



U.S. Fish & Wildlife Service

Fish Lines



Fiscal Year 2006
Vol. 4 No. 8

Region 3 - Great Lakes/Big Rivers

Leadership in Conserving, Enhancing, and Restoring Aquatic Ecosystems

Public Visitation/Outreach at the Neosho National Fish Hatchery



-USFWS

Series of photos depicting visitation and outreach at Neosho National Fish Hatchery (NFH) (Top Row, Lt. to Rt.): Neosho NFH sponsors the Annual Fishing Outing for the Elderly and the Physically Challenged which attracts about 80 participants; Hatchery manager David Hendrix directs the Annual Fishing Derby for 8 - 12 year olds; Kids enjoy the Annual Fishing Derby; (Bottom Row) Managers David Hendrix and Roderick May participate in an educational event for the Outdoor television channel; Roderick May works with students to examine the internal organs of a fish at Goodman Elementary in Goodman, Missouri; Biologist Ralph Simmons works the hatchery booth at the Carver National Monument's Carver Day Celebration.

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To view other issues of "Fish Lines", see our Regional website at: (<http://www.fws.gov/midwest/Fisheries/>)



Region 3 - Great Lakes/Big Rivers 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

Region 3 Focus Areas

1. Partnerships and Accountability

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.

2. Aquatic Species Conservation and Management

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.

3. 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.

4. Public Use

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.

5. Cooperation with Native Americans

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.

6. Leadership in Science and Technology

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.

7. Aquatic Habitat Conservation and Management

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.

8. Workforce Management

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.

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.

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Certification Course held in
Onalaska, Wisconsin**

Click here to visit our Fisheries Web Site

Great Lakes - Big Rivers Region Fisheries Field Offices

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.

Sea Lamprey Control Stations

Sea Lamprey Control Stations assess and control sea lamprey populations throughout the Great Lakes. The U.S. Department of State and Canadian Department of Fisheries and Oceans fund this program through the Great Lakes Fishery Commission.

Fishery Resources Offices

Fishery Resources 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 opportu-

nities; 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 re-licensing; evaluate and manage fisheries on Service lands; and, provide technical support to 38 Native American tribal governments and treaty authorities. In other Regions of the Service, FRO's are also referred to as Fish and Wildlife Management Assistance Offices.

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 throughout the region; 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.

Great Lakes - Big Rivers Region Fisheries Field Offices



List of Acronyms

DNR- Department of Natural Resources
 FHC- Fish Health Center
 FRO- Fishery Resources Office
 NFH- National Fish Hatchery
 NWR- National Wildlife Refuge

Feature Story - Public Visitation/Outreach at the Neosho National Fish Hatchery

The Neosho National Fish Hatchery (NFH) is the oldest operating Federal fish hatchery in the nation. Established in 1888, Neosho is located in the Ozark Mountain Region of Southwest Missouri. It is one of 69 hatcheries operated by the Fish and Wildlife Service with a mission to conserve and protect our nation's fishery resources.

Neosho NFH was established just outside the small town of Neosho, Missouri, because of the availability of the gravity flow spring water and a railroad spur for transporting fish in specialized railcars as far west as the Rocky Mountains. As the years passed, the City of Neosho grew around the hatchery and generations of people adopted it as one of their favorite places to visit.



-USFWS
Aerial view of the Neosho National Fish Hatchery (2002). Note the red text and arrow that indicate the site of the future visitor center.



-USFWS
Hatchery manager David Hendrix (back, center) works with the Friends of the Neosho National Fish Hatchery to prepare fishing poles for annual fishing clinics and derbies. About 200 fishing rods and reels were donated by the Friends group to loan out to participants.

Now, 118 years after it opened, Neosho NFH—unlike most Federal hatcheries—is located in the heart of a city. This spells a healthy public outreach program. Approximately 45,000 people visit this historic hatchery annually, and the staff hopes to elevate this to more than 100,000 if funding is approved for the construction of a new visitor center in 2007 (see sidebar).

Neosho NFH has produced more than 130 different species of fish since it was established, and can produce cold, cool, and warm water fish. The current hatchery focuses are rainbow trout mitigation for Lake Taneycomo, near Branson; endangered pallid sturgeon production for the Lower Missouri River; walleye exchange for other services from the State of Missouri; and freshwater drum host fish for mussel work in the Ozarks.

Staff at the Neosho NFH also works to protect the endangered Ozark cavefish in one of four springs that supplies the hatchery with water. After staff discovered the Ozark cavefish using the spring in 1989, they undertook efforts to protect the area surrounding the spring, prevent illegal dumping and vandalism, and maintain the integrity of the spring to help protect water quality necessary for cavefish survival.

A camera inside the springbox provides live pictures of Ozark cavefish in the hatchery's display room. This allows the public to view the cavefish in its natural environment.



-USFWS

Visitors to the Neosho National Fish Hatchery have the opportunity to view rare Ozark cavefish that live in one of the hatchery springs. A camera relays live video to a monitor in the hatchery's display room.

The water supply for the hatchery arrives from four gravity flow underground springs located up to four miles from the hatchery. The 1,600 gallons of 58 degree water is of excellent quality and allows the hatchery staff to produce more than 90,000 pounds of fish annually.

Hatchery staff participates in a variety of outreach activities by working with girl and boy scouts, Lion's clubs, Rotary clubs and Kiwanis clubs; setting up booths at county fairs, business fairs, career day events, off-site presentations, on-site presentations, schools through-out the four state area of all levels, churches and fishing clubs; and sponsoring an annual kid's fishing clinic/derby, annual fishing outing for the elderly and physically challenged, and other events.



Neosho NFH's New Visitor Center

The future "Visitor Center" at Neosho NFH will encompass 9,500 square feet of floor space. It will include an audiovisual room for viewing videos and presentations/seminars; historic exhibits on the hatchery and the railcar era in fisheries; aquariums; an Ozark cavefish exhibit; a wet lab and a library; and an outdoor deck that will extend over hatchery Pond 11. The visitor center will also house much needed office space for the hatchery staff and a bookstore that will be operated by the *Friends of the Neosho National Fish Hatchery*. The new visitor center is expected to increase hatchery visitation to more than 100,000 visitors annually.

