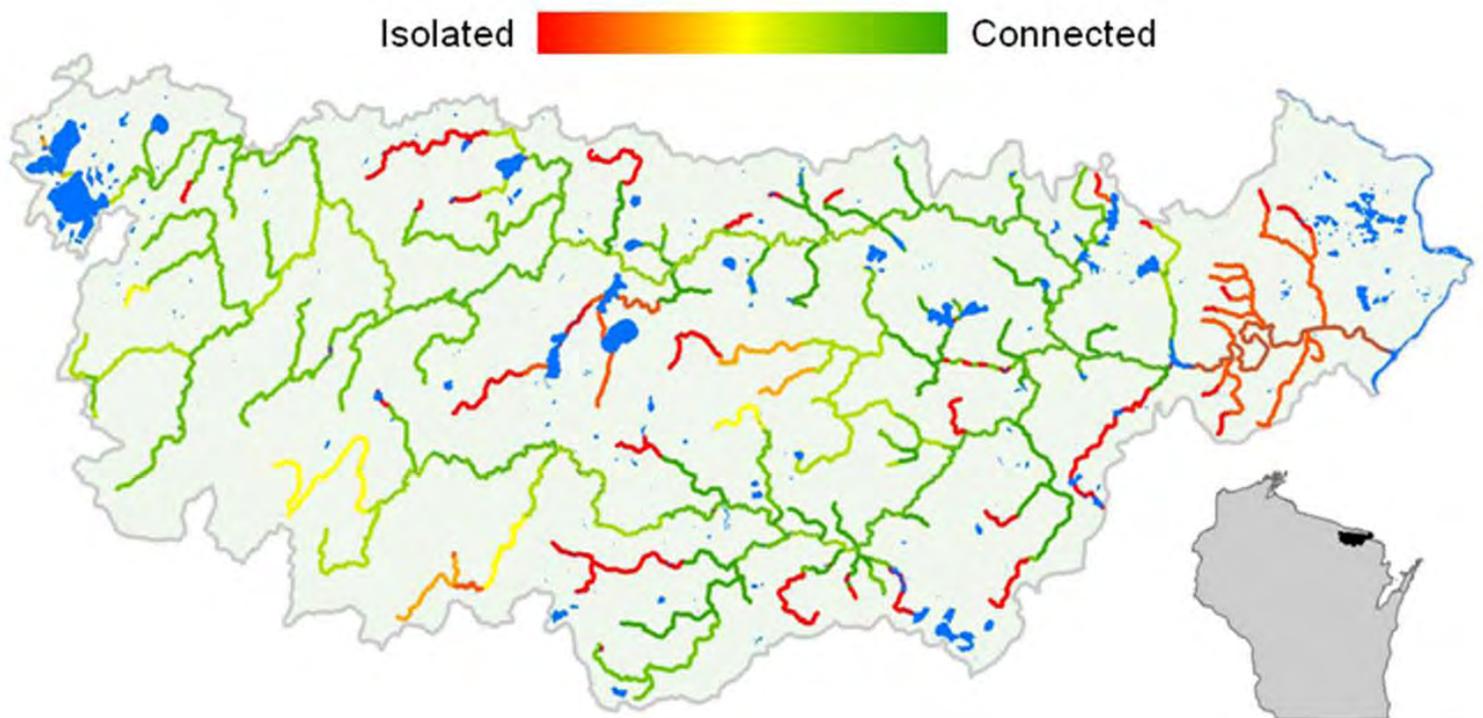
was to create a method to identify strategic road crossings whose reconstruction will most benefit stream fishes by restoring connectivity of fragmented stream sections.

Initial efforts focused on identifying all available data on road/stream crossings and then ground truth and survey all crossings. Over 300 crossings were surveyed in the Pine-Popple watershed. Data obtained from field surveys was used to populate the new model. The goal was to collect enough information on each crossing to estimate its passability by fish, and for problem crossings, to estimate the cost of replacing the existing structure with a fully passable structure. The estimate of passability was designed to represent the proportion of fish from all species and life stages that could pass the structure. Additional information on the condition of each structure was also collected to aid in maintenance planning. Initial runs of the model have shown that watershed connectivity is currently 62% with the existing road crossings and barriers. The model generates a prioritized list of all problem sites and also calculates the connectivity and improvement costs of individual sites. This is a potentially powerful tool that could aid managers to strategically identify road crossings where minimal

resource investment returns maximum habitat benefits. Knowing cost and connectivity allows resource managers to identify a watershed goal (e.g., 10% increased connectivity) and then be able to target sites that are within a predetermined budget.

This project is meant to be ongoing, evolving to best meet the needs of restoration managers across the Great Lakes basin. Many exciting avenues are being explored since this project has proved to be the catalyst for a new array of endeavors. The model is currently being updated to increase processing speed, identify a standard mapping format, and create a more user friendly interface. Data collection methods are also moving forward to meet the diverse needs of resource professionals performing landscape scale assessments. The standard passability datasheet is currently being transformed into a format that enables direct computer entry in the field. To further enhance the process, we are pursuing the most advanced field computers that will be able to take field data, geo-reference photos and GPS points, all from one unit. There is also progress towards developing or identifying additional data sheets that can be included with this effort to gather information on erosion, dams and geomorphology.

## Pine-Popple Watershed Connectivity Status



**Map of the Pine-Popple watershed illustrating the range of isolated and connected stream order segments. When a watershed contains numerous barriers that isolate or eliminate certain stream orders (habitats) from each other, it can have severe effects by causing decreased fish populations or extinction within a particular stream system.**

For further info about the Green Bay FWCO: <http://www.fws.gov/midwest/Fisheries/library/StationFactSheets/greenbay.pdf>

# Lake Sturgeon Restoration Efforts on the White Earth Reservation

BY SCOTT YESS, LA CROSSE FWCO

Lake sturgeon have been annually reintroduced to waters of the White Earth Indian Reservation in northwestern Minnesota since 2001. On October 5th, staff from the Genoa National Fish

months. The crew also transported the small lake sturgeon over 300 miles to the Reservation.

Volunteers also helped Fish and wildlife Service personnel tag each one of the sturgeon so its origin could later be traced. On the stocking day, Tribal Spiritual Leader Willie Wilson led a ceremony to bless the fish. The 2010 stocking is the most recent step to aid the restoration of this species here. Monitoring efforts indicate that lake sturgeon populations on the White Earth Reservation are increasing due to the survival and growth of the hundreds of fish stocked during the past decade.



-USFWS

**Students from the White Earth Indian Reservation release hatchery reared lake sturgeon into White Earth Lake as part of a restoration plan.**

Hatchery (NFH) returned here to stock approximately 8,000 fingerling lake sturgeon into White Earth Lake and another 5,000 sturgeon into Round Lake. Each fish traveled a very long journey to reach these destinations. This year's effort began in May at the Rainy River First Nations Hatchery in Canada. Personnel from the White Earth Natural Resources Department and the La Crosse Fish and Wildlife Conservation Office (FWCO) traveled there to assist Joe Hunter and his hatchery staff spawn several adult lake sturgeon. Prior to spawning, fin clips (tissue samples) were analyzed for viral disease pathogens by the La Crosse Fish Health Center. Because the results of these tests found no certifiable diseases, the eggs were later transported across the United States - Canadian border to Genoa NFH. Genoa's staff did a fantastic job rearing over 13,000 lake sturgeon to fingerling size (6 inches) in less than five

The efforts at the White Earth Indian Reservation are part of a larger coordinated initiative with the nearby Red Lake Indian Reservation and the Minnesota Department of Natural Resources to restore lake sturgeon in the Red River watershed. The joint lake sturgeon management plan will be re-evaluated this winter to determine future stocking rates and sites. It has been many years since lake sturgeon have reproduced in White Earth waters.

Hopefully within another 10 years, lake sturgeon will naturally spawn here once again ... that is the goal!



For further info about the La Crosse FWCO: <http://www.fws.gov/midwest/lacrossefisheries/>

# The River that Binds

BY COLBY WRASSE & PATTY HERMAN, COLUMBIA FWCO

Take a look at any map and you will quickly see that rivers are often used as dividing lines – separating cities, counties, states and even countries. But these same rivers which divide can also bring us together. Such was the case on September 11th of this year when 268 volunteers from all walks-of-life, joined forces to clean-up one of America's great rivers, the Missouri (aka The Big Muddy). This particular clean-up at St. Charles, Missouri, was just one of several organized by Missouri River Relief (MRR), a volunteer grassroots organization dedicated to improving the Missouri River valley.



-USFWS/ColbyWrasse

**A group of volunteers stand next to a large pile of trash they collected through Missouri River Relief, a volunteer grassroots organization dedicated to improving the Missouri River valley.**

The goal of the St. Charles clean-up was to remove trash from 10 miles of river shoreline, while educating people about the Missouri River. One of the logistical challenges of these river clean-ups is the safe and efficient transport of hundreds of volunteers to sites scattered up and down the river. It takes a fleet of boats, eleven to be exact, to pull this off. This is

where the Columbia Fish and Wildlife Conservation Office (FWCO) and our large john boats come into play. Technicians Patty Herman and Colby Wrasse captained two Columbia FWCO boats, escorting volunteers to designated sites, while giving them a crash course in big river ecology. Some of the topics discussed included endangered pallid sturgeon, man-made river modifications, and invasive species such as silver carp which seemed to jump right on queue.

As always, the dedicated people at MRR and their loyal volunteers pulled off another successful river clean-up. On just this one day, seven tons of trash were removed, most of which was recycled.

Some of the trashy highlights included 107 tires, 5 refrigerators, a 42" flat screen TV and a message in a bottle. We have assisted with several MRR clean-ups over the past few years. While we are happy to help out, we also get something in return, as these events provide us with an excellent opportunity to spread our message, while doing something constructive to improve the river on which we work.

The story of Missouri River Relief is an inspiring tale, a wonderful example of what enthusiastic, motivated people can do when they work together. Since MRR's inception nearly a decade ago, they and more than

12,000 volunteers have removed over 537 tons of trash from the Missouri River and its tributaries. Most importantly, they have generated great interest from local communities which have come together to take stewardship of their Missouri River. Go to the following website to learn more about Missouri River Relief: <http://www.riverrelief.org/>.

For further info about the Columbia FWCO: <http://www.fws.gov/midwest/columbiafisheries/>

## Alpena FWCO Hosts Dinner for Commercial Fishers Helping with the Lake Sturgeon Tagging Project

BY ADAM KOWALSKI, ALPENA FWCO

Commercial fishers in Lake Huron encounter lake sturgeon as by-catch during normal fishing operations for lake whitefish, yellow perch and channel catfish. The fishers volunteer time by tagging and collecting biological information on lake sturgeon by-catch. Currently, 13 licensed commercial fishers operating 17 boats participate in the study. Approximately 450 lake sturgeon have been tagged or recaptured since the program began in 1995.

During July 2010, biologist Adam Kowalski finalized details for the Commercial Fishers Appreciation Dinner. The Alpena FWCO hosts this dinner for

For further info about the Alpena FWCO: <http://www.fws.gov/midwest/alpena/index.htm>

## Small Dams Workshop Held in Grayling, Michigan

BY RICK WESTERHOF, GREEN BAY FWCO

Several Fish and Wildlife Service staff from Alpena and Green Bay Fish and Wildlife Conservation Offices (FWCO) attended the Small Dams Workshop in Grayling, Michigan, last July. The first day was filled with presentations from local experts on topics such as Impacts of Dams on Streams; Regulation and Oversight; Watershed Approach and Inventory Process; Impacts of Removal; Permitting; Sediment, Blockage and Reconnection; Aquatic Organism Passage and Habitat (fish, mussels, invasive species); Project Management; and Balancing Needs, Functions and Situations.

One of the expert speakers was biologist Andrea Ania of the Alpena FWCO. Her presentation focused on aquatic organism passage and habitat concerning fish, mussels and invasive species. Andrea did an excellent job and was also a team leader for the field activities on the second day.

On the second day the class traveled to the Flowing Well property (1,725 acres) that was recently

For further info about the Green Bay FWCO: <http://www.fws.gov/midwest/Fisheries/library/StationFactSheets/greenbay.pdf>

Partnerships are essential for effective fisheries conservation. Many agencies, organizations, and private individuals are involved in fisheries conservation and management, but no one can do it alone. Together, these stakeholders combine efforts and expertise to tackle challenges facing fisheries conservation. The success of these partnerships will depend on strong, two-way communications and accountability.

Michigan state-licensed and tribal commer-

cial fishers that assist with the lake sturgeon tagging project in Lake Huron. Kowalski reserved a pavilion at a city park in Bay City to hold the dinner and made arrangements for the event. A number of prizes and gifts such as life vests, rain gear, t-shirts and knives are purchased for the event to show appreciation for their hard work and time spent collecting data that we would otherwise never get.

purchased by the State of Michigan. On the property there are 12 dams, a trout rearing facility, miles of channelized stream and numerous buildings that need to be addressed for complete habitat restoration. The class was divided up into teams and toured the site recording data at each dam, discussing restoration options and tackling a specific problem related to one of the dams. All the teams presented their ideas for restoring fish passage at their specific dam to the entire class. The team's data and ideas will be used to develop restoration and habitat improvements at the property.

The workshop was organized and hosted by Huron Pines. Huron Pines is a non-profit organization dedicated to conserving the forests, lakes and streams of northeast Michigan. They serve the following Michigan counties: Alcona, Alpena, Cheboygan, Crawford, Iosco, Montmorency, Ogemaw, Oscoda, Otsego, Presque Isle and Roscommon.

## Fish Health Center Hosts Baitfish Workshop

BY CORY PUZACH, LA CROSSE FHC

The La Crosse Fish Health Center (FHC) hosted a baitfish workshop sponsored by the North Central Regional Aquaculture Center (NCRAC). NCRAC is one of five regional aquaculture centers managed by the U.S. Department of Agriculture and covers a 12 state area in the Midwest to support research and development to enhance aquaculture for producers and consumers. NCRAC funds projects for food fish, baitfish and recreational sport fish producers. The Center works with many federal, state and private organizations.

A wide variety of topics were presented at the workshop and included: the baitfish industry and regulations; aquaculture of golden shiners, spot fin shiners and horny head chubs; bio security; the drug approval process; and fish health. Corey Puzach of the La Crosse FHC gave a presentation on fish health testing procedures and pathogens and parasites of concern to bait species. Participants in the workshop also received a tour of the laboratories at the La Crosse FHC. Over 30 people attended the conference and information was exchanged between academia, baitfish aquaculturists and government offices.



-USFWS/RebekahMcCann

**There are a wide range of pathogens that can affect baitfish. An unknown virus was isolated from this fathead minnow exhibiting hemorrhaging on the jaw, eye, operculum, and at the base of the pectoral fin.**

For further info about the La Crosse FHC: <http://www.fws.gov/midwest/LaCrosseFishHealthCenter/>

## Ohio River Basin Alliance Continues to Develop

BY ROB SIMMONDS, CARTERVILLE FWCO

Carterville Fish and Wildlife Conservation Office (FWCO) project leader Rob Simmonds participated in the most recent meeting of the Ohio River Basin Alliance (Alliance). This group continues to rapidly take shape as people with various views and from various walks of life gather around the common interest of a sustainable Ohio River basin. Some in the Alliance are viewing sustainability from more of an economic perspective, others from an environmental perspective, but most, hopefully, are concerned with both. Rob continues to serve on the Water Availability and Management Working Group as well as the Environmental Restoration and Protection Working Group. Both groups are making progress developing and refining goals, objectives and strategies.

The Alliance is interested in working closely with existing groups in the basin, rather than working over top of them or duplicating efforts. To that end, Rob works closely with John Stark of The Nature Conservancy, and Chair of the Environmental Restoration and Protection Working Group, to dovetail in all of the efforts of the Ohio River Basin Fish Habitat Partnership, in order to take advantage of the strategic planning that has already been completed. The Alliance as a whole continues to gain momentum, has identified an interim steering committee, and is considering 501(c)3 status (not for profit organization). The Alliance has good potential to bring needed attention and resources to the water-rich and resource-rich Ohio River basin.

For further info about the Carterville FWCO: <http://www.fws.gov/midwest/Fisheries/library/StationFactSheets/carterville.pdf>

## Higgins' Eye Found in the Wapsi

BY SCOTT YESS, LACROSSE FWCO



-USFWS

Thanks to recovery efforts, the Higgins' eye pearlymussel is now among a growing number of mussel species that once again inhabit Midwestern rivers like the Wapsipinicon in Iowa.

For further info about the La Crosse FWCO: <http://www.fws.gov/midwest/lacrossefisheries/>

## Alpena FWCO Conducts 2010 Fishery Independent Lake Whitefish Survey in Northern Lake Huron

BY ADAM KOWALSKI, ALPENA FWCO

During the months of May through September, staff from the Alpena Fish and Wildlife Conservation Office (FWCO) and volunteers conducted a juvenile lake trout survey and a fishery independent lake whitefish survey in 1836 Treaty waters of northern Lake Huron. Staff involved included biologists Adam Kowalski, Anjanette Bowen and Scott Koproski and biological science aids Kyle Krajniak and Coral Makowske. Volunteers included Jacob Cannon and Michigan Department of Natural Resources staff Mark Werda, Jeff Diamond and Ken Glomski. The purpose of this survey is to collect fishery independent abundance and biological data on juvenile lake trout and lake whitefish stocks in treaty waters for use in statistical catch-at-age population

Divers from the Fish and Wildlife Service recently assisted the Iowa Department of Natural Resources (DNR) with searches for Higgins' eye

pearlymussels on the Wapsipinicon River in northeast Iowa. The Higgins' eye is a federally endangered species that was once found in many rivers in the Hawkeye state. Since 2000, there have been ongoing efforts to restore this endangered mussel to selected Iowa rivers. For example, the Wapsipinicon River has been stocked with (host) fish infested with Higgins eye "glochidia" (the parasitic larval stage of freshwater mussels) for nearly a decade, in hopes that juvenile mussels will later drop off the fish's gills and survive in their new habitat. Several young Higgins' eye pearlymussels have been collected in previous years. Although only one young Higgins' eye was collected in 2010, this signifies that some of the mussels are surviving in the Wapsi.

The Fisheries Program maintains and implements a comprehensive set of tools and activities to conserve and manage self-sustaining populations of native fish and other aquatic resources. These tools and activities are linked to management and recovery plans that help achieve restoration and recovery goals, provide recreational benefits, and address Federal trust responsibilities. Sound science, effective partnerships, and careful planning and evaluation are integral to conservation and management efforts.

models that are updated annually to determine harvest regulations for tribal commercial fishers in 1836 Treaty waters.

During the survey, we set 24 overnight, variable mesh gill nets and 20 small 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 and lake trout collected were measured, weighed, sexed, assessed for maturity and visceral fat content, and checked for lamprey wounds, fin clips and tags. We took scales and otoliths for age determination and removed stomachs for diet analysis. Non-target species were processed in a similar manner.

Data collected in this survey will improve the accuracy of population models used to set lake whitefish and lake trout 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.

For further info about the Alpena FWC: <http://www.fws.gov/midwest/alpena/index.htm>

## Abundant Harvest of Fall fingerling Lake Sturgeon Assists State and Tribal Partners to Restore Midwestern Populations

BY DOUG ALOISI, GENOA NFH

**L**ake sturgeon fingerlings grew and prospered under the watchful care of their guardians at the Genoa National Fish Hatchery (NFH) this summer. Over 50,000 (7-8 inch) lake sturgeon fingerlings of two strains were reared for state and tribal partners in the Midwest. From Missouri to Minnesota, lake

sturgeon biologists were able to meet or exceed stocking goals in proscribed lake sturgeon management and restoration plans in order to either reintroduce lake sturgeon to areas they had been extirpated, or supplement areas where populations were reduced drastically. Lake sturgeon populations are highly susceptible to overharvest, point source pollution, and dam construction which covers spawning and nursery habitat and blocks migration routes.

This year's primary culturists of our lake sturgeon included two Student Temporary Employment Program enrollees, one Student Career Employment Program enrollee and two staff biologists. This may seem like a lot of staff to raise 50,000 fish compared to some species, but lake sturgeon are a relatively high maintenance fish. They must have their tanks cleaned twice daily, and their food must actually be hatched out and raised for them in their first three months of life. Constant care and attention must be given to the sturgeon fry and fingerlings to ensure good health and condition at the time of stocking.

Lake sturgeon must be inspected by the La Crosse Fish Health Center before their release to further safeguard receiving waters from an accidental introduction of a fish pathogen. Most of the sturgeon are also tagged to provide a way to identify the lot and year class of these fish after they are released in the wild. Once the growing season begins to slow in the fall of the year, the fish are ready to be released into restoration areas. It is hoped that the continued efforts of stocking lake sturgeon will provide viable and healthy populations for future generations of Americans to enjoy.



-USFWS

**Lake sturgeon are being cultured at the Genoa NFH for a variety of restoration programs throughout the upper Midwest.**

For further info about the Genoa NFH: <http://www.fws.gov/midwest/genoa/>

## Hunting and Fishing Days Participants Find that Even a Carp can become a Swan

BY TERESA CAMPBELL, CARTERVILLE FWCO

The notion of eating Asian carp inspires shudders and wrinkled noses from most who have not tried it. Asian carps, including the silver and bighead carps, are the veritable ugly ducklings amongst fishes these days. Not only could they be called ugly in appearance, but many assume that, because of the carp moniker, the flesh tastes terrible.



-USFWS

**Sam Finney of the Carterville Fish and Wildlife Conservation Office demonstrates how to fillet an Asian carp at the Southern Illinois Hunting and Fishing Days event.**

It was the task of the Carterville Fish and Wildlife Conservation Office (FWCO) to dispel this image at the Southern Illinois Hunting and Fishing Days, which was held September 25-26 at John A. Logan College in Carterville, IL. The Hunting and Fishing Days are held annually and attracts as many as 40,000 people. A wide variety of vendors and activities pulls in people of all ages, from those in strollers to those sporting canes.

Nestled between the youth fishing derby, an axe-throwing contest, and the large goose and duck call vendor's tent was our Fish and Wildlife Service table.

For further info about the Carterville FWCO: <http://www.fws.gov/midwest/Fisheries/library/StationFactSheets/carterville.pdf>

### 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.

This year, our goal was to show people that Asian carp can and should be eaten... and are quite tasty. Curious visitors picked up hand-outs of Asian carp cooking recipes and filleting instructions, but the highlight of our booth was the Asian carp filleting demonstrations. Asian carp have tricky y-bones within their meat, which make them difficult to prepare. Knowing this, we wanted to show people how to easily work around these bones and prepare nice fillets. Every two hours, spectators gathered around our table to watch one of our employees demonstrate how to fillet Asian carp. Many were surprised at the nice, white fillets. A major reason for why people assume Asian carp taste bad is the misconception that their flesh is like that of the common carp, which is dark and gamey. The demonstrations drew quite a crowd, and even young, aspiring fishermen were eager to learn.

In our battles to prevent Asian carp from reaching Lake Michigan, and to manage populations where they already exist, one of the most promising means of controlling their numbers is to create markets for them. Asian cultures already consider these fish a delicacy, and people in the United States are slowly catching on. Our Hunting and Fishing Days booth was a great success in that we were able to bring this idea directly to the people who are fishing carp-infested waters. Many visitors left the event saying that, "They would give these fish a try."

If people remain open-minded about bringing Asian carp to the table, they are in for a pleasant surprise. So give them a try; these fish really can be transformed from an ugly duckling into a beautiful swan.

## Fish Brains a Big Hit

BY SARAH BAUER, LACROSSE FHC

The fourth, fifth and sixth grade classes from Lakeview Montessori School in Sparta, Wisconsin, camped for an evening at a local campground to learn about conservation and appreciation for the outdoors. Programs were arranged with staff from Fort McCoy to demonstrate electro-fishing techniques and how Fort McCoy monitors threatened and endangered species on the facility. Fifth grade teacher Mrs. Katie contacted Eric Leis about information on education programs that staff from the La Crosse Fish Health Center (FHC) could provide. La Crosse FHC staff provided four, half hour programs to groups of ten students. Topics covered during each program included; fish identification, fish habitat preferences and diet, fish anatomy and dissection, and fish health sampling. The fish identification was made possible by the Genoa National Fish Hatchery which graciously provided their "fish on a stick" models for use during the programs. Fort McCoy and the Upper Midwest Environmental Science Center (U.S. Geological Survey) provided fish for the fish anatomy and

dissection. The children were very excited about the dissection and found it difficult to patiently wait for the hands-on demonstration. The enthusiastic students wanted to see the inside of the eye, the size of the fish's brain and heart, and the stomach contents of each fish dissected. Overall, the children seemed to greatly enjoy the programs and asked excellent questions of La Crosse FHC staff about fish life histories and our careers.

As the population in the United States continues to grow, the potential for adverse impacts on aquatic resources, including habitat will increase. At the same time, demands for responsible, quality recreational fishing experiences will also increase. The Service has a long tradition of providing opportunities for public enjoyment of aquatic resources through recreational fishing, habitat restoration, and education programs and through mitigating impacts of Federal water projects. The Service also recognizes that some aquatic habitats have been irreversibly altered by human activity (i.e. - dam building). To compensate for these significant changes in habitat and lost fishing opportunities, managers often introduce non-native species when native species can no longer survive in the altered habitat.

For further info about the La Crosse FHC: <http://www.fws.gov/midwest/LaCrosseFishHealthCenter/>

## The Green Bay FWCO Assists Marinette County with Environmental Field Day

BY STEWART COGSWELL, GREEN BAY FWCO

The Green Bay Fish and Wildlife Conservation Office (FWCO) assisted the Marinette Land and Water Conservation Department with an annual Environmental Field Day. This event is held each fall for fourth graders from over 13 public, private and home school organizations in Marinette County, Wisconsin.

A total of 460 students and teachers participated in the event. The event was held in late September at four sites to accommodate student travel and included a couple of city parks, a large lake, and a remote stream area. At each location, a total of eight stations were set up for each topic including recycling, forestry, fire control, insects, birds, soils, fish and water quality. The Green Bay FWCO led the fish session which included a brief overview of basic fish biology, displays of gear used for assessments, a short discussion of typical biologist job duties and at the end, an electro fishing or fyke netting demonstration. One gear item that had high interest among the students was the Remotely Operated Vehicle (ROV). Other

highlights included working the fire hose, holding aquatic insects, touching a fish and feeling different soils. At each location, a treat of apples and lemonade was provided for all the students.



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Stewart Cogswell of the Green Bay Fish and Wildlife Conservation Office shows students a bluegill during Marinette County Environmental Days.

For further info about the Green Bay FWCO: <http://www.fws.gov/midwest/Fisheries/library/StationFactSheets/greenbay.pdf>

## Early Dismissal - Sullivan Creek

BY JAMES ANDERSON, SULLIVAN'S CREEK NFH

When Sullivan Creek National Fish Hatchery (NFH) has excess lake trout brood fish, the hatchery partners with the Michigan Department of Natural Resources and Environment (DNRE) to locate inland lakes which have the essential habitat base and depth required to support large lake trout.



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One of the retired lake trout adults from the Sullivan Creek National Fish Hatchery finds a new home in a northern Michigan lake.

On June 24, the hatchery crew stocked 113 fish from its 2003 year class of Seneca Lake Wild lake trout brood stock. The lake trout averaged 25 inches in length with an average weight of 8 pounds. The fish were split between two lakes; one in Marquette County and one in Alger County of the Upper Peninsula of Michigan. The first was Ackerman Lake which is located between Munising and Chatham. Thirteen of the brood fish were stocked into that lake. This is the first time that Sullivan Creek NFH has stocked this lake. After the quick stop at Ackerman Lake, it was on to Sporley Lake for the rest of the brood fish. This is the third year in a row that Sullivan Creek NFH has stocked Sporley Lake.

On September 15 and 22 two stocking runs to the western and northwest end of Michigan's Upper Peninsula were completed. The run on September 15 was to Lake Roland in Houghton County. Lake Roland received 500 of the 2008 Seneca Lake Wild brood stock. The fish averaged 8.75 inches and 0.25 pounds. On September 22, 1,000 2007 Huron Parry Sound Wild brood stock were stocked into Lake Fanny Hoe, which is located at the tip of the Keweenaw Peninsula. The 2007 Huron Parry Sound lake trout averaged 14.25 inches and 1.25 pounds. This is the first time that Sullivan Creek NFH has stocked Lake Fanny Hoe.

For further info about the Pendills Creek NFH/Sullivan Creek NFH: <http://www.fws.gov/midwest/Fisheries/library/StationFactSheets/pendills.pdf>

## Discover Your Sense of Wonder at Genoa NFH

BY JENNY BAILEY, GENOA NFH

Fifth grade students from Southern Bluffs Elementary in La Crosse, Wisconsin, got a seasonal booster of nature experience at Genoa National Fish Hatchery's (NFH) Outdoor Classroom Wetlands Program. This experience in nature is part of a program to get children in touch with nature by providing students with a place to learn about nature, wildlife and conservation principles while exploring, romping, touching, feeling and becoming part of nature.

This year is special for the Outdoor Classroom. It is the first year that Southern Bluffs students collected data for a long-term species monitoring program in the Sense of Wonder Discovery Wetland. Students performed an aquatic invertebrate diversity survey and provided results to staff at the Hatchery. Data will be collected each year by a new 5th grade class, and results will be compared over a long period

of time, or from year-to-year. In the past, classes collected and identified aquatic invertebrates occurring in the wetland, but a permanent data set was not established. This new program will enhance the outdoor learning experience for students and will allow resource managers to observe changes in invertebrate communities over time. This will be especially useful as Genoa NFH undertakes a project to remove invasive plant species and restore native plant communities to the Wetland area. In addition, monitoring changes in wetland communities can help demonstrate effects of water and land use within a watershed and weather patterns over time.

A new addition to the Sense of Wonder Discovery Wetland enhanced the Outdoor Classroom experience and will continue to enhance the experience of all visitors to the Wetland. A boardwalk complete with

an observation deck near the water allows visitors to be surrounded by nature while viewing a working wetland. Outdoor Classroom students used the observation deck as a home-base for Wetland lessons and activities. Construction of the boardwalk was organized by Dan Kumlin and Jeff Lockington of the Genoa NFH while volunteers from other Fish and

Wildlife Service offices, surrounding communities, and the *Friends of the Upper Mississippi Fishery Services* helped with layout and assembly. Matt Merchlewitz (Visitor Services and Outreach – Fish and Wildlife Service) designed interpretive displays to enhance the Wetland experience and provide nature education to visitors and students alike.



-USFWS

**Fifth grade students from Southern Bluffs Elementary (La Crosse, Wisconsin) get a sense of wonder while exploring Genoa National Fish Hatchery's outdoor classroom.**

For further info about the Genoa NFH: <http://www.fws.gov/midwest/genoa/>

## Jordan River NFH Cooperates with Grand Traverse Band of Ottawa and Chippewa on Fall Feast Fishing Event!

BY ROGER GORDON, JORDAN RIVER NFH

The Midwest Region Fisheries program has a long history of supporting Tribal fishing programs across the Midwest. Our hatcheries have provided walleye and bass for stocking in Minnesota, lake sturgeon and pan fishes in Wisconsin, and now most recently, catchable-size brook trout in the lower peninsula of Michigan. The Fish and Wildlife Service has worked hand-in-hand with Native American governments to provide quality fishing opportunities for children, adults and elders.

In September, the Jordan River National Fish Hatchery (NFH) in Elmira, Michigan, provided more than 400 trophy-size brook trout to the Grand Traverse Band of Ottawa and Chippewa Indians in support of their annual Natural Resources Fair and Feast. This event, which draws hundreds of visitors, is a celebration sponsored by the Tribe for members and the visiting public. The event revolves around responsible use, management and preservation of natural resources for future generations. The festival also features activities that promote Native Ameri-

can culture and heritage to the visitors. One of the highlights of the festival is the children's fishing event in which children of all ages are able to angle for a trophy-size brook trout provided by the Jordan River NFH.

The trout stocked for the event are part of an ongoing program sponsored by the hatchery and area schools, where students assist hatchery personnel in the production of catchable-size brook trout to be used in outdoor education events throughout northern Michigan. The program known as "Baby Brookies" is a wonderful way to engage youth in the natural world while providing countless hours of recreation and memories for thousands of young anglers.

Conserving this Nation's fish and other aquatic resources cannot be successful without the partnership of Tribes; they manage or influence some of the most important aquatic habitats both on and off reservations. In addition, the Federal government and the Service have distinct and unique obligations toward Tribes based on trust responsibility, treaty provisions, and statutory mandates. The Fisheries Program plays an important role in providing help and support to Tribes as they exercise their sovereignty in the management of their fish and wildlife resources on more than 55 million acres of Federal Indian trust land and in treaty reserved areas.

For further info about the Jordan River NFH: <http://www.fws.gov/midwest/JordanRiver/>

## Sturgeon Elusive on Awareness Day

BY JENNA MERRY, LA CROSSE FWCO

The La Crosse Fish and Wildlife Conservation Office (FWCO) teamed with members of the Conservation and Youth Development & Outreach Departments of the Menominee Indian Tribe of Wisconsin to host Sturgeon Awareness Day on Saturday, September 25 at Legend Lake, near Keshena, Wisconsin, on the Menominee Indian Reservation. Aimed at bringing awareness to this ancient species and teaching families about their presence in the lake, the program provided kids with a fun-filled day of fish-based activities. Aside from practicing their casting skills and getting their hands dirty painting t-shirts, the kids had the opportunity to interact with live lake sturgeon. A large tank was set up to house live sturgeon which were netted from Legend Lake. Children were able to touch and hold these gentle and unique fish, including a 70 pounder that was likely part of the lake's first generation of sturgeon, stocked in 1994.

Another activity was a kids fishing tournament, in which some children had the unique experience of

fishing for lake sturgeon in Legend Lake. Sunshine and brilliant fall colors set the stage for a perfect fishing day, but by the end of the afternoon, the sturgeon had managed to evade their baited hooks. Despite this, smiles and laughter from all involved proved to be far less elusive. Sounds like a successful day of fishing to me!



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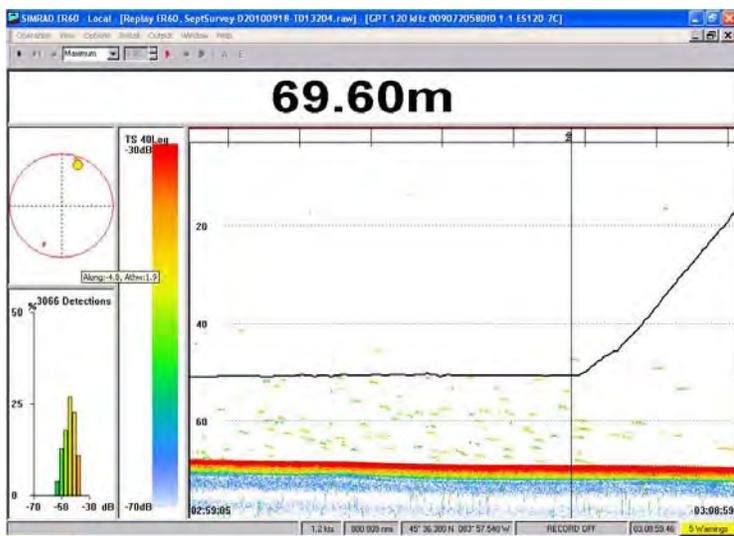
**A bad day of lake sturgeon fishing on Legend Lake is still better than ... just about anything else!**

For further info about the La Crosse FWCO: <http://www.fws.gov/midwest/lacrossefisheries/>

## M/V *Spencer F. Baird* Hydro Acoustic and Trawling Assessments: Ready to Go!

BY DALE HANSON, GREEN BAY FWCO

Since 2008, the *M/V Spencer F. Baird* has demonstrated that it serves as an excellent platform for stocking juvenile lake trout onto offshore areas of Lakes Huron and Michigan; however, the vessel's stock assessment capabilities have yet to be exercised. That all changed in 2010 as Great Lakes Restoration Initiative funds enabled Fish and Wildlife Service staff to learn the *Baird's* hydro acoustic and mid-water trawling capabilities and evaluate the performance of the gear. Two weeks of preliminary testing performed this summer trained the *Baird's* crew and Fish and Wildlife Conservation Office (FWCO) biologists in assessment gear operation. Then the week of September 13 was spent conducting a full blown evaluation of the acoustic and trawling systems under survey conditions in northern Lake Huron.



This image shows an “echogram” readout of the fish sign identified with hydroacoustics. This echogram was collected during a midwater trawl in northern Lake Huron that targeted the fish sign seen off the bottom; the solid black line across the screen shows the depth of the trawl headrope and the footrope (not shown).

Science and technology form the foundation of successful fish and aquatic resource conservation and are used to structure and implement monitoring and evaluation programs that are critical to determine the success of management actions. The Service is committed to following established principles of sound science.

The *Baird's* crew, along with Dale Hanson and Ted Eggebraaten of the Green Bay FWCO and Adam Kowalski and Scott Koproski of the Alpena FWCO performed hydro acoustic surveys to estimate fish densities along several transects in northern Lake Huron. At the beginning and end of each transect, a water temperature profiler was deployed to determine a mean water temperature, a measurement required to fine tune the hydro acoustic data. The actual acousticing was done after sunset as forage fish move off the bottom and up into the water column where they are detectable with hydro acoustics and mid-water trawls. On all transects, the acoustic echograms identified low densities of fish from the near-surface waters down to a depth of roughly 30 meters and higher densities of fish near the bottom.

What were these fish on the echogram? To find out, the crew fished mid-water trawls at targeted depths where fish sign was present to determine the species compositions seen in the acoustic echograms. The *Baird* is equipped with a PI-44 trawl mensuration system which consists of several sensors that are attached to the net to send data streams back to the vessel via a hydrophone. The PI-44 thus provides real-time data including the net's fishing depth and width of the net during fishing. This system enables the *Baird* to hone right in on fish aggregations identified on the echogram. The mid-water trawls consistently captured rainbow smelt in shallower tows and bloater chubs in trawls fished near the bottom at depths greater than 40 meters. By all accounts, this survey was a huge success and instrumental for the *Spencer F. Baird* to work with partner agencies in conducting future assessment work.

For further info about the Green Bay FWCO: <http://www.fws.gov/midwest/Fisheries/library/StationFactSheets/greenbay.pdf>

## Construction Begins! Moving Forward to Improve Fish Passage for Niangua Darters in Dallas County, Missouri

BY JOANNE GRADY, COLUMBIA FWCO

The Benton Branch Road in Dallas County, Missouri, has been closed to local traffic, forcing folks to “take the long way around”, but they don’t mind. They know it’s just temporary. In fact, they can already see the framework for their new bridge. The crossing, known locally as Williams Ford, is being replaced with a free span bridge to allow the threatened Niangua darter and other aquatic species to move up and downstream. The low water crossing



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**This temporary construction crossing at the Williams Ford crossing site in Dallas County, Missouri, demonstrates the difference between flood capacity of the old structure evident by the box culvert opening and the new structure. The two new bridge openings are framed by the steel beams.**

which had existed at this Ford for years was a barrier to fish travel.

Road crews for Dallas County began work on the road approaches during mid-summer in anticipation of the new bridge. The existing low water crossing was removed in August, and work on the new structure began shortly afterwards. When visiting the site in late August, it was apparent what a difference the new structure will make. A temporary crossing occupies the channel where the old structure had been removed. This allows the construction crews to move equipment into place for driving pylons for the bridge abutments. Midway in this temporary crossing is a box culvert allowing stream flow. The two new openings to allow water and sediment flow are framed by the large steel beams reaching for the sky. The temporary box structure represents the entirety of flow that was provided by the old crossing.

The contractor anticipates placement of the new pre-cast road deck on the bridge abutments and re-open the road in October. The project will benefit both the fish and the local people. Funds for this project were provided by the American Recovery and Reinvestment Act, Missouri Conservation Heritage Foundation, and Dallas County, Missouri. Project coordination and Niangua darter monitoring is provided by the Missouri Department of Conservation.

For further info about the Columbia FWCO: <http://www.fws.gov/midwest/columbiafisheries/>

## The Removal of Nashville Dam and Maple Hill Dam in the Thornapple River Watershed

BY JOANNE BARNARD, BARRY CONSERVATION DIST. & RICK WESTERHOF, GREEN BAY FWCO

The Nashville and Maple Hill dams in the Thornapple River watershed were removed during spring and summer of 2009, thus restoring fish passage, river connectivity and natural sediment flow to benefit numerous native fish species such as bass, northern pike and walleye. The removal of the dams opened up 60 main stem river miles, 105 tributary miles and reconnected five inland lakes within the Thornapple River system.

The Nashville Dam was originally constructed of brush and sand in 1854 to provide mechanical power for area mills, but at the time it was removed it was a

rock filled timber crib structure capped with concrete. At full pool, the dam provided 11 feet of head and created an 80 acre impoundment. The dam was 165 feet long and had approximately 7 feet of head with a spillway cap width of 25 feet. There also was an adjacent mill race (330 feet long) that at low river flows diverted all the water from the main river channel. Maple Hill Dam was a small structure (two feet high) that was used to divert water to irrigate a golf course. The dam blocked passage of fish and aquatic organisms and prevented transport of sediment and large woody structures.

Loss and alteration of aquatic habitats are principal factors in the decline of native fish and other aquatic resources and the loss of biodiversity. Seventy percent of the Nation’s rivers have altered flows, and 50 percent of waterways fail to meet minimum biological criteria.

Barry Conservation District received a \$5,000 grant from Ocean Trust, via Bonefish Grill in Grand Rapids to fund a community outreach event in the Village of Nashville to educate the public about the dam's history and celebrate its removal. The event was held at the new fish passage site and approximately 75 people attended. Barry Conservation District also received a \$40,000 grant from FishAmerica Foundation and the National Oceanic and Atmospheric Administration, for landowner education and native plant re-vegetation of drained portions of the old Nashville Dam mill pond area and the Maple Hill floodplain area. Educational workshops were held in February-March, 2010, and re-vegetation plantings took place throughout the spring, summer and fall. In all, 15 Nashville landowners and two Maple Hill landowners participated in the re-vegetation project.

Barry Conservation District in Hastings, Michigan, organized and coordinated the removal of Nashville and Maple Hill dams in the Thornapple River watershed. Michigan Department of Natural Resources and Environment (DNRE) staff did the engineering, design and construction for both dams. Funding for the project was provided by the Michigan

DNRE, National Fish and Wildlife Foundation and the Fish and Wildlife Service's National Fish Passage Program using American Recovery and Reinvestment Act dollars. Numerous other partners provided significant in-kind donations of equipment, materials and labor to make the project possible. Total project cost for the dam removals, community celebration, educational workshops and tree and wildflower plantings was \$681,579.

With the 80 acre impoundment gone, the Michigan DNRE has been able to purchase several tracts of land (one 40 and one 21 acre parcel, plus three acres downstream of Nashville) to provide public access to the Thornapple River. All the properties have river access and will substantially increase the amount of public recreational area along the river near Nashville, Michigan.

If you are ever near Nashville, Michigan, it will be worth your time to stop and see the newly restored Thornapple River where the old dam from 1854 was built. In a few years, the impoundment area will be totally grown in with vegetation, walleye fishing will be good above the old dam and hundreds of miles of the Thornapple River will be functioning in a more natural state for future generations to enjoy.



Nashville Dam before removal (Lt.) and after dam removal (Rt.).



Maple Hill Dam before removal (Lt.) and after dam removal (Rt.).



-USFWS  
 The removal of the Nashville and Maple Hill dams opened up 60 main stem river miles, 105 tributary miles and reconnected 5 inland lakes within the Thornapple River system (Michigan).

For further info about the Green Bay FWCO: <http://www.fws.gov/midwest/Fisheries/library/StationFactSheets/greenbay.pdf>

## The “Finn Shack” Takes on a New Look

BY NICK STARZL, IRON RIVER NFH

The Youth Conservation Corps (YCC) crew from the summer of 2010 at the Iron River National Fish Hatchery (NFH) helped the hatchery staff perform an extreme makeover on the infamous “Finn Shack”. The shack was originally constructed to



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The new “Fin Shack” is used as a break room by seasonal employees hired at the Iron River National Fish Hatchery to mark lake trout.

provide an area of R & R for the seasonal tagging/clipping crew. The little hut worked out just fine for many years, but it did have a few

problems. During the cold winter months, the space was inefficiently heated even though it is located inside the hatchery’s main building where it rarely drops below 60 degrees in the tank room. This, along with its somewhat rustic appearance provoked efforts to enhance it with modern conveniences like insulation, door knobs and walls made of wood instead of plastic sheeting. This year’s YCC enrollees April Johnson and John Bainbridge began the restoration in July and worked throughout the rest of the summer alongside hatchery staff while tacking up insulation and sheeting the walls and roof with plywood. The process allowed April and John to learn some rudimentary carpentry skills as well as have some fun making the “Finn Shack” a nicer place to take a break.

The Fisheries Program relies on a broad range of professionals to accomplish its mission: biologists, managers, administrators, clerks, animal caretakers, and maintenance workers. Without their skills and dedication, the Fisheries Program cannot succeed. Employees must be trained, equipped and supported in order to perform their jobs safely, often under demanding environmental conditions, and to keep current with the constantly expanding science of fish and aquatic resource management and conservation.

For further info about the Iron River NFH: <http://www.fws.gov/midwest/ironriver/>

## River Biologist in Training

BY KYLE CALCOTE & PATTY HERMAN, COLUMBIA FWCO

The Columbia Fish and Wildlife Conservation Office (FWCO) is proud to introduce a new student employee. Kyle Calcote comes to us through a local student job placement and mentoring program for middle and high school students called Career Awareness Related Experience (CARE). Through this program, Kyle is paid by the City of Columbia and earns credit towards his G.E.D. While working at our office, Kyle will gain valuable hands-on experience while assisting our field crews with equipment repair and maintenance, as well as field data collection. In the few weeks since Kyle has joined us, he has been a tremendous asset to our office. Kyle is a quick study, is extremely motivated and takes great pride in the quality of his work – all the redeeming characteristics

of a Missouri River biologist! This is the fifth year our office has received student help from the CARE organization. Welcome aboard, Kyle!

“My name is Kyle Calcote. I am 17 years old and go to Hickman High School in Columbia, Missouri. I have grown up out here in Missouri, but was born in Brookhaven, Mississippi. I have juggled around ideas of what I would like to become when I am older but my top two still remain. I would like to be a highway patrol officer or a conservation agent; however, a third option of working for the Fish and Wildlife Service grows more and more appealing by the hour as I work here at Columbia FWCO through the CARE program. I really like the friendly staff, but to be honest, I love the beautiful trucks and boats.”

For further info about the Columbia FWCO: <http://www.fws.gov/midwest/columbiafisheries/>

# *Congressional Actions*

**H.R. 51 (ih)** To direct the Director of the United States Fish and Wildlife Service to conduct a study of the feasibility of a variety of approaches to eradicating Asian carp from the Great Lakes and their tributary and connecting waters. [Introduced in House]

**H.R. 4604 (ih)** To direct the Secretary of the Army to prevent the spread of Asian carp in the Great Lakes and the tributaries of the Great Lakes, and for other purposes. [Introduced in House]

**H.R. 48 (ih)** To amend section 42 of title 18, United States Code, popularly known as the Lacey Act, to add certain species of carp to the list of injurious species that are prohibited from being imported or shipped. [Introduced in House]

**S. 1421 (es)** To amend section 42 of title 18, United States Code, to prohibit the importation and shipment of certain species of carp. [Engrossed in Senate]

**S. 1421 (rs)** To amend section 42 of title 18, United States Code, to prohibit the importation and shipment of certain species of carp. [Reported in Senate]

**S. 1421 (is)** To amend section 42 of title 18, United States Code, to prohibit the importation and shipment of certain species of carp. [Introduced in Senate]

**H.R. 3173 (ih)** To amend section 42 of title 18, United States Code, to prohibit the importation and shipment of certain species of carp. [Introduced in House]

**S. 3553 (is)** To require the Secretary of the Army to study the feasibility of the hydrological separation of the Great Lakes and Mississippi River Basins. [Introduced in Senate]

**S. 237 (is)** To establish a collaborative program to protect the Great Lakes, and for other purposes. [Introduced in Senate]

**H.R. 4472 (ih)** To direct the Secretary of the Army to take action with respect to the Chicago waterway system to prevent the migration of bighead and silver carps into Lake Michigan, and for other purposes. [Introduced in House]

**S. 2946 (is)** To direct the Secretary of the Army to take action with respect to the Chicago waterway system to prevent the migration of bighead and silver carps into Lake Michigan, and for other purposes. [Introduced in Senate]

**H.R. 5625 (ih)** To require the Secretary of the Army to study the feasibility of the hydrological separation of the Great Lakes and Mississippi River Basins. [Introduced in House]

Source is <http://www.gpoaccess.gov/bills/index.html>  
Searched database by keyword = "Asian carp"

# Midwest Region Fisheries Divisions

## National Fish Hatcheries

The Region's National Fish Hatcheries primarily focus on native fish restoration/rehabilitation by stocking fish and eggs, such as pallid and lake sturgeon and by developing and maintaining brood stocks of selected fish strains, such as lake trout and brook trout.

Hatcheries also provide technical assistance to other agencies, provide fish and eggs for research, stock rainbow trout in fulfillment of federal mitigation obligations and assist with recovery of native mussels and other native aquatic species.

## Fish and Wildlife Conservation Offices

Fish and Wildlife Conservation Offices conduct assessments of fish populations to guide management decisions, perform key monitoring and control activities related to invasive, aquatic species; survey and evaluate aquatic habitats to identify restoration/rehabilitation opportunities; play a key role in targeting and implementing native fish and habitat restoration programs; work with private land owners, states, local governments and watershed organizations to complete aquatic habitat restoration projects under the Service's Partners for Fish and Wildlife and the Great Lakes Coastal Programs; provide coordination and technical assistance toward the management of interjurisdictional fisheries; maintain and operate several key interagency fisheries databases; provide

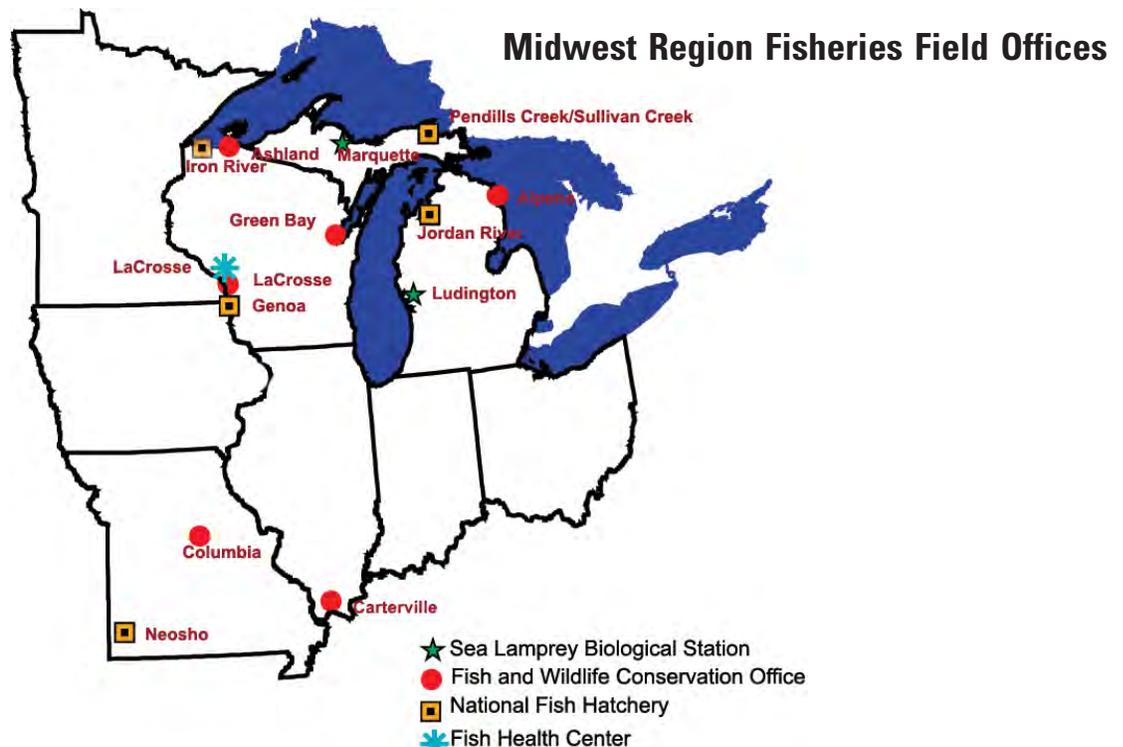
technical expertise to other Service programs addressing contaminants, endangered species, federal project review and hydro-power operation and relicensing; evaluate and manage fisheries on Service lands; and, provide technical support to 38 Native American tribal governments and treaty authorities.

## Sea Lamprey Biological Stations

The Fish and Wildlife Service is the United States Agent for sea lamprey control, with two Biological Stations assessing and managing sea lamprey populations throughout the Great Lakes. The Great Lakes Fishery Commission administers the Sea Lamprey Management Program, with funding provided through the U.S. Department of State, U.S. Department of the Interior, and Fisheries and Oceans Canada.

## Fish Health Center

The Fish Health Center provides specialized fish health evaluation and diagnostic services to federal, state and tribal hatcheries in the region; conducts extensive monitoring and evaluation of wild fish health; examines and certifies the health of captive hatchery stocks; and, performs a wide range of special services helping to coordinate fishery program offices and partner organizations.



# Midwest Region Fisheries Contacts

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989/356-3052  
Area of Responsibility (Michigan, Ohio)

Jordan River National Fish Hatchery  
6623 Turner Road  
Elmira, MI 49730  
Roger Gordon ([roger\\_gordon@fws.gov](mailto:roger_gordon@fws.gov))  
231/584-2461

Ludington Biological Station  
229 South Jebavy Drive  
Ludington, MI 49431  
Jeff Slade ([jeff\\_slade@fws.gov](mailto:jeff_slade@fws.gov))  
231/845-6205

Marquette Biological Station  
3090 Wright Street  
Marquette, MI 49855-9649  
Katherine Mullett ([katherine\\_mullett@fws.gov](mailto:katherine_mullett@fws.gov))  
906/226-1235

Pendills Creek/Sullivan Creek  
National Fish Hatchery  
21990 West Trout Lane  
Brimley, MI 49715  
Curt Friez ([curt\\_friez@fws.gov](mailto:curt_friez@fws.gov))  
906/437-5231

## Missouri

Columbia Fish and Wildlife Conservation Office  
101 Park Deville Drive; Suite A  
Columbia, MO 65203  
Tracy Hill ([tracy\\_hill@fws.gov](mailto:tracy_hill@fws.gov))  
573/234-2132  
Area of Responsibility (Iowa, Missouri)

Neosho National Fish Hatchery  
East Park Street  
Neosho, MO 64850  
David Hendrix ([david\\_hendrix@fws.gov](mailto:david_hendrix@fws.gov))  
417/451-0554

## Illinois

Carterville Fish and Wildlife Conservation Office  
9053 Route 148, Suite A  
Marion, Illinois 62959  
Rob Simmonds ([rob\\_simmonds@fws.gov](mailto:rob_simmonds@fws.gov))  
618/997-6869  
Area of Responsibility (Illinois, Indiana, Ohio)

## Wisconsin

Ashland Fish and Wildlife Conservation Office  
2800 Lake Shore Drive East  
Ashland, WI 54806  
Mark Brouder ([mark\\_brouder@fws.gov](mailto:mark_brouder@fws.gov))  
715/682-6185  
Area of Responsibility (Michigan, Minnesota, Wisconsin)

Genoa National Fish Hatchery  
S5689 State Road 35  
Genoa, WI 54632-8836  
Doug Aloisi ([doug\\_aloisi@fws.gov](mailto:doug_aloisi@fws.gov))  
608/689-2605

Green Bay Fish and Wildlife Conservation Office  
2661 Scott Tower Drive  
New Franken, WI 54229  
Mark Holey ([mark\\_holey@fws.gov](mailto:mark_holey@fws.gov))  
920/866-1717  
Area of Responsibility (Michigan, Wisconsin)

Iron River National Fish Hatchery  
10325 Fairview Road  
Iron River, WI 54847  
Dale Bast ([dale\\_bast@fws.gov](mailto:dale_bast@fws.gov))  
715/372-8510

LaCrosse Fish Health Center  
555 Lester Avenue  
Onalaska, WI 54650  
Becky Lasee ([becky\\_lasee@fws.gov](mailto:becky_lasee@fws.gov))  
608/783-8441

LaCrosse Fish and Wildlife Conservation Office  
555 Lester Avenue  
Onalaska, WI 54650  
Pamella Thiel ([pam\\_thiel@fws.gov](mailto:pam_thiel@fws.gov))  
608/783-8431  
Area of Responsibility (Illinois, Iowa, Minnesota, Wisconsin)

# Fish Tails

“Fish Tails” includes articles that are included in field station reports that are not published in the “Conservation Briefs.” These articles are categorized by focus area and includes the article title, author and field station. The website link, where the full article can be viewed, is highlighted in blue type.

## Partnerships and Accountability

### Aquatic Species Conservation and Management

### Aquatic Invasive Species

### Public Use

### Cooperation with Native Americans

## Leadership in Science and Technology

- [A Glimpse of the World Below](#)
  - Colby Wrasse, Columbia FWCO
- Cooperation between the Pacific and Great Lakes Fish Health Committees
  - Ken Phillips, La Crosse FHC
- Federal Drug Administration (FDA) Biologist Consults with Staff of the La Crosse Fish Health Center
  - Becky Lasee, LaCrosse FWCO

## Aquatic Habitat Conservation and Management

- [Habitat Working Group Moves Forward](#)
  - Stewart Cogswell, Green Bay FWCO

## Workforce Management

- [Alpena FWCO hosts Motor Boat Certification Course](#)
  - Adam Kowalski, Alpena FWCO
- [Motor Boat Certification Course Open Water Module Held in Bayfield WI](#)
  - Adam Kowalski Alpena FWCO
- [Not so S.U.T.L.](#)
  - Stewart Cogswell, Green Bay FWCO

U.S. FISH & WILDLIFE SERVICE  
DEPARTMENT OF THE INTERIOR

# Grand Opening

*Remembering our Past*

*Celebrating our Future*

## Neosho National Fish Hatchery

Thursday, December 9, 2010

- 9:30 a.m. Ceremony
- 10:30 a.m. Ribbon Cutting
- 10:45 a.m. Formal Tours
- 11:00 a.m. Lunch
- 12:00 - 5:00 p.m. Open House

*Come celebrate with live music,  
lunch and tours!*