



U.S. Fish & Wildlife Service - Midwest Region

Fisheries & Aquatic Resources Program

fish lines



New Host Fish Discovered for the Washboard Mussel

Carterville NFWCO Monitors the Movements of Asian carp toward the Great Lakes

Driftless Area Restoration Effort Recognized as full NFHAP Fish Habitat Partnership

Fall Lake Trout Assessment Conducted at Six Fathom Bank



Vol. 6 No. 2
November 2007

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 New Host Fish Discovered for the Washboard Mussel

Genoa NFH determines that blue catfish is a suitable host fish for washboard mussels.

BY TONY BRADY, GENOA NFH

5 Carterville NFWCO Monitors the Movements of Asian carp toward the Great Lakes

Bighead and silver carps are aquatic invasive species that have been expanding their range since the early 1980's when they first began to appear in public waters.

BY NATHAN RICHARDS AND MATT WEGENER, CARTERVILLE NFWCO

6 Driftless Area Restoration Effort Recognized as full NFHAP Fish Habitat Partnership

The Driftless Area Restoration Effort is recognized as a full Fish Habitat Partnership by the NFHAP Board.

BY LOUISE MAULDIN, LA CROSSE NFWCO

7 Fall Lake Trout Assessment Conducted at Six Fathom Bank

Since 1993, Alpena NFWCO has attempted to conduct annual fall spawning surveys at two historically important offshore spawning reefs in Lake Huron - Six Fathom Bank and Yankee Reef.

BY SCOTT KOPROSKI, ALPENA NFWCO



-USFWS

Carterville National Fish and Wildlife Conservation Office biologist Mike Stahl provides information to the public at the 20th Anniversary of Southern Illinois Hunting and Fishing Days

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

Fish Lines

2007 Vol. 6 No. 2

ASSISTANT REGIONAL DIRECTOR
Gerry Jackson

To submit suggestions or comments, e-mail
david_radloff@fws.gov

U.S. Fish & Wildlife Service, Midwest Region
Fisheries & Aquatic Resources Program
1 Federal Drive, Ft. Snelling, MN 55111
Phone: 612/713-5111



-USFWS

Fishing Day at the Tomah Veterans Administration Hospital.

Fish Lines is produced by the Fisheries and Aquatic Resources Program, Region 3, U.S. Fish & Wildlife Service, Ft. Snelling, Minnesota. Items included are selected from monthly reports submitted by Region 3 fisheries offices. Photos included are used by permission and may be copyrighted.

Equal opportunity to participate in, and benefit from programs and activities of the U.S. Fish and Wildlife Service is available to all individuals regardless of race, color, national origin, sex, age, disability, religion, sexual orientation, status as a parent and genetic information. For information contact the U.S. Department of Interior, Office for Equal Opportunity, 1849 C Street N.W., Washington, DC 20240

Printed on 30% Recycled by Fiber Weight Paper

Conservation Briefs 8-20

- 8 Sharing Information with Congressional Staff in Southern Illinois
BY ROB SIMMONDS, CARTERVILLE NFWCO
- 8 Ashland NFWCO 2007 Accomplishment Reports Now on the Internet
BY FRANK STONE, ASHLAND NFWCO
- 9 Stakeholders Discuss St. Marys River Area of Concern
BY ANJANETTE BOWEN, ALPENA NFWCO
- 9 Northeast Michigan Great Lakes and Aquatic Education Networking Meeting
BY ANDREA ANIA, ALPENA NFWCO
- 10 Genoa NFH Upgrades Trout Egg Incubator
BY NICK STARZL, GENOA NFH
- 11 Harlow Island Fisheries Monitoring Report
BY NATE CASWELL, CARTERVILLE NFWCO
- 11 Tag Identification Database Contains More Than 13,000 Tag Numbers
BY ADAM KOWALSKI, ALPENA NFWCO
- 12 Partners Prevent Pet Fish Releases
BY MARK STEINGRAEBER, LA CROSSE NFWCO
- 12 Triploid Grass Carp Certification
BY NATE CASWELL, CARTERVILLE NFWCO
- 13 Great Lakes National Parks Aquatic Invasive Species Report
BY GARY CZYPINSKI, ASHLAND NFWCO
- 13 Biologists Tell Kids about Asian Carp
BY HEIDI KEULER, LA CROSSE NFWCO
- 14 Crab Orchard Lake Survey
BY MATT MANGAN, CARTERVILLE NFWCO
- 14 Southern Illinois Hunting and Fishing Days
BY MATT MANGAN, CARTERVILLE NFWCO
- 14 Third Grade Environmental Day
BY HEIDI KEULER, LA CROSSE NFWCO
- 15 Coded-Wire Tags Extracted
BY ADAM KOWALSKI, ALPENA NFWCO
- 16 USGS Scientist Tours Genoa Sturgeon Culture Facilities
BY DOUG ALOSI, GENOA NFH
- 17 Crossing Repair May Help Endangered Beetle
BY HEATHER RAWLINGS, ALPENA NFWCO
- 18 Ashland NFWCO Partners for Fish and Wildlife Program 2007 Accomplishments
BY TED KOEHLER, ASHLAND NFWCO
- 18 Dry Weather Conditions = Good Wetland Construction
BY HEATHER RAWLINGS, ALPENA NFWCO
- 19 Driftless Area Restoration Effort Receives \$220,000 from the National Fish Habitat Action Plan Program
BY LOUISE MAULDIN, LA CROSSE NFWCO
- 19 Carterville NFWCO participates in Midwest Fish Passage Workshop
BY NATE CASWELL, CARTERVILLE NFWCO
- 20 Upward Bound Program
BY HEIDI KEULER, LA CROSSE NFWCO

Congressional Actions 21
Midwest Region Fisheries Divisions 22
Fisheries Contacts 23
Fish Tails 24

New Host Fish Discovered for the Washboard Mussel

BY TONY BRADY, GENOA NFH

Genoa National Fish Hatchery (NFH) has worked to become a nationally recognized force in freshwater mussel propagation and culture. One goal of the NFH's mussel program is to investigate larval mussel and fish interactions in order to find suitable host fish for mussel species that are of interest for restoration.

Because of the promising results in the recovery of the endangered Higgins' eye pearl mussel, Genoa NFH was asked to be a part of a multi-agency group charged with the restoration of a large mussel bed near Marietta, Ohio, that suffered a fish and mussel kill in 1999. This multi-agency group consists of the West Virginia and Ohio Departments of Natural Resources (DNR), Ohio Islands National Fish and Wildlife Refuge, White Sulfur Springs NFH, Ohio State University and Genoa NFH.



Genoa NFH cultures up to 16 species of fish annually and has the capacity to raise and hold cold-, cool- and warm-water species of fish. Because of this capability, Genoa NFH is able to conduct host trials even into late autumn. One mussel species of interest for the Ohio River group is the washboard mussel, which happens to spawn and release their glochidia (larval mussels) in the fall. These glochidia will then over-winter on the fish and complete their transformation in the spring of the following year. Washboards are known to successfully complete their parasitic life-stage on channel catfish which is a very near relative of the blue catfish. Blue catfish are also of interest to West Virginia DNR as a species their fisheries program wants to restore in the Ohio River. If fish stocking and mussel culture can be combined, the West Virginia DNR will get more bang for their buck - or catfish in this case.

Genoa NFH obtained 300 blue catfish from the Normandy State Fish Hatchery, Tennessee, for host trials. Genoa NFH's mussel biologist collected three larva-bearing (gravid) washboard mussels in October and brought them back to the hatchery where the staff proceeded to inoculate 40 blue catfish with washboard mussel glochidia. The blue catfish were then divided into groups of five and placed into eight aquaria. Juvenile washboard mussels excysted 17 days post-inoculation, making blue catfish a suitable host fish for this mussel species. This data will allow the Ohio River group to make informed decisions as they proceed with the restoration of this mussel bed.

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

Carterville NFWCO Monitors the Movements of Asian carp toward the Great Lakes

BY NATHAN RICHARDS AND MATT WEGENER, CARTERVILLE NFWCO

Bighead and silver carps are aquatic invasive species that have been expanding their range since the early 1980's when they first began to appear in public waters. In the last 10 years they have dramatically increased their numbers and upriver movements within the Illinois River. Presently, bighead and silver carps are within 50 miles of Lake Michigan. As a result, natural resource managers in the Great Lakes are concerned because an invasion of bighead and silver carp could be devastating to native aquatic species in the Great Lakes.

To help combat the spread of these invasive species, Carterville National Fish and Wildlife Conservation Office (NFWCO) has developed a network of acoustic receivers within a 60-mile reach of the Upper Illinois River, immediately below an electric dispersal barrier constructed to prevent movements of aquatic invasive species into and out of Lake Michigan. The network is designed to track the movements of bighead and silver carps that are surgically implanted with tags that transmit unique signals to the receivers. In April 2007, Carterville NFWCO staff successfully implanted transmitters in 17 carp (9 bighead carp, 7 silver carp, and 1 hybrid of the two species). An outing during October 2007 proved to be even more successful with 6 bighead and 15 silver carp being tagged. A total of 38 tagged individuals are now being monitored by the acoustic network to determine the upriver movement of Asian carp toward the Great Lakes. Currently, none of the tagged individuals have moved a significant distance upstream. Although this monitoring is successful in describing the general progression of Asian carp upriver, it does not determine exactly what habitat they prefer; therefore, Carterville NFWCO is also conducting mobile tracking to better understand what habitat Asian carp prefer in the Upper Illinois River.



-USFWS
Technician Matt Wegener tracks movements of Asian carp in the Starved Rock Pool of the Upper Illinois River using a portable hydrophone.

The mobile tracking is accomplished by using a boat and portable underwater hydrophones that detect the acoustic signal that is given off by the implanted transmitters. The boat is drifted downriver until the hydrophone detects a signal. Once a signal is detected, the boat can be maneuvered until it is directly over the signal and the fish location can be determined. Our hope is that this information on habitat use will aid us in identifying control strategies for this area to stop the spread of Asian carp. During September 2007, Carterville NFWCO embarked on their first tracking effort on the Upper Illinois River. Although only 3 of 17 fish were found, a great deal of information was gained on the potential movements and habitat use of the tagged Asian carps in the river.

Using the acoustic network and mobile tracking will hopefully prove to be successful in determining the upriver movements and habitat preferences exhibited by Asian carp. Future control and eradication strategies can be developed through these evaluations to limit the negative influences of these invasive species.

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

Driftless Area Restoration Effort Recognized as full NFHAP Fish Habitat Partnership

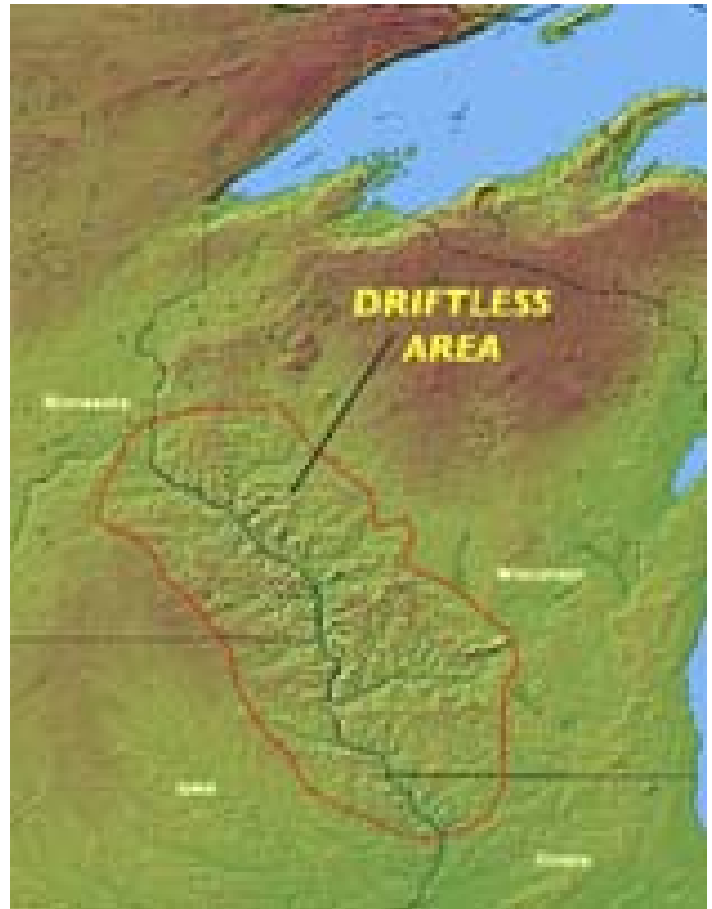
BY LOUISE MAULDIN, LA CROSSE NFWCO

The Driftless Area Restoration Effort (DARE) was recognized as a full Fish Habitat Partnership by the National Fish Habitat Action Plan (NFHAP) Board at an October board meeting held at the Holiday Inn in Arlington, Virginia. Louise Mauldin, (Driftless Area Team Leader) and Jeff Hastings (DARE coordinator from Trout Unlimited) were in attendance to receive this formal acknowledgement. Establishment of Fish Habitat Partnerships is integral to the National Fish Habitat Action Plan's success in protecting, restoring and enhancing fish and aquatic habitats.

The Fish and Wildlife Service has been working with Trout Unlimited, state agencies, Driftless Area Initiative and others over the past two years to implement the National Fish Habitat Action Plan under guidance from the NFHAP Board. The five pilot projects were the first to be chosen by the NFHAP Board for formal recognition. The DARE partnership, Eastern Brook Trout Joint Venture, Southeast Aquatic Resource Partnership, and Matanuska-Susitna Salmon Conservation Partnership submitted applications August 17, 2007. The Western Native Trout Initiative made the decision to apply in the second round.

Mauldin and Hastings worked on partnership narratives for a series of questions and pooled together requested documentation from the past several years to support the information supplied in the application. Among the material submitted for review by NFHAP staff and the Board were support letters from the state Department of Natural Resources (Directors or Chiefs of Fisheries), the Driftless Area Initiative, Regional Director of the Fish and Wildlife Service, Trout Unlimited, Patagonia, and others. Board recognition for a full Fish Habitat Partnership is contingent upon meeting criteria that identifies strong and diverse partnerships, works within a defined geographic focus, demonstrates strategic planning that is consistent with national goals, and outlines the potential for measurable progress. The NFHAP Board plans to establish 12 or more Fish Habitat Partnerships throughout the United States by 2010. Deadline for the second round of applications was December 21, 2007. Formal recognition of the Western Native Trout Initiative and two candidate partnerships are expected to occur at the Board meeting held in Tampa Florida, February 20-21, 2008.

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



The Driftless Area, highlighted in red, is located in the heart of the Upper Mississippi River valley, encompassing a 24,000-square-mile area of Southeast Minnesota, Northeast Iowa, Southwest Wisconsin, and Northwest Illinois.

Fall Lake Trout Assessment Conducted at Six Fathom Bank

BY SCOTT KOPROSKI, ALPENA NFWCO

Invasion of sea lamprey in the mid 1900's along with over-harvest led to near extirpation of lake trout from Lake Huron. Since the early 1970's the Fish and Wildlife Service has invested a tremendous amount of time and money in lake trout rehabilitation and sea lamprey control. In some regions of Lake Huron where stocking has occurred, there have been encouraging signs of rehabilitation.

Since 1993, Alpena NFWCO has attempted to conduct annual fall spawning surveys at two historically important offshore spawning reefs in Lake Huron - Six Fathom Bank and Yankee Reef. Both of these reefs are located in the central portion of Lake Huron and possess honey-comb limestone rock which provides excellent habitat for spawning lake trout.

The new stocking and research vessel *M/V Spencer F. Baird* left its home port of Cheboygan, Michigan, and traveled in Alpena, Michigan, on October 18 to prepare for the 2007 lake trout spawning survey. This marks the second season that the *M/V Spencer F. Baird* has been available to conduct this work. Prior to the commissioning of this new vessel, the fall spawning surveys at Yankee Reef and Six Fathom Bank were conducted on the *M/V Togue*, which has now been retired from service.

Staff from the Alpena NFWCO participating in the survey consisted of biologists Scott Koproski, Adam Kowalski and Aaron Woldt. Additionally, the vessel crew: Captain Mike Perry, Marine Engineer Robert Bergstrum, and Deck Hand David Bohn along with Mark Werda from the Michigan DNR participated on this survey.



-Michigan DNR/Mark Werda
Crew on the *M/V Spencer F. Baird* remove lake trout from assessment gear fished in Northern Lake Huron.

Great Lakes weather is always problematic in the fall with the crew trying to complete the assessments while avoiding gale-force winds and large seas that are characteristic of this time of year. After nearly two weeks of waiting for a suitable weather window, the *M/V Spencer F. Baird* finally departed the Federal Dock in Alpena, Michigan, on November 3rd in route to Six Fathom Bank. Nets were deployed and the crew anticipated anchoring adjacent to the reef for the night; however, due to building seas it was decided that anchoring was not possible and the crew returned to Alpena. The following day the vessel again departed the Federal Dock and traveled to Six Fathom Bank to retrieve gear.

Three 400 foot gangs of gill nets were deployed at Six Fathom Bank. Each gang consisted of one 100 foot panel of 4.5", 5.0", 5.5", and 6.0" stretch mesh net. This effort has been standardized since 1993. A total of 163 lake trout were captured between all three sites which is the second highest catch ever recorded. Of those 163 lake trout, just over 27% were wild fish (45 wild fish). This is the largest catch of wild fish that Alpena NFWCO has ever experienced at Six Fathom Bank. Over

the past few years, there has been an increasing trend of wild-caught lake trout but nothing of this magnitude. This increase in wild fish has excited staff and further justifies the Fish and Wildlife Service's efforts to rehabilitate lake trout in Lake Huron. The crew was not able to assess Yankee Reef this season due to the weather.

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

Sharing Information with Congressional Staff in Southern Illinois

BY ROB SIMMONDS, CARTERVILLE NFWCO

In an effort to help our local U.S. Congressional representatives make the tough decisions they face each day, Carterville NFWCO staff Greg Conover and Rob Simmonds met with Holly Healy, district aide from U.S. Rep. John Shimkus' office, and Karl Maple, staff assistant from Rep. Jerry Costello's office.

We discussed several issues during our visits, starting with the National Fish Habitat Action Plan. This is certainly the wave of the future in the Fisheries program and is a high priority for states across the country. Illinois currently has four habitat partnerships, including the Upper Mississippi River and Ohio River in Southern Illinois. Next, we covered the Navigation and Ecosystem Sustainability Program on the Upper Mississippi River. Through this program, navigation and environmental interests have gained a better appreciation for each other's views, which will help make the Upper Mississippi River more healthy and productive in the future. We also discussed management and control of Asian carp, acknowledging that there are many questions to be answered as we move forward, as well as many opportunities to work together and be creative. Finally, we discussed the fishery assistance we provide to Crab Orchard NWR and Scott Air Force Base. Fisheries work on Crab Orchard National Wildlife Refuge (NWR) is a cooperative effort with Illinois DNR taking the lead through their local office, but working very closely with our office and the Refuge. On Scott Air Force Base, our office leads the annual fishery survey and works closely with base staff to manage the fishery. It is truly an honor for us to know that we can support our troops.

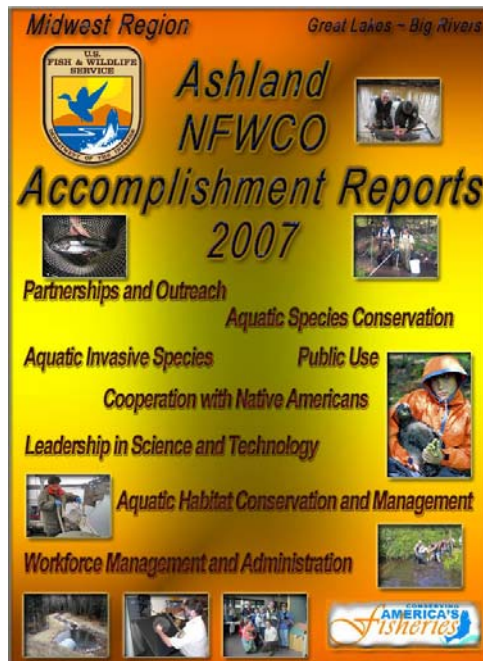
In addition to sharing information, this meeting also provided a great opportunity for us to get a better understanding of environmental and other issues that members of Congress face. It was certainly an interesting and informative session in both directions, and we thank Holly and Karl for taking some time out of their busy schedules to meet with us.

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

Ashland NFWCO 2007 Accomplishment Reports Now on the Internet

BY FRANK STONE, ASHLAND NFWCO



Ashland NFWCO's 2007 accomplishment reports are available on the Web at: http://www.fws.gov/midwest/ashland/accom_rpts/AccomRpt_FY07/index.html. This report summarizes all the activities we conducted regarding: Partnerships and Outreach, Aquatic Species Conservation, Aquatic Invasive Species, Public Use, Cooperation with Native Americans, Leadership in Science and Technology, Aquatic Habitat Conservation and Management, and Workforce Management/Administration.

Networking with the public to share our accomplishments can take place in many fashions and web pages help fill in the pieces of a much larger informational network. The Ashland NFWCO web page is just one tool we use to communicate our responsibilities and staff accomplishments.

For further info about the Ashland NFWCO: <http://www.fws.gov/midwest/ashland/>

Stakeholders Discuss St. Marys River Area of Concern

BY ANJANETTE BOWEN, ALPENA NFWCO

Biologist Anjanette Bowen attended a Binational Public Advisory Council Stakeholder Meeting to discuss delisting criteria for the beneficial use impairment of fish and wildlife populations, and the beneficial use impairment of fish and wildlife habitat in the St. Marys River Area of Concern. Stakeholders recommended a number of projects to help restore fish and wildlife populations and their habitats on the river.

The International Joint Commission designated the St. Marys River as an Area of Concern because of issues related to phosphorus, bacteria, and contaminated sediment, among others. For more information on the St. Marys River Area of Concern, go to <http://www.lsu.edu/bpac/aoc.html> or <http://www.epa.gov/glupo/aoc/stmarys.html>.

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

Northeast Michigan Great Lakes and Aquatic Education Networking Meeting

BY ANDREA ANIA, ALPENA NFWCO

Anjanette Bowen and Andrea Ania participated in the Northeast Michigan Great Lakes and Aquatic Education Networking meeting in Alpena, Michigan. The meeting was organized and facilitated by Michigan Sea Grant with financial support from the Great Lakes Fishery Trust and the Great Lakes Stewardship Initiative. Attendees included teachers, watershed groups, local and state government, the Thunder Bay National Marine Sanctuary, Trout Unlimited and the Community Foundation.

The goal of this event is to provide an opportunity to learn about existing and new Great Lakes and aquatic education opportunities in Northeast Michigan through place-based education. Bowen and Ania discussed Alpena NFWCO's efforts to incorporate partnerships with educators through the *Children and Nature* initiative and the National Fish Habitat Action Plan – Great Lakes Partnership.

As a result of this meeting, a regional list-serv is being established to improve regional communication between participants and enhance aquatic education efforts in Northeast Michigan. For more information on participants and presentations made at the meeting visit: <http://www.miseagrant.umich.edu/education/gl-aquatic-edu-network-PDFs.html>.

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

Genoa NFH Upgrades Trout Egg Incubator

BY NICK STARZL, GENOA NFH

A new re-circulating egg incubation system built at the Genoa NFH will facilitate coaster brook trout production, one of the hatchery's key missions. The new system incorporates a chiller that allows for the manipulation of the egg incubation temperature.

Slowing the growth rate of some egg lots is especially important during the start of the coaster brook trout production cycle at the Genoa NFH.

Brook trout eggs are taken throughout the entire spawning season at the



-USFWS

The new trout egg incubator at the Genoa National Fish Hatchery incorporates a chiller unit which allows for manipulation of the incubation temperature and resultant hatch time.

Each year, Genoa NFH distributes thousands of brook trout to restore populations along the northern shores of Lake Superior. Genoa's 2008 production of "brookies" is scheduled to include over 30,000 stockable fish ranging in size from 2" to 9".

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

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.

Iron River NFH

in order to

ensure genetic conservation of the brook trout strains. The eggs are shipped to Genoa NFH in late December through early January. At this time, the growth rate of the early egg lots are slowed by chilling the water, while the later lots are allowed to catch up developmentally over a period of a month. This process allows the entire brook trout production lot to be pooled together, resulting in an increased efficiency of time and space as well as reducing cannibalism and increasing survival.

The hatchery kept the cost for the incubation system to a minimum by using existing materials, including the pump and chiller from the previous system, and by building the system in-house, using the talents of staffer Jeff Lockington to weld the aluminum frame and water reservoirs. It's estimated that a similar system would have cost \$6,300 new, but the hatchery brought the price down to about \$2,200, including staff labor. The main expense for the project was the purchase of two new MariSource vertical egg incubators.

Coaster brook trout produced at the Genoa NFH are part of an ongoing, multi-agency Great Lakes restoration effort involving the Fish and Wildlife Service, the National Park Service, and the states of Wisconsin, Minnesota and Michigan. The "coaster" strain of brook trout is endemic to the Great Lakes and drainages along the Atlantic coast. The species is threatened due to over-fishing, competition with invasive species, and habitat loss throughout its range.

Harlow Island Fisheries Monitoring Report

BY NATE CASWELL, CARTERVILLE NFWCO

Carterville NFWCO completed a draft of the pre-project fisheries monitoring report for the Harlow Island Side Channel Restoration Project at the Harlow Island Division of the Middle Mississippi River NWR. The U.S. Army Corps of Engineers (Corps) St. Louis District is planning a project that will restore some of the original functions of this side-channel, which serves as a backwater area inundated by the river only under near-flood conditions. The remnant side-channel is shallow with several feet of unconsolidated soft sediment, making it relatively low-quality habitat. Since July 2005, Carterville NFWCO has conducted surveys of the fish community in this backwater to obtain baseline data and evaluate the effect of an enhancement project. Carterville NFWCO completed a report covering the pre-project monitoring and submitted it to the Corps for review. The report is currently in revision, and Carterville NFWCO will continue to participate in planning restoration efforts with the Corps.

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

Tag Identification Database Contains More Than 13,000 Tag Numbers

BY ADAM KOWALSKI, ALPENA NFWCO

In October, biologist Adam Kowalski started updating the Great Lakes Sturgeon Tag Identification database. Development of the database was funded by the Great Lakes Fishery Trust in 2004 to house tag information such as tag type, tag number, tag location, and tagger contact information. The database has been operational for more than two years now and contains information on over 13,000 passive integrated transponder (PIT) tags and more than 100 sequences for external tags. Kowalski will continue to maintain and update the database by requesting and entering tagging information annually. Feedback has been positive and the database seems to be getting a lot of use by biologists looking up information for tagged lake sturgeon they have captured. The database is housed at the Great Lakes Fishery Commission's web site at: <http://www.glfc.org/sturgeontag/index.htm>. This database will improve the information sharing process between agencies and the general public who may encounter tagged lake sturgeon.

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

Partners Prevent Pet Fish Releases

BY MARK STEINGRAEBER, LA CROSSE NFWCO

Reports of large, exotic fish caught by anglers, commercial fishermen and fishery managers in public waters have become all too common across the country in recent years. The causes for most of these unexpected and environmentally troubling landings are hobbyists such as aquarium owners and water gardeners releasing ornamental fish into nearby waters when the fish have grown too large to care for.



-Wisconsin DNR/Patrick Short
Increasing numbers of large ornamental fish, such as this 14-inch pacu, have been illegally released into the Upper Mississippi River by owners who are no longer willing to care for such large aquarium fish.

three large, unwanted pet fish from owners. The La Crosse NFWCO subsequently took possession of these tropical species in November: one red-belly pacu (12-inches), one black pacu (11-inches), and one oscar (11-inches). These fish were humanely euthanized and cryo-preserved later that day. Following preparation by a taxidermist, these colorful specimens will become part of an attractive display used during La Crosse NFWCO outreach activities to increase public awareness of potentially problematic pet fish and acceptable alternatives to the release of these animals in the wild.

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

Triploid Grass Carp Certification

BY NATE CASWELL, CARTERVILLE NFWCO

Carterville NFWCO participates in the Fish and Wildlife Service's Triploid Grass Carp Inspection and Certification Program, a service offered to natural resource agencies in the United States and other countries to help protect natural resources. The inspection program provides assurance that shipments of alleged triploid grass carp do not, within the confidence limits of the inspection program, contain diploids (those fish that are able to reproduce).

During Fiscal Year 2007, inspectors from Carterville NFWCO conducted 25 inspections for triploid (those fish that are unable to reproduce) grass carp producers in the Midwest Region. In all, 20,694 triploid grass carp were certified for 49 shipments into four states. No inspections were failed by producers this fiscal year. A small percentage of inspections in the past have failed, emphasizing the need for Fish and Wildlife Service involvement to protect our aquatic resources.

For further info about the Carterville NFWCO: <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.

The Fish and Wildlife Service is part of a partnership to educate pet owners about the adverse impacts on the ecosystem of releasing unwanted fish. The partnership is letting fish hobbyists know about approved alternatives to the illegal abandonment of their aquatic pets in the wild. One such option now offered in Western Wisconsin is a government-business partnership that was established in 2006 by the La Crosse NFWCO. Several pet retailers in this region have agreed to accept and quarantine large, unwanted pet fish from owners who can no longer care for them. Because there is virtually no market to re-sell such large fish, the La Crosse NFWCO will accept custody of these unwanted fish and humanely euthanize them at no cost.

Through this unique partnership, the Marineland Pet Center in Onalaska, Wisconsin, recently accepted

Great Lakes National Parks Aquatic Invasive Species Report

BY GARY CZYPINSKI, ASHLAND NFWCO

Under an interagency agreement with the Great Lakes Inventory and Monitoring Network of the National Park Service, Ashland NFWCO completed a report addressing aquatic invasive species issues in and near nine Great Lakes basin national parks. Highlights of the report include life history summaries of 12 species of concern; selection of three to five priority aquatic invasive species for each of the nine parks; protocols for monitoring these priority species; and a list of organizations that conduct sampling in and near each of the nine parks that could monitor the priority species directly or incidentally. This report also provides aquatic invasive species background and monitoring information to any organization that manages aquatic ecosystems, conducts invasives monitoring or is preparing to conduct monitoring. The report is online at:

http://science.nature.nps.gov/im/units/GLKN/reports/USFWS_AIS_Final_Report_20070927.pdf.

For further info about the Ashland NFWCO: <http://www.fws.gov/midwest/ashland/>

Biologists Tell Kids about Asian Carp

BY HEIDI KEULER, LA CROSSE NFWCO

On November 13, Heidi Keuler from the La Crosse NFWCO gave a presentation titled *Asian Carp and Their Potential Impacts to the Upper Mississippi River* to about 20 members of the Upper Mississippi River Fish and Wildlife Refuge Winona District's Friends group and the public. Keuler discussed how the invasive Asian carps were introduced into the United States, life histories of the four Asian carp species, ecological and human impacts of Asian carp on the Illinois and Lower Mississippi rivers, and prevention and control techniques used by the many agencies working to prevent the spread of these invasives. In response to an audience question, Keuler suggested that the public can help stop the spread of Asian carp by talking to sports-men and -women and writing to Congress about the need for funding to help monitor and control the spread of invasive species.

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

Third Grade Environmental Day

BY HEIDI KEULER, LA CROSSE NFWCO

La Crosse NFWCO and the La Crosse District of the Upper Mississippi River National Wildlife and Fish Refuge teamed up to host Winona, Minnesota, third graders during their Environmental Day. Ann Blankenship from the Refuge presented “Ducks on a Stick” and Heidi Keuler and Scott Yess from La Crosse NFWCO helped the budding biologists make colorful painted fish prints that they took home with them. These were excellent energetic activities to do the day after Halloween “trick or treating” and a great way to introduce children to natural resources. The third graders had lots of fun learning about ducks and fish.

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

Southern Illinois Hunting and Fishing Days

BY MATT MANGAN, CARTERVILLE NFWCO

Carterville NFWCO participated in the 20th Anniversary of Southern Illinois Hunting and Fishing Days on September 22 and 23 in Carterville, Illinois. Staff handed out pamphlets and informational cards about aquatic invasive species and various Fish and Wildlife Service programs. Staff also showed videos about Asian carps and provided background information to interested members of the public on current projects.

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

Crab Orchard Lake Survey

BY MATT MANGAN, CARTERVILLE NFWCO

Carterville NFWCO staff members Nathan Richards, Matt Wegener and Matt Mangan helped the Illinois DNR and volunteers from Shawnee Community College to conduct the annual fall fishery survey of Crab Orchard Lake on Crab Orchard NWR. The October 17 survey included electrofishing at four sites around Crab Orchard Lake. Fish community data collected will be compared with data from previous surveys to help maintain a healthy and well-balanced fish assemblage in the lake.



-Shawnee Community College/Kevin Rhodes

Matt Mangan of the Carterville National Fish and Wildlife Conservation Office (left) and a volunteer from Shawnee Community College net fish while electrofishing at Crab Orchard Lake, which is located on Crab Orchard National Wildlife Refuge.

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

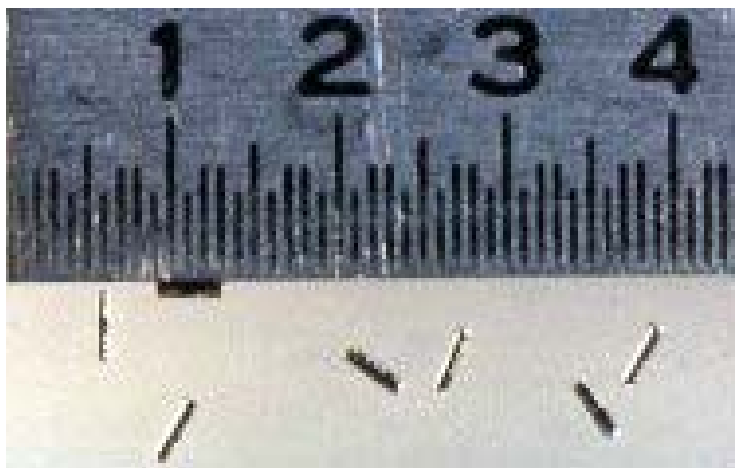
As the population in the United States continues to grow, the potential for adverse impacts on aquatic resources, including habitat will increase. At the same time, demands for responsible, quality recreational fishing experiences will also increase. The Service has a long tradition of providing opportunities 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.

Coded-Wire Tags Extracted

BY ADAM KOWALSKI, ALPENA NFWCO

In November, biologist Adam Kowalski extracted and read coded-wire tags (CWT's) from lake trout. CWT's are microscopic metal tags placed in the snouts of juvenile lake trout at the hatchery. Kowalski looked at Alpena NFWCO lake trout caught during the lake whitefish fishery independent survey and fall lake trout assessment in Lake Huron. He also removed tags from lake trout sampled by the Chippewa Ottawa Resource Authority (CORA).

Coded-wire tags are extracted by cutting lake trout snouts into smaller and smaller pieces until the tag can be seen and removed, then read under a microscope. Each tag's unique number is compared to stocking records to yield information such as stocking location and date, fish age and strain, and hatchery of origin.



-USGS

Coded-wire tags are microscopic metal tags placed in the snouts of juvenile lake trout at the hatchery. When fish are later recaptured in assessment surveys, tags are retrieved from individual fish. Each tag's unique number is compared to stocking records to yield information such as stocking location and date, fish age and strain, and hatchery of origin.

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.

Kowalski removed and read 300 tags from approximately 325 heads. Not all adipose-clipped lake trout contain CWT's because some lake trout shed their tags and others experience fin regeneration that masks original multiple clip sequences, which identify whether a fish contains a CWT. Additional lake trout heads from the Bay Mills Indian Community and the Michigan DNR creel program will be processed.

Data collected from lake trout coded-wire tags are used in several ways. First, lake trout age data are used in population models that determine lake trout harvest limits for parties to the 2000 Consent Decree. Second, stocking location data are used to determine lake-wide lake trout movement patterns. Finally, two existing studies to determine differences in survival between groups of lake trout reared under different culture techniques and differences in survival of various lake trout strains depend on analysis of CWT data.

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

USGS Scientist Tours Genoa Sturgeon Culture Facilities

BY DOUG ALOSI, GENOA NFH

In November, Dr. Dawn Dittman of the U. S. Geological Survey's Cortland, New York, Field Office toured Genoa NFH's lake sturgeon culture facilities. She is helping the St. Regis Tribe of Mohawk Indians start a sturgeon restoration program on reservation waters, and was gathering ideas on how to help the Tribe design and implement a new sturgeon culture building for the program. A highlight of the tour was the artemia culture room, where billions of brine shrimp cysts are hatched out and fed to thousands of hungry sturgeon fry each spring.

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.



-USFWS

Genoa National Fish Hatchery's sturgeon culture facility was built in 2004 and enables the Hatchery to produce over 40,000 lake sturgeon annually.

Dittman also toured the preparation room and cold storage facilities, where thousands of pounds of frozen bloodworms and Pacifica krill are stored and prepared for feeding. Each year, Genoa NFH raises 30,000 lake sturgeon fingerlings of three strains to provide fish for restoration programs for three tribes and three state conservation agencies in the Midwest. Lake sturgeon populations have been impacted heavily throughout its historic range due to habitat loss from water impoundments, water quality declines, and over-harvest. The Fish and Wildlife Service considers the lake sturgeon a species of special concern due to its unique life history requirements and population decreases in the last century. Many tribes consider lake sturgeon as culturally significant due to its value as a food fish - tribal communities used to migrate to lake sturgeon spawning sites each spring.

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

Crossing Repair May Help Endangered Beetle

BY HEATHER RAWLINGS, ALPENA NFWCO

The Maple River is a high-quality, predominantly cold-water stream that flows about 23 miles and drains an area of approximately 148,000 acres before flowing into Burt Lake, which is part of the Cheboygan River watershed. A 2000 report identified 25 road-stream crossing sites that contribute excessive sedimentation to the Maple River watershed. One of these crossings, the westernmost crossing of Robinson Road over the West Branch of the Maple River, was a priority of the local road commission, and presented an opportunity to improve habitat with renovation at the site. The West Branch of the Maple River is known to support the best trout fishery and coldest water within the watershed. The former crossing was a system of five culverts that were critically failing to the extent that they were blocking fish passage. Erosion from the road shoulders and embankment contributed excessive sand to the river. The undersized and failing culverts were causing flooding and consequent warming of upstream waters.



-USFWS/Heather Rawlings

Before (left) and after (right) restoration at the Robinson Road stream-crossing on the Maple River, Michigan. Five degraded culverts were replaced with two elliptical culverts which will provide uninhibited fish passage and reduce erosion and sedimentation.

the Maple River and reduce adverse fish habitat impacts from erosion and warming at the crossing, benefiting approximately 12 stream-miles of fish habitat. The project will also benefit other aquatic species currently suffering the impacts of sand erosion, flooding and obstructed flow.

Restoration of this road crossing site may also provide suitable habitat for the Federally endangered Hungerford's crawling water beetle, which is present in the river's East Branch. The Maple River is one of only four Michigan rivers where the Hungerford's crawling water beetle lives. According to the 2004 recovery plan for this species, excessive erosion and sedimentation at degraded road crossings are potential threats to the beetle's habitat.

The project was completed on October 12, 2007. Planning and fundraising began in 2005. The Conservation Resource Alliance (CRA) was the lead agency for this project, working with the Emmet County Road Commission, the Emmet County Revenue Sharing Board, the Baiardi Family Foundation, the Frey Foundation, the Petoskey-Harbor Springs Area Community Foundation, U.S. Department of Agriculture's Conservation Innovation Grant, and CRA's River Fund. The Coastal Program contributed \$10,000 and the Partners for Fish and Wildlife Program provided \$25,000. The total cost for this project was \$194,256.

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

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.

The Fish and Wildlife Service's Coastal Program and Partners for Fish and Wildlife Program contributed \$35,000 toward a cooperative effort to replace the existing culverts with a free-span structure that will accommodate the natural flow of the river. Last Spring, partners placed two large elliptical culverts at the crossing and buried them approximately two feet into the river substrate. These culverts allow for fish passage and can accommodate a 100-year storm event. In addition, the embankments were stabilized, and the road runoff was managed to eliminate sedimentation at the crossing.

The fish passage created by the project will allow access to approximately six miles of the headwaters of

Ashland NFWCO Partners for Fish and Wildlife Program 2007 Accomplishments

BY TED KOEHLER, ASHLAND NFWCO

The Ashland NFWCO – Partners for Fish and Wildlife Program (Partners) had one of its best years in 2007. It completed 14 high quality wetland, upland, in-stream, and fish passage fish and wildlife habitat restoration projects focusing on trust resources such as migratory waterfowl and native brook trout. The office worked with many partners to accomplish these projects. Building strong partnerships locally as well as across the Great Lakes basin has long been the key to the success of the office's habitat programs. The majority of the credit for our habitat accomplishments belongs to the landowners, conservation organizations, Native American tribes, and many government agencies with whom we work on daily basis.

Projects completed through the Ashland Partners program in 2007 restored and protected 87 wetland and upland acres to benefit migratory waterfowl and songbirds. Some projects are pieces to watershed-scale restoration of riparian forest cover. In recent years, our Partners work focused on brook trout habitat, evident by the huge increase in brook trout related restoration projects and miles of stream restored and enhanced. Twenty-one miles of stream were restored or enhanced for brook trout as well as other native and sport fish. Seven fish passage projects were completed, opening 41 miles of habitat upstream of man-made barriers. With many fish habitat barriers and restoration challenges to be met in 2008, the Ashland NFWCO Partners for Fish and Wildlife Program looks forward to another great year.

For further info about the Ashland NFWCO: <http://www.fws.gov/midwest/ashland/>

Dry Weather Conditions = Good Wetland Construction

BY HEATHER RAWLINGS, ALPENA NFWCO

Dry weather conditions prevalent throughout the Midwestern United States this summer allowed wetland restoration projects in Northern Michigan to go forward without a hitch. The Alpena NFWCO Partners for Fish and Wildlife Program coordinator Heather Rawlings completed seven wetland projects on four properties during August and September, restoring a total of 24 acres of wetlands to provide nesting, rearing and refuge habitat for waterfowl. These restorations also benefit shorebirds, reptiles, amphibians and many other types of wildlife. Sites are typically located in fallow farm fields, and the earthen berms block farm ditches that used to drain water off of the property.



-USFWS/Heather Rawlings

Dry weather conditions in Northern Michigan allowed wetland restoration projects to move forward without any weather delays; however, this project site in Montmorency County, Michigan, will have to wait until spring to fill.

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

Driftless Area Restoration Effort Receives \$220,000 from the National Fish Habitat Action Plan Program

BY LOUISE MAULDIN, LA CROSSE NFWCO

The Driftless Area Restoration Effort (DARE) received \$220,000 through the National Fish Habitat Action Plan for 2007 stream restoration/enhancement projects. The partnership is focusing on improving habitat in cold-, cool- and warm-water streams and rivers in targeted watersheds for fish and other aquatic communities. Operational funds received by the DARE partnership will be used to implement riparian and in-stream habitat projects and support planning and coordination. Despite a Continuing Resolution in Fiscal Year 2007, the Fish and Wildlife Service made some \$3 million available to help support the National Fish Habitat Action Plan program.

Approximately \$1.76 million was allocated to five regional partnerships to fund on-the-ground work. Priority DARE projects were entered into the Fish and Wildlife Service's Fisheries Operational Needs database and submitted to the National Fish Habitat Action Plan Board and Director of the Fish and Wildlife Service for approval. Nine of eighteen projects from Iowa, Minnesota and Wisconsin were approved for funding based on how well they met certain criteria. The Fish and Wildlife Service will be working with project partners to update a recently developed restoration database by Trout Unlimited and communicate project progress to the National Fish Habitat Board.

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

Carterville NFWCO participates in Midwest Fish Passage Workshop

BY NATE CASWELL, CARTERVILLE NFWCO

Carterville NFWCO biologist Nate Caswell attended the Fish Passage on Midwestern Streams: Evaluation of Stability and Functionality of Dam Removals, Constructed Fishways, and Culvert Crossings Workshop that was held in Wheaton, Illinois. The main goal of the workshop was to foster discussions on ways to evaluate fish passage projects to determine their effect on stream fisheries and their stability after construction. Presentations were given by many highly-regarded individuals in the fish passage and stream restoration fields. In addition, the

group was able to make field visits to several fish passage project sites in Illinois, two of which were projects funded through Carterville NFWCO with the National Fish Passage Program. Site visits included a dam removal site that was still in the process of channel stabilization and a rock ramp that was washed out after it was damaged by high flows and ice. As the National Fish Passage Program continues to expand, it is important to continue to learn from past projects and apply those lessons to new ones.

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

Upward Bound Program

BY HEIDI KEULER, LA CROSSE NFWCO

In November, the La Crosse NFWCO participated in its first Upward Bound Program hosted by the University of Wisconsin-La Crosse and La Crosse Central High School. Many local La Crosse/Onalaska business-men and -women took time out of their busy Saturday afternoon to take part in a round table discussion about careers in Design and Engineering, Arts and Humanities, Business, Law, Education, Health Service, Social Service, Science and Computers. Each of the nine career groups had two to three individuals speak about their careers at a table with about twelve students from six local high schools from the La Crosse area. The Upward Bound Project at UW-La Crosse was created by Congress to help students overcome educational, social, cultural, and financial barriers to higher education. Eighty-five students are selected from low income homes and or homes where neither parent has a four year college degree. Participants include African-, Asian-, Euro-, and Hispanic-Americans, American Indians, Southeast Asian refuge students and students with disabilities. Upward Bound students have been very successful because of this excellent program. Of the 81 participants who graduated from the Program from 1998 to 2002, 47 percent have graduated from postsecondary institutions with 27 percent still enrolled in their postsecondary degree programs.

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 La Crosse NFWCO: <http://www.fws.gov/midwest/lacrossefisheries/>

Dam Removal Evaluation Course

BY JOANNE GRADY, COLUMBIA NFWCO

Branch Chief for Fish Conservation Joanne Grady attended a seminar hosted by the Illinois-Indiana Sea Grant Program. *Fish Passage on Midwestern Streams: Evaluation of Stability and Functionality of Dam Removals, Constructed Fishways and Culvert Crossings* was held in Wheaton, Illinois, in early November. Topics included fishway development, culvert replacements, and rock ramp designs. The course closed with a field trip to several dam project sites in northern Illinois.

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

Congressional Actions

H.R. 1495 (enr) To provide for the conservation and development of water and related resources, to authorize the Secretary of the Army to construct various projects for improvements to rivers and harbors of the United States, and for other purposes. [Enrolled bill]

S. 1248 (pcs) To provide for the conservation and development of water and related resources, to authorize the Secretary of the Army to construct various projects for improvements to rivers and harbors of the United States, and for other purposes. [Placed on Calendar Senate]

H.R. 1495 (eas) [Engrossed Amendment Senate]

H.R. 2419 (eas) “(B)(vii)..... 10”. [Engrossed Amendment Senate]

H.R. 4455 (ih) To authorize the Secretary of the Interior to provide international wildlife management and conservation programs through the Wildlife Without Borders Program in the United States Fish and Wildlife Service, and for other purposes. [Introduced in House]

H.R. 2764 (enr) Making appropriations for the Department of State, foreign operations, [Enrolled bill]

H.R. 2764 (eah) This Act may be cited as the “Consolidated Appropriations Act, 2008”. [Engrossed Amendment House]

H.R. 3891 (ih) To amend the National Fish and Wildlife Foundation Establishment Act to increase the number of Directors on the Board of Directors of the National Fish and Wildlife Foundation. [Introduced in House]

H.R. 767 (rh) To protect, conserve, and restore native fish, wildlife, and their natural habitats at national wildlife refuges through cooperative, incentive-based grants to control, mitigate, and eradicate harmful nonnative species, and for other purposes. [Reported in House]

H.R. 767 (ih) To protect, conserve, and restore native fish, wildlife, and their natural habitats at national wildlife refuges through cooperative, incentive-based grants to control, mitigate, and eradicate harmful nonnative species, and for other purposes. [Introduced in House]

H.R. 767 (eh) To protect, conserve, and restore native fish, wildlife, and their natural habitats at national wildlife refuges through cooperative, incentive-based grants to control, mitigate, and eradicate harmful nonnative species, and for other purposes. [Engrossed in House]

H.R. 1533 (ih) To provide for the establishment of a national mercury monitoring program. [Introduced in House]

S.J.Res. 17 (rs) Directing the United States to initiate international discussions and take necessary steps with other Nations to negotiate an agreement for managing migratory and transboundary fish stocks in the Arctic Ocean. [Reported in Senate]

S. 843 (is) To provide for the establishment of a national mercury monitoring program. [Introduced in Senate]

H.R. 767 (rfs) To protect, conserve, and restore native fish, wildlife, and their natural habitats at national wildlife refuges through cooperative, incentive-based grants to control, mitigate, and eradicate harmful nonnative species, and for other purposes. [Referred in Senate]

H.R. 767 (rcs) To protect, conserve, and restore native fish, wildlife, and their natural habitats at national wildlife refuges through cooperative, incentive-based grants to control, mitigate, and eradicate harmful nonnative species, and for other purposes. [Reference Change Senate]

S.J.Res. 17 (es) Directing the United States to initiate international discussions and take necessary steps with other Nations to negotiate an agreement for managing migratory and transboundary fish stocks in the Arctic Ocean. [Engrossed in Senate]

S.J.Res. 17 (is) Directing the United States to initiate international discussions and take necessary steps with other Nations to negotiate an agreement for managing migratory and transboundary fish stocks in the Arctic Ocean. [Introduced in Senate]

S.J.Res. 17 (rcs) Directing the United States to initiate international discussions and take necessary steps with other Nations to negotiate an agreement for managing migratory and transboundary fish stocks in the Arctic Ocean. [Reference Change Senate]

S.J.Res. 17 (rfh) Directing the United States to initiate international discussions and take necessary steps with other Nations to negotiate an agreement for managing migratory and transboundary fish stocks in the Arctic Ocean. [Referred in House]

H.R. 3663 (ih) To amend the Fish and Wildlife Act of 1956 to establish additional prohibitions on shooting wildlife from aircraft, and for other purposes. [Introduced in House]

H.R. 2830 (rh) To authorize appropriations for the Coast Guard for fiscal year 2008, and for other purposes. [Reported in House]

H.R. 1495 (eh) To provide for the conservation and development of water and related resources, to authorize the Secretary of the Army to construct various projects for improvements to rivers and harbors of the United States, and for other purposes. [Engrossed in House]

H.R. 1495 (pcs) To provide for the conservation and development of water and related resources, to authorize the Secretary of the Army to construct various projects for improvements to rivers and harbors of the United States, and for other purposes. [Placed on Calendar Senate]

H.R. 3227 (ih) To direct the Secretary of the Interior to continue stocking fish in certain lakes in the North Cascades National Park, Ross Lake National Recreation Area, and Lake Chelan National Recreation Area. [Introduced in House]

H.R. 1495 (ih) To provide for the conservation and development of water and related resources, to authorize the Secretary of the Army to construct various projects for improvements to rivers and harbors of the United States, and for other purposes. [Introduced in House]

H.R. 1495 (rh) To provide for the conservation and development of water and related resources, to authorize the Secretary of the Army to construct various projects for improvements to rivers and harbors of the United States, and for other purposes. [Reported in House]

S. 1766 (is) To reduce greenhouse gas emissions from the production and use of energy, and for other purposes. [Introduced in Senate]

S. 2302 (pcs) To provide for the continuation of agricultural programs through fiscal year 2012, and for other purposes. [Placed on Calendar Senate]climate change mitigation, and for other purposes. [Introduced in House]

Source is <http://www.gpoaccess.gov/bills/index.html>

Searched database by keyword = “fish”

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.

National Fish and Wildlife Conservation Offices

National 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 fisher-

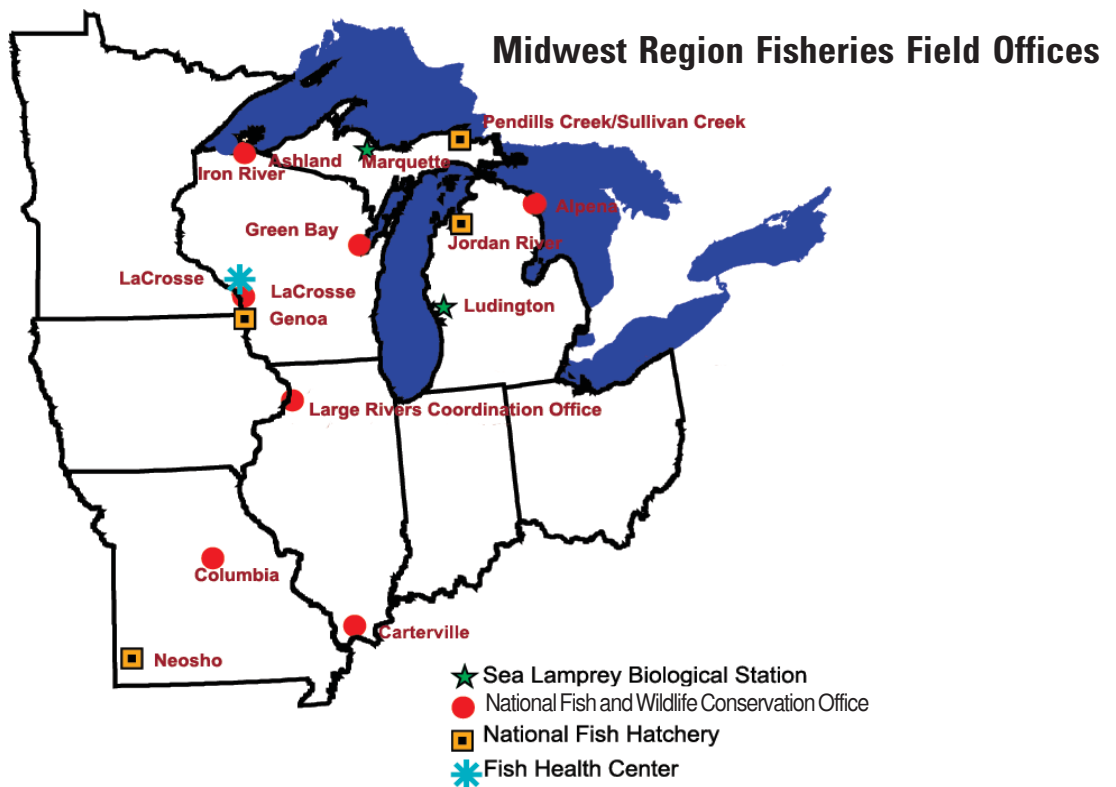
ies databases; provide technical expertise to other Service programs addressing contaminants, endangered species, federal project review and hydro-power operation and re-licensing; evaluate and manage fisheries on Service lands; and, provide technical support to 38 Native American tribal governments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



Fisheries Contacts

Gerry Jackson (gerry_jackson@fws.gov)

Michigan

Alpena National Fish and Wildlife Conservation Office
Federal Building; 145 Water Street
Alpena, MI 49707
Jerry McClain (jerry_mcclain@fws.gov)
989/356-3052

Jordan River National Fish Hatchery
6623 Turner Road
Elmira, MI 49730
Roger Gordon (roger_gordon@fws.gov)
231/584-2461

Ludington Biological Station
229 South Jebavy Drive
Ludington, MI 49431
Dennis Lavis (dennis_lavis@fws.gov)
231/845-6205

Marquette Biological Station
3090 Wright Street
Marquette, MI 49855-9649
Katherine Mullett (katherine_mullett@fws.gov)
906/226-6571

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

Missouri

Columbia National Fish and Wildlife Conservation Office
101 Park Deville Drive; Suite A
Columbia, MO 65203
Tracy Hill (tracy_hill@fws.gov)
573/234-2132

Neosho National Fish Hatchery
East Park Street
Neosho, MO 64850
David Hendrix (david_hendrix@fws.gov)
417/451-0554

Illinois

Cartersville National Fish and Wildlife Conservation Office
9053 Route 148, Suite A
Marion, Illinois 62959
Rob Simmonds (rob_simmonds@fws.gov)
618/997-6869

Wisconsin

Ashland National Fish and Wildlife Conservation Office
2800 Lake Shore Drive East
Ashland, WI 54806
Mark Brouder (mark_brouder@fws.gov)
715/682-6185

Genoa National Fish Hatchery
S5689 State Road 35
Genoa, WI 54632-8836
Doug Aloisi (doug_aloisi@fws.gov)
608/689-2605

Green Bay National Fish and Wildlife Conservation Office
2661 Scott Tower Drive
New Franklin, WI 54229
Mark Holey (mark_holey@fws.gov)
920/866-1717

Iron River National Fish Hatchery
10325 Fairview Road
Iron River, WI 54847
Dale Bast (dale_bast@fws.gov)
715/372-8510

LaCrosse Fish Health Center
555 Lester Avenue
Onalaska, WI 54650
Becky Lasee (becky_lasee@fws.gov)
608/783-8441

LaCrosse National Fish and Wildlife Conservation Office
555 Lester Avenue
Onalaska, WI 54650
Pamella Thiel (pam_thiel@fws.gov)
608/783-8431

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

Aquatic Habitat Conservation and Management

- [Cartersville NFWCO participates in Midwest Fish Passage Workshop](#)
 - [Nate Caswell, Cartersville NFWCO](#)

- [Ohio River Basin Habitat Partnership introduces itself to the NFHAP Board and the Ohio River Fish Management Team](#)
 - [Rob Simmonds, Cartersville NFWCO](#)
- [Cartersville NFWCO submits draft Stone Dike Alterations Project Year Two report](#)
 - [Nate Caswell, Cartersville NFWCO](#)
- [Alcona-Black Watershed Stream Survey and Habitat Assessment](#)
 - [Andrea Ania, Alpena NFWCO](#)

Workforce Management



Nashua, N.H., U.S. Fish Hatchery
-Jerry French Postcard Collection; U.S. Fish Hatchery at Nashua, New Hampshire (circa 1910)

Water Under the Bridge

A Glimpse into our Proud Past

The Nashua Fish Hatchery is located near the City of Nashua, Hillsborough County, in south central New Hampshire. This U.S. Fish Hatchery was established in 1898 and remains in operation today.