Neosho has a wonderful Friends group that is very supportive and provides wonderful assistance for many of the annual events. Each year the hatchery host events like the Annual Open House Celebration, Annual Kid's Fishing Clinic/Derby, Annual Fishing Outing for the Elderly and Physically Challenged, as well as the Annual Friends Picnic.

Visitors are welcome at the hatchery Monday through Friday from 8 a.m. to 4:30 p.m. and walk-through gates are open later for walkers and visitors after hours and on weekends.

For additional information about visitation and outreach opportunities at the Neosho National Fish Hatchery, contact David Hendrix at:

Phone 417/451-0554
E-mail David_Hendrix@fws.gov

Partnerships and Accountability

Multi-Agency Mussel Recovery Programs Maintain Momentum

Propagation programs for the Higgins' eye pearl mussel and winged mapleleaf mussel continue to be the focus of a multi-agency recovery initiative for Federally endangered freshwater mussels in the Upper Mississippi River watershed during 2006. A consortium of state and Federal cooperators, including the Genoa National Fish Hatchery (NFH), work together as part of the Upper Mississippi River Mussel Conservation Team (Team). The Team carries out a multi-year plan to bolster populations of Higgins' eye pearl mussels and winged mapleleaf mussels that have been affected by habitat losses and infestation of the invasive zebra mussels in the Upper Mississippi River and its tributaries.

This six-year-old program, which has grown from a fledgling program to the largest freshwater mussel recovery effort in the United States, has produced millions of juvenile mussels for reintroduction and recovery efforts in the Upper Mississippi watershed, as well as more than 11,000 advanced growth mussels. This year the team placed more than 100 mussel propagation cages containing 3,790 mussel-bearing host fish for the two species at several sites. These cages will be monitored through the coming season and harvested later in 2006. Production from this year will be grown out over the next three years and eventually stocked into recovery sites designated in the relocation and recovery plans for each mussel species.

Roger Gordon, Genoa NFH



-USFWS

These Federally endangered Higgins' eye pearl mussels were produced in a protected cage. The cage was anchored in Lake Pepin which is part of the Mississippi River and forms a border between Minnesota and Wisconsin.

St. Marys River Fishery Task Group Meets

The St. Marys River Fishery Task Group met on May 4 to coordinate and discuss upcoming activities and issues of concern regarding St. Marys River fisheries. Alpena Fishery Resources Office (FRO) biologist Anjie Bowen chaired the meeting, which was held at the Chippewa Ottawa Resource Authority (CORA) office in Sault Ste. Marie, Michigan. The group coordinated activities for the upcoming 2006 St. Marys River Fish Community Survey scheduled for August and the annual Fall Walleye Recruitment Survey planned for September.

Dave Fielder of the Michigan Department of Natural Resources (DNR) presented a summary of the 2005 St. Marys River Harvest Survey, and Bill Gardner of the Department of Fisheries and Oceans Canada (DFO Canada) presented results of their 2005 Fall Index Netting Survey. Michelle Selzer of Michigan Department of Environmental Quality provided information on the *St. Marys River Remedial Action Plan Beneficial Use Impairments*

related to fisheries where delisting criteria will be developed and fishery data will be needed to determine whether the delisting criteria have been met.

The task group comprises a number of agencies with management authority or other interests in the St. Marys River, including the Michigan DNR, Ontario Ministry of Natural Resources, Bay Mills Indian Community, CORA, DFO Canada, Lake Superior State University, Sault College of Applied Arts, and the Fish and Wildlife Service.

The group was established under the authority of the Great Lakes Fishery Commission's Lake Huron Committee in 1997 to achieve a meaningful understanding and a joint strategy to enhance and maximize the fishery resources of the St. Marys River. Publications produced on the St. Marys River fishery may be found on the Great Lakes Fishery Commission's website at <http://www.glfc.org/lakecom/lhc/lhchome.php> under "Publications and Products." *Anjanette Bowen, Alpena FRO*

Preparation Begins for Commercial Fisher Appreciation Dinner

Biologist Adam Kowalski began preparation for the ninth annual Commercial Fishers Appreciation Dinner, which the Alpena FRO hosts each year to honor Michigan state-licensed and tribal commercial fishers who assist with a lake sturgeon tagging project in Lake Huron. Kowalski reserved a pavilion at a city park in Bay City and made other arrangements for the event. Volunteer funds pay all costs for the event, including purchase of prizes and gifts such as life vests, rain gear, t-shirts, and can coolers.

Commercial fishers 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, 10 commercial fishers operating 16 boats participate in the study. Approximately 430 lake sturgeons have been tagged since the program began in 1995. This partnership between the Fish and Wildlife Service and Lake Huron commercial fishers to track and monitor lake sturgeon has been in place since 1995.

Adam Kowalski, Alpena FRO



-USFWS photo by Adam Kowalski

A certificate of appreciation was presented to Lake Huron commercial fishermen who assisted the Alpena Fishery Resources Office with lake sturgeon tagging activities during 2005. Commercial fishers have assisted with the tagging of over 430 lake sturgeons since 1995.

Mourning Dove Call-Count Survey Conducted

As part of the Fish and Wildlife Service's nationwide Mourning Dove Call-Count Survey, Ted Koehler from the Ashland FRO surveyed Wisconsin Route #0060 in Ashland County. The call-count survey was designed specifically for the mourning dove and provides an annual index to population size. The total number of doves heard on each route is used to determine trends in populations and provides the basis for determining an index to population size during the breeding season. Resulting information on status and trends is used by wildlife administrators to set annual hunting regulations.

The mourning dove is one of the most widely distributed and abundant bird species in North America. During courtship behavior, mourning dove calling reaches a peak at sunrise and then diminishes gradually. The survey is conducted along a 20-mile route, and all doves seen along the route as well as heard at stopping intervals are recorded. The results are then entered into the national Mourning Dove Call-Count database.

Ted Koehler, Ashland FRO



-USFWS

Ted Koehler of the Ashland Fishery Resources Office participates in a Mourning Dove Call-Count Survey in Ashland County, Wisconsin.

Michigan Federal Natural Resource Managers Meet

Ashland FRO project leader Mark Dryer participated in the annual meeting of Federal Resource Leaders for Michigan in Marquette in May. The objectives for this annual gathering are to establish and maintain relationships among principal Federal natural resource managers in Michigan, and become more informed on major natural resource and political developments of mutual interest. The following agencies and programs were represented: Fish and Wildlife Service Fisheries (Marquette Biological Station and Ashland FRO); Fish and Wildlife Service Ecological Services (East Lansing Field Office and sub-office in Marquette); Fish and Wildlife Service National Wildlife Refuges (Seney and Shiawassee NWR's); U.S. Forest Service (Hiawatha and Ottawa National Forests, and Houghton Research Station); National Park Service (Isle Royale National Park and Sleeping Bear Dunes National Lake Shore); and the U.S. Environmental Protection Agency (Great Lakes National Program Office). Managers reported on agency and policy issues and discussed opportunities to work together under the Great Lakes Regional Collaboration initiative.

Mark Dryer, Ashland FRO

Aquatic Species Conservation and Management

Native Mussel Cage Culture Efforts Underway at Genoa NFH

Buoyed by the success of floating rearing cages in 2005, Genoa NFH and the National Mississippi River Museum and Aquarium loaded floating cages with walleye and bass inoculated with mussel larva called glochidia. These fish will help produce another cohort of sub-adult mussels for restoration efforts for the interior waters of Iowa. Ninety walleye were inoculated with glochidia from black sandshell mussels and placed in three floating cages in Ice Harbor at Dubuque, Iowa. Expanding 2005 efforts, three cages containing 90 largemouth bass inoculated with fat mucket mussel glochidia were also placed at the site. Fat mucket mussels are expected to do equally as well as black sandshell mussels.

The secret of this successful program is the partnership formed by Genoa NFH and the Aquarium. Genoa NFH is able to supply the expertise for mussel culture, while the aquarium supplies a safe location for Genoa staff to work on the Mississippi River. The aquarium also provides a constant watch over the cages to prevent vandalism. Having the cages anchored to an existing exhibit gives the aquarium an opportunity to educate visitors about ongoing mussel issues and restoration efforts.

Tony Brady, Genoa NFH



-USFWS

Floating native mussel culture cages can be seen attached to this vessel exhibit at the National Mississippi River Museum and Aquarium. This site provides a safe location for the cages and opportunities to educate visitors about mussel restoration and recovery efforts.

Take Me to the River

Spring northern pike and walleye netting operations on Pool 9 of the Upper Mississippi River were underway throughout the months of April and May for the crew of the Genoa NFH. This spring's efforts accounted for egg and fry distribution of 229,000 northern pike; 4,276,000 sauger; and 21,044,750 walleye. The majority of the pike production was bound for Horicon NWR, which requests the fish annually for biological control of rough fish on its wetlands. Millions of sauger and walleye eggs/fry were also shipped throughout the United States, primarily to fulfill fisheries management goals on state and federal waters. Not all cool water fish produced at the hatchery are distributed to other states; many remain at the hatchery for further grow-out (up to six inches) or are released locally. This year Genoa NFH released 2,715,000 walleye fry and 2,050,000 sauger fry back into Pool 9 of the Upper Mississippi River to fulfill the annual commitment of returning at least 10 percent of the year's egg take

back into the river. Giving back to the river helps create angling opportunities and ensures a healthy walleye spawning population for years to come.

Nick Starzl, Genoa NFH

St. Marys River Lake Sturgeon Project

On May 15, biologist Scott Koproski worked on the St. Marys River lake sturgeon telemetry project near Sault Ste. Marie, Michigan. Newly appointed biological science aid Meghan Kline will be stationed in Sault Ste. Marie working on this project, which is funded through the National Fish and Wildlife Foundation and partners including Lake Superior State University, Bay Mills Indian Community, and Soo Area Sportsman.

Koproski and Kline began deploying set lines to capture lake sturgeon utilizing the St. Marys River. A set line consists of twenty five baited hooks spaced 10 feet apart on a 300-foot main line, which has an anchor and buoy on each end. The set line is allowed to fish for either one or two nights. Koprowski and Kline set more than 50 set line lifts over the last three weeks of May, capturing three lake sturgeons, two of which exceeded the 50-inch minimum length limit necessary for implanting a sonic telemetry tag. Set lines will continue to be fished through June and tracking began with the first sonic tag implantation. By following these fish, we hope to identify spawning locations within the St. Marys River or identify new tributaries that lake sturgeons utilize.

Scott Koproski, Alpena FRO

Aquatic Invasive Species

Lake Superior Aquatic Invasive Species Surveillance Detects Round Goby and Confirms Ruffe

The Ashland FRO survey crew captured a single juvenile round goby in Marquette Harbor, Michigan, a new discovery location for round goby in Lake Superior. Single round gobies have also been collected in Thunder Bay Harbour, Ontario, and the Amnicon River, Wisconsin. The only location in Lake Superior where the round goby has an established population is the Duluth-Superior Harbor, Minnesota/Wisconsin. These four locations comprise the confirmed distribution of round goby in Lake Superior.

In cooperation with the Michigan DNR, Ashland FRO staff confirmed range expansion of Eurasian ruffe east along the south shore of Lake Superior to Whitefish Bay, during spring aquatic invasive species surveillance activity. An angler with a ruffe "watch" card (wallet-size identification card), produced by the Great Lakes Sea Grant Network, captured an adult ruffe at the mouth of the Tahquamenon River, Michigan, a tributary to Western Whitefish Bay. This location is 26 miles west of the Soo Locks and 100 miles east of Marquette harbor, the previous eastern boundary of the Eurasian ruffe range along the south shore of Lake Superior. The survey crew arrived at the Tahquamenon River, one of six established surveillance locations, to conduct surveillance monitoring and contacted the angler to confirm identification of the preserved specimen. No additional ruffe were captured in mini fyke nets deployed by the survey crew in the estuary. The primary ruffe surveillance method, bottom

trawling, is not effective in the Tahquamenon River due to the high density of woody debris on the river bottom.

Other aquatic invasive species collected during spring surveillance included three Eurasian ruffe from the Keweenaw Waterway, Michigan; one live and several dead zebra mussels; 26 threespine sticklebacks from Marquette harbor; and one threespine stickleback from Munising Bay, Michigan. All of these were previously discovered in these locations, but the threespine stickleback catch from Marquette harbor is the largest one-day catch since they were detected at that location. *Gary Czypinski, Ashland FRO*

Eurasian Ruffe Removal Effort Conducted in Thunder Bay River

Alpena FRO conducted efforts to detect and remove Eurasian ruffe from the only known Lake Huron population located in the Thunder Bay River near Alpena in Northeastern Michigan. This annual effort was initiated in 2002 to remove adult ruffe prior to spawning. Small mesh gillnets were fished at three to five index locations and targeted water temperatures and timing of when ruffe were captured in past years.

No ruffe were captured following a total of 44 nights of effort. In fact, ruffe have not been captured in Thunder Bay since 2003. Alpena FRO staff involved in the effort included Heather Rawlings, Susan Wells, Aaron Woldt, Scott Koproski, Adam Kowalski, Jerry McClain, and Anjanette Bowen.

Eurasian ruffe are an aquatic invasive species that were accidentally introduced into the Great Lakes via ballast water from one or more ocean-going vessels. They are related to yellow perch but do not attain a size that is desirable for sport fish harvest and are thought to compete with native species for food and habitat resources. Ruffe were designated an aquatic invasive species in 1992 by the Aquatic Nuisance Species Task Force. They were first discovered in Lake Huron at Thunder Bay in 1995.

Anjanette Bowen, Alpena FRO



-USFWS
Educational watch cards for invasive round goby and Eurasian ruffe are part of the kiosk at the Presque Isle Marina boat landing near Marquette, Michigan.

Fish and Wildlife Service Consulted and a Protocol Implemented to Minimize Effects of Lampricide Stream Treatments on Federal and/or State-Listed Species

Sea lamprey management program staff consulted with personnel of the Ecological Services Field Offices in the Twin Cities, Green Bay, East Lansing, Bloomington, Reynoldsburg, State College, and Cortland and completed intra-Service section 7 reviews on proposed lampricide stream treatments to comply with the Endangered Species Act of 1973, as amended. Concurrence was achieved on lampricide treatment strategies to kill populations of larval sea lampreys and conservation measures to protect and avoid disturbance to 10 Federal and state-listed endangered, threatened, candidate, and special concern species in Minnesota, Wisconsin, Michigan, Indiana, Ohio, Pennsylvania, and New York during 2006. The Federal and state-listed species include bald eagle, dwarf lake iris, eastern massasauga rattlesnake, eastern prairie fringed orchid, Houghton's goldenrod, Indiana bat, Karner blue butterfly, Kirtland's warbler, piping plover, and Pitcher's thistle.

Fifteen additional state-listed endangered, threatened, and special concern species were also described during the treatment permitting process in Wisconsin, Michigan, and Indiana and included black tern, Blanding's turtle, channel darter, common loon, eastern fox snake, ellipse mussel, lake sturgeon, northern brook lamprey, northern goshawk, osprey, pugnose shiner, red-shouldered hawk, slippershell mussel, spotted turtle, and wood turtle.

Based on the Federal reviews and state permits received, a

Protocol to Protect and Avoid Disturbance to Federal and/or State-Listed Endangered, Threatened, Candidate, or Special Concern Species and Critical or Proposed Critical Habitats in or near Great Lakes Streams Scheduled for Lampricide Treatments in the United States during 2006 was implemented to minimize the effects of treatments on 25 rare organisms in 30 of the 54 streams scheduled for treatments. The protocol included a list of stream treatments and known locations, GIS maps, procedures to protect and avoid disturbance, and fact sheets for each listed species that contained an image, description, and preferred habitat.

The sea lamprey program continues to work closely with partners to control populations of sea lampreys in tributaries of the Great Lakes to protect the fishery and related economic activities in the basin, an estimated benefit of \$4 billion to \$6 billion a year to the region.

John Weisser, Marquette Biological Station



-GLFC

The piping plover is a Federal and state listed species in the Great Lakes. The Sea Lamprey Control program works closely with Ecological Services offices and state partners to minimize impacts from stream treatments to remove invasive lamprey populations.

Students Learn Impacts of Invasive Species

Fish and Wildlife Service personnel from the Marquette Biological Station presented information on the impacts invasive species have had in Great Lakes waters to students at the Rudyard Middle School in Rudyard, Michigan. Live sea lampreys allowed students a hands-on experience of an invasive, parasitic fish. Students also learned the importance of biodiversity in the aquatic community and how sea lampreys and other invasive species have a significant negative effect on the health of the aquatic ecosystem, as well as economic impacts to the Great Lakes. The Fish and Wildlife Service delivers a program of integrated sea lamprey control in the U.S. waters of the Great Lakes as a contracted agent of the Great Lakes Fishery Commission. *John Weisser, Marquette Biological Station*

Public Use

Kids Fishing Day Held at the Northern Great Lakes Visitor Center

Joan Bratley, Ted Koehler, Gary Czypinski, Jonathan Pyatskowitz, Jess Krajniak, and Mark Dryer of the Ashland FRO contributed their time and talents to a successful presentation of activities for Kids Fishing Day at the Northern Great Lakes Visitor Center in Ashland, Wisconsin. The event was organized by Whittlesey Creek NWR and the U.S. Forest Service, which both have offices at the center. Kids learned how to identify fish, where fish live, what fish eat, and how to catch and release fish. An estimated 275 kids and their parents participated. Fishing in the center's pond was slow, but the great weather, attendance, programs, and instruction made the day a huge success. Iron River NFH provided the fish for the fishing pond.

Mark Dryer, Ashland FRO



-USFWS

Project Leader Mark Dryer of the Ashland Fishery Resources Office helps a child during one of the many activities offered during the Kids Fishing Day event held at the Northern Great Lakes Visitor Center near Ashland, Wisconsin.

Kids Fishing Day Nets Large Turnout at the Genoa NFH

The fourth annual Kids Fishing Day sponsored by the Friends group of the three La Crosse area Fish and Wildlife Service Fisheries field offices—Genoa NFH, La Crosse FRO, and La Crosse FHC—took place on May 20. More than 150 youth, adult volunteers, and Fish and Wildlife Service staff were on hand to begin handing down responsible conservation ethics to eager young anglers.

Assisted by Conservation Warden Shawna Stringham of the Wisconsin DNR, Falling Rock Walleye Club, Friends group members, and Fish and Wildlife Service biologists from the three river offices, participants visited five learning stations focusing on fishing ethics and conservation, river jig making, fish anatomy, fish cleaning, and fish behavior and habitats. Then the fun began! The kids were turned loose for a few hours on a pond stocked with 10- to 14-inch rainbow trout. More than a few stringers of five fish (the daily limit) were carried proudly around for all to see. Afterward, the crowd gathered for lunch and prizes.

All of the participants received a goody bag. Smiles were in abundance as the day came to a close, hopefully the result of a budding passion for fishing and natural resource conservation. Many thanks to all the helpers.

Doug Aloisi, Genoa NFH

Rick Nelson, La Crosse FHC



-USFWS

The 4th Annual Kids Fishing Day held at the Genoa National Fish Hatchery attracted over 150 youth, adult volunteers, and Fish and Wildlife Service staff.

Genoa NFH Connects with Students On and Off Station

As the days get longer, indicating the return of spring and the end of the school year, Genoa NFH becomes a field trip destination for many school groups and visitors of all ages. Everyone is welcome at the hatchery, where they tour the facilities, learn about our history, observe walleye and lake sturgeon fry, learn about threatened and endangered species such as a coaster brook trout and Higgins' eye pearly mussels, and see the feeding frenzy caused by thousands of 10-inch rainbow trout. This spring, Genoa NFH was visited by seven school groups and one club scout group, totaling 350 kids and adults. Genoa is able to give these students a unique opportunity to see and learn about career opportunities in the field of natural resources. The largest daily visitation Genoa NFH experiences each year is our annual kids fishing day, when 150 kids and parents enjoy a day of fishing for rainbow trout at the hatchery.

Genoa extended its outreach efforts beyond the hatchery grounds by participating in the annual multi-agency outreach effort known as River Festival

that is attended by nearly 1,000 students from two different states. This year's River Festival was held on May 16 and 17 at Lock and Dam 9 on the Mississippi River near Lynxville, Wisconsin. Genoa NFH staff presented a program on mussel life history and propagation efforts conducted at the hatchery. A display pool gave kids a chance to get their hands wet and dig around for some live mussels. Dan Kumlin and Nick Starzl assisted in this year's festival by piloting boatloads of school children on the Upper Mississippi National Wildlife and Fish Refuge (NW&FR). Refuge and hatchery staff toured local wildlife "hotspots," including a large blue heron rookery.

Tony Brady, Genoa NFH



-USFWS
A school group enjoys their lunch after an exciting tour of the Genoa National Fish Hatchery.

Tomah Veterans Administration Hospital Fishing Tournament

On May 17, staff from the La Crosse FHC and the La Crosse FRO traveled to Tomah, Wisconsin, to participate in the 16th annual Tomah Veteran Affairs Medical Center's Hospital-wide Fishing Tournament. Volunteers from the Friends of the Upper Mississippi River Fisheries Services were on hand to staff display booths, and Tomah Middle School students assisted veterans while fishing and during weigh-ins. The Genoa NFH stocked 1,000 rainbow trout several weeks before the

tournament. Plenty of 10- to 14-inch trout along with bluegills and smallmouth bass gave a variety of fish for everyone's enjoyment.

A booth was set up for weighing fish and prizes were awarded for the longest and smallest fish of each species. Prizes donated by local businesses consisted of new fishing rod and reels, tackle boxes, fishing lures, floats, and hooks. The winners were very happy with their prizes. Hot dogs, brats and fried catfish with all the fixings were provided by the Tomah Chapter of the Wisconsin Veterans Group and Genoa NFH. Special thanks to all who participated for the enjoyment of all the veterans at the hospital.

Rick Nelson, La Crosse FHC

Camp Chickagami Retreat

A group of 40 fifth grade students from Lincoln Elementary, in Alpena, Michigan, attended an overnight retreat at Camp Chickagami, spending two days in May camping and participating in a variety of outdoor educational activities. This event included canoeing, fishing, orienteering, and group building games. Alpena FRO biologist Susan Wells and Project Leader Jerry McClain participated, talking to the group on projects being conducted at the Alpena FRO and careers in natural resources. The kids also participated in a seining demonstration along the shoreline of Lake Esau, where the camp is located. Fish collected included spottail shiners, logperch, and rainbow darters. The students were then asked questions on the habitat types for each of the fish. After the demonstration, a packet of games and information regarding the Fish and Wildlife Service was provided to each student.

Susan Wells, Alpena FRO



-USFWS photo by Anjanette Bowen
Fifth graders from Lincoln Elementary look on as Alpena Fishery Resources Office biologist Susan Wells collects fish with a seine at a Camp Chickagami outreach event.

Students Learn Importance of Biodiversity

Marquette, Michigan, area fifth-grade students gathered for a three-day educational and fun program at Bay Cliff Health Camp, where Fish and Wildlife Service personnel presented information on the importance of biodiversity and how the sea lamprey and other aquatic invasive species have a significant negative effects on the health and economy of the Great Lakes ecosystem. More than 100 students learned that aquatic organisms have evolved into specialized body shapes with specialized appendages over time and also enjoyed knowing why the adaptations complement the existence of each type of organism in specific habitats within the aquatic community.

John Weisser, Marquette Biological Station

Cooperation with Native Americans

Coaster Brook Trout Planted in Lake Superior

With assistance from personnel from the Grand Portage Tribal Resources Department, biologists from the Iron River NFH stocked two- to three-inch hatchery-raised coaster brook trout at the shores of Lake Superior and in two tributaries on Grand Portage Reservation lands. Approximately 50,000 fingerlings were released at the lakeshore, Grand Portage Creek received 35,000, and the Pigeon River got 100,000. All fish were marked with oxytetracycline at the hatchery before release, allowing biologists to monitor the status of the coasters in these habitats. When stocking the Pigeon River, a new challenge faced the crew. As described by biologist Steve Redman, "The sun was very hot that day and temperatures they did grow, so new waters were discovered that provided for the tiny few."

This multiple year event is coordinated between the Grand Portage Indian Community and the Fish and Wildlife Service as part of a rehabilitation plan for Lake Superior brook trout. The combined efforts have led to continued monitoring of coaster brook trout status, distribution, movement, and abundance of re-introduced fish. Steve says, "A poet I may not be, but a proud biologist I will always be."

Steve Redman, Iron River NFH



-USFWS
A Grand Portage tribal biologist stocks coaster brook trout on the shore of Lake Superior. The fish were reared at the Iron River National Fish Hatchery.

Lake Sturgeon Migration Studied in Wisconsin's White River

Staff from the Ashland FRO and the Bad River Tribal Natural Resources Department set large mesh gill nets in the White River in Wisconsin to determine whether lake sturgeons are prevented from reaching spawning habitat by four large log jams. Two 100-foot nets were set in the lower river below the potential barrier and one 100' net was set upriver. A total of 39 sturgeons were captured in the lower nets and marked with a numbered Floy tag and a passive integrated transponder or PIT tag. Two fish were captured in the upriver net; however, neither fish had been captured in the lower nets. In addition to the adult sturgeon netting, staff spent about an hour each day trying to visually observe sturgeon spawning on the suspected spawning grounds below the White River Hydro dam. No sturgeons were observed during these efforts.

On May 8, 10, and 17, larval drift nets were also set to collect larval sturgeon. Larval drift nets were set 7 to 10 days after suspected spawning. Collection of larval sturgeons would have confirmed successful spawning but no larval sturgeon were collected. Nets were set at dusk and lifted twice, approximately once an hour. Larval fish collected of other species were counted and a subsample of 50 individuals from each genus was measured. Suckers and walleye were the only larval fish collected.

Jonathan Pyatskowitz, Ashland FRO



-USFWS
Staff from the Ashland Fishery Resources Office and the Bad River Tribal Natural Resources Department set large mesh gill nets in the White River in Wisconsin to determine whether lake sturgeons are being prevented from reaching spawning habitat because of large log jams.

Biologists Map Substrate Types in Nett Lake

The Bois Forte Indian Reservation of Nett Lake, Minnesota, received a Tribal Landowner Incentive Grant in 2004, one component of which was to conduct a survey of substrate types common in Nett Lake. Ashland FRO biologist Frank Stone and Bois Forte Reservation biologist Chris Holm set up a sampling protocol and completed the survey the week of May 8.

The objective of this project was to characterize and map bottom substrate composition and fish habitat value at Nett Lake, which will provide data critical to the Bois Forte Natural Resources Department for the assessment of wild rice production, fish habitat, and the long term management of the lake. This information will also fulfill management recommendations specified in the Bois Forte Integrated Resources Management and Aquatic Resources Management plans.

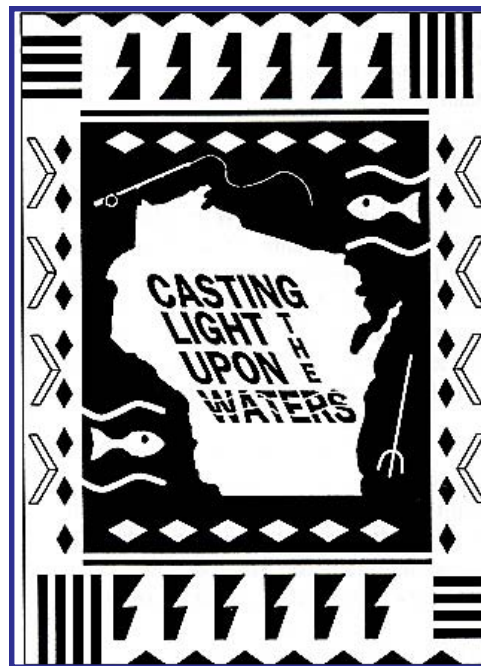
A continuous line transect that circumvented the lake and a systematic mid-lake sampling method (comprising 109 sample points) was established. Using a tribal airboat, substrate types were identified in one of five categories (silt/muck/clay, sand, gravel, cobble and bolder/bedrock) and their respective positions referenced. Substrate types were identified by prodding the lake bottom with a long aluminum pole and feeling the vibrations that resulted. If additional verification was needed, a Ponar Dredge was used to pull up a sample of the substrate in question.

Frank Stone, Ashland FRO

Casting Light Upon the Waters Annual Partners Event

Mark Dryer attended the 14th Annual Wisconsin Joint Assessment Steering Committee Partners event at on Lac Courte Oreilles Indian Reservation at The Landing on the Chippewa Flowage. The Wisconsin Joint Assessment Committee, composed of Federal, state, and tribal officials, formed in 1991 to assess and report on fishery resources in lakes where treaty fishing rights are exercised by the Chippewa Indians. Each year, committee partners and representatives gather to renew relationships and commitments, and to fish and feast.

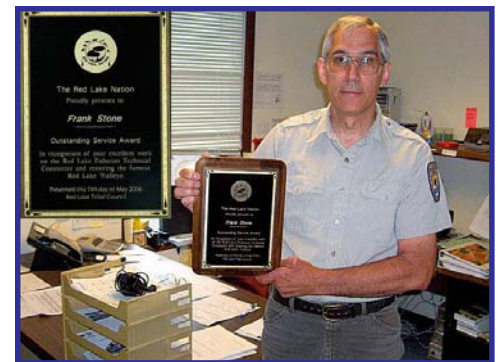
Mark Dryer, Ashland FRO



Stone Recognized for Contributions to Red Lake Fisheries Technical Committee

In March, the Minnesota Chapter of the American Fishery Society recognized Ashland FRO for its contributions and support to the Red Lake Fisheries Technical Committee, formed in 1997 to restore walleye populations in Red Lake. In May, Frank Stone of the Ashland FRO was recognized for his individual contributions on the committee by the Red Lake Tribal Council, along with other partners, committee members, and leaders. Our appreciation and thanks also extends to Tom Busiahn, previous project leader of the Ashland FRO, for establishing the initial planning process that helped to make the Red Lake walleye restoration effort possible.

Mark Dryer, Ashland FRO



-USFWS

Frank Stone of the Ashland Fishery Resources Office was recognized for contributions to the Red Lake Fisheries Technical Committee, which was formed in 1997 to restore walleye populations in Red Lake (Northern Minnesota).

Leadership in Science and Technology

Coaster Brook Trout: Who's Your Mama?

Staff from the Ashland FRO and the U.S. Geological Survey's (USGS) Great Lakes Science Center are progressing with a study of coaster brook trout population genetics on Federal lands and Indian reservations in Lake Superior. Specific sites include Isle Royale National Park; Pictured Rocks and Apostle Islands National lake shores; Whittlesey Creek NWR; and Grand Portage, Red Cliff, and Keweenaw Bay Indian reservations.

Objectives of the study are to determine microsatellite DNA genotypes of brook trout samples collected from the target areas and hatchery brood stocks. This information will be used to: 1) examine the relationship between known coasters and stream caught brook trout from the same vicinity; 2) determine if fish sampled are progeny of hatchery fish, native fish, or hybrids between the two; and 3) to determine the strain of stocked fish and the ratio of stocked to native fish in streams and near shore areas where experimental rehabilitation stocking is taking place.

Henry Quinlan, Ashland FRO



-USFWS

This fish is part of a study of coaster brook trout population genetics on Federal lands and Indian Reservations in Lake Superior.

Lake Sturgeon Surgery Demonstrated

Biologists Scott Koproski and James Boase took part in a surgery demonstration workshop on implanting sonic tags in lake sturgeons held in Sarnia, Ontario. Koproski obtained funding from the National Fish and Wildlife Foundation to capture, tag, and track lake sturgeons in the St. Marys River. Partners on this project are Lake Superior State University (LSSU), Bay Mills Indian Community, and Soo Areas Sportsman. LSSU Limnology Professor Ashley Moerke, LSSU Aquatics Research Laboratory Manager Roger Greil, LSSU student Meghan Kline, Dr. Bruce Manny (U.S. Geological Survey), and Jim McFee and Christopher Vandergoot (Ohio DNR) all participated in the workshop. Meghan Kline will be hired by the Alpena FRO through the Student Temporary Employment Program (STEP), and she will work primarily on the lake sturgeon project in the St. Marys River.

Lake sturgeon were captured and held by Purdy's Fishery in Sarnia, a valuable partner that provides live lake sturgeons and facilities to host similar events for

resource professionals. Twelve lake sturgeons captured from Lake Huron were made available for the demonstration at Purdy's. Boase demonstrated the incision location and suture knots to the group. Once Boase completed the procedure on the first fish, it was measured, tagged, and released. All participants of the workshop were allowed to practice on subsequent fish with Boase's close supervision. The techniques instructed and performed by participants were valuable to all present and will be used during the St. Marys River lake sturgeon telemetry project which began in May, and for other projects being conducted by partner agencies.

Scott Koproski, Alpena FRO



-USFWS photo by James Boase

Alpena Fishery Resources Office biologist Jim Boase performs surgery on a lake sturgeon to implant a sonic tag into the fish. The tag will allow the fish to be tracked.

Genoa NFH Supplies Mussels and Fish for Research Projects Across the Nation

Genoa NFH is home to the largest mussel restoration program in the United States. Since 2000, Genoa NFH has worked with other Federal and state agencies to produce several million juvenile Higgins' eye pearl mussels for an ongoing endangered species recovery program. More than 11,000 sub-adult Higgins' eye pearl mussels have been raised in cages and 7,000 have been stocked to recover this species. Mussel propagation efforts at Genoa NFH are not limited to just this species, but have been applied to other native mussel species for restoration in interior rivers in Iowa, Wisconsin, and Minnesota.

Because of the mussel propagation expertise gained through the Higgins' eye pearl mussel program, Genoa NFH has been able to apply propagation techniques to other species for use in various research labs across the country. In May, Genoa NFH supplied 70 yearling fat mucket mussels that were overwintered at the hatchery to USGS's Midwest Environmental Science Center in La Crosse, Wisconsin, for a diet study. Plans are currently being made to produce additional mussels for future USGS studies.

This spring Genoa NFH partnered with Dr. Chris Barnhart at Missouri State University (MSU) and Dr. Greg Cope at North Carolina State University (NCSU) to produce fat mucket sub-adult mussels for toxicity testing. Genoa staff inoculated 200 largemouth bass with fat mucket glochidia (larval mussels). One hundred of these fish were transported to MSU where juveniles will be raised for three months and then shipped to NCSU. At the same time 90 of

the remaining fish will be used to produce sub-adult mussels in the Mississippi River. These sub-adults will also be sent to NCSU where toxicity testing will compare river raised sub-adults to sub-adults raised in MSU's lab.

Tony Brady, Genoa NFH



-USFWS
Several species of native mussels are cultured at Genoa National Fish Hatchery.

Oxytetracycline Marks Coaster Brook Trout Fry

Iron River NFH has completed marking coaster brook trout fry for 2006 with oxytetracycline. This is the preferred technique for fish less than one inch long. The fish were exposed to 700 parts per million solutions of oxytetracycline for eight hours in a recirculation bath treatment. The oxytetracycline will make a permanent mark on their bones and as the fish grows and adds new bone, a yellow spot or ring from the chemical marking process will remain. If a biologist catches the marked fish, they can extract the otolith (inner ear bone). When the otolith is exposed to ultraviolet light, the oxytetracycline mark will glow yellow. The presence of this mark distinguishes wild fish from hatchery fish. The marked fish are stocked into specifically selected tributaries on Lake Superior. The purpose of these stockings is to help biologists determine the best way to initiate restoration of populations of coaster brook trout.

Nikolas Grueneis, Iron River NFH

Aquatic Habitat Conservation and Management

Ashland FRO Completes First Billy Creek Fish Passage Project

The Ashland FRO has completed the first fish passage project on Billy Creek in Ashland County, Wisconsin. This project has taken longer than expected to complete due to summer and fall rain storms that halted the project. As with other fish passage projects, Billy Creek had limitations as to when the work could be done to ensure survival of trout fry and other fish species found in the creek.

The Ashland FRO teamed-up with the Ashland-Bayfield-Douglas-Iron County Land Conservation Department (ABDI LCD) and surveyed the site in April to map any last minute changes in the culvert design and placement. After a meeting with the Town of Ashland, Ashland FRO, ABDI LCD, and the Bad River Watershed Association to go over the final survey results, a large excavator was used to remove the two perched culverts that prevented fish passage. Construction began early in the morning and by the end of the first day the new culvert was in place and enough fill placed over the pipe to allow traffic to resume on the road.

This replacement immediately produced results as several brook trout were found at the site and visual confirmation of brook trout entering the culvert and proceeding upstream. Once the culvert was in place, the stream immediately started to heal itself. The stream cut down through the built up sediment above the culvert to the original gravel stream bottom. This culvert replacement has opened two miles of habitat to brook trout and other fish species. *Glenn Miller, Ashland FRO*



The Billy Creek fish passage project was completed in Ashland County, Wisconsin. The old road culvert was impassable (above). The new culvert (below) provides uninhibited fish passage.



-USFWS

National Fish Habitat Initiative Meetings Help Develop Lake Superior Basin Cold Water Tributaries

Ashland FRO biologists Jonathan Pyatskowit and Henry Quinlan, organized meetings with state, Federal, tribal, and non-governmental organization partners in Minnesota, Wisconsin, and Michigan during early May to promote and form a coalition of partners to develop a *Lake Superior Basin Cold Water Tributary* habitat action plan. Pyatskowit and Quinlan presented background information on the National Fish Habitat Initiative (NFHI) and facilitated a discussion to identify focus areas and additional coalition partners in each state.

The Minnesota meeting was held May 8 in Duluth and included

participants from the Minnesota DNR, Minnesota Pollution Control Agency (MPCA), Grand Portage Tribe, and The Nature Conservancy. The group identified numerous opportunities to leverage existing work in Minnesota. The MPCA has a grant from National Fish and Wildlife Foundation to work on priority watersheds based on Total Maximum Daily Load criteria. Their plan of action fits the NFHI program very well because they propose to activate interest and partnerships at a local level. Another opportunity involves the Natural Resources Research Institute and its efforts to restore and protect habitat in the Lester River watershed. Partners at this meeting were engaged in the discussions and excited about this new opportunity to leverage funds and work to improve aquatic habitat.

The Wisconsin meeting was held May 10 in Ashland and included participants from Wisconsin DNR, Red Cliff and Bad River tribes, Natural Resources Conservation Service (NRCS), Trout Unlimited (TU), The Nature Conservancy, and the Ashland, Bayfield, Douglas, Iron (ABDI) County Conservationist. Opportunities to leverage existing work include Wisconsin DNR projects and experiments with TU, University of Wisconsin-Madison and University of Wisconsin-Eau Claire to manipulate habitat to benefit brook trout. ABDI and NRCS are involved in the Marengo River watershed on a pilot project to lessen the impacts of agriculture and other land use on the river. Partners at this meeting were excited about the prospect of the NFHI program.

The Michigan meeting was held May 17 in Marquette and included

participants from Michigan DNR, National Park Service, and the Fish and Wildlife Services' Ecological Services program. Opportunities to leverage work in Michigan include Michigan DNR and Michigan Department of Environmental Quality work within the Huron River, Otter River, and Sucker River watersheds. Several county conservation groups also received grant money to work on tributary habitats. There are existing projects to leverage with and we are working on adding additional and diverse partners.

A template was developed to gather background information that can be incorporated into a planning document for the focus area watersheds identified at the meetings. This information will be compiled and a draft plan will be sent to partners for review in mid-July. In early August, a meeting among all the partners will be scheduled to finalize the plan.
Jonathan Pyatskowitz, Ashland FRO

Construction Begins for Alpena FRO Partners Program

Construction began on May 23 to restore 19 acres of wetlands on five sites throughout Northern Michigan. Wetland restoration sites were on the properties of three private landowners in Presque Isle, Montmorency, and Cheboygan counties. Spring construction at these sites means they will quickly fill with water and will be able to benefit migratory birds and possibly provide nesting immediately. A mix of waterfowl, shorebirds, and common upland birds were observed in the restored wetlands within 48 hours following construction. BCK Ventures of Mio, Michigan, was the contractor for the sites. Funding for the design and

restoration of these sites was provided by the Partners for Fish and Wildlife program. Design and oversight of the construction was provided by biologist Heather Rawlings, Partners Coordinator for Northern Michigan.

Heather Rawlings, Alpena FRO



-USFWS photo by Heather Rawlings
Waterfowl are already using wetland areas restored through Alpena Fishery Resources Office's Partners for Fish and Wildlife Program. Construction began on May 23 and 19 wetland acres at 5 sites throughout Northern Michigan will be restored this spring.

Alpena FRO Hosts First Region 3 Fish Passage Workshop

The Alpena FRO hosted the first Regional Fish Passage Workshop May 9-11 to provide a forum to share ideas, concerns, and present examples of fish passage restoration among field offices, regional office, and other Fish and Wildlife Service programs. Regional Fish Passage Coordinator Tim Patronski coordinated the workshop with assistance from a committee of field station fish passage coordinators. Discussions revolved around issues such as invasive species and the challenges they present when reconnecting habitats, development of a pre- and post-monitoring plans for fish passage projects, better coordination among Fish and Wildlife Service programs to implement fish passage projects, and development of Standard

Operating Procedures for the fish passage program in Region 3.

Presentations were given by multiple Fish and Wildlife Service programs including Refuges, Ecological Services, Fisheries, Sea Lamprey Control, Federal Aid, and the National Fish Passage Coordinator. This provided the attendees a cross programmatic overview of projects occurring throughout the region and stimulated discussion on different methodologies for conducting projects. Alpena FRO Fish Passage Coordinator Susan Wells led a field trip to a local culvert replacement project recently completed with the use of a recycled railroad tanker car as a bottomless culvert. Workshop attendees engaged in productive discussions concerning fish passage projects and their implementation. The workshop was well received by all in attendance with the anticipation that a follow-up meeting will occur next year and be expanded to include more partners.
Susan Wells, Alpena FRO



-USFWS photo by Susan Wells
The Alpena Fishery Resources Office hosted the first Regional Fish Passage Workshop in May. The purpose of the workshop was to share ideas, concerns, and present examples of fish passage restoration among field offices, regional office, and other Fish and Wildlife Service programs.

Workforce Management

2006 Motorboat Operator Certification Course held in Onalaska, Wisconsin

Aaron Woldt of the Alpena FRO led a Department of Interior (DOI) Motorboat Operator Certification Course (MOCC) at the La Crosse FRO office from May 23 to 25. Adam Kowalski (Alpena FRO), Brian Pember (Upper Mississippi River NW&FR-Winona District), Joe Reid (Trempealeau NWR) and Randy Lilla (Onalaska Law Enforcement) co-instructed the course, assisted by volunteer Don Schroeder and Region 3 MOCC Coordinator Dave Wedan. The primary goal of the course is to train Fish and Wildlife Service employees to safely operate motorboats in the work environment. DOI Policy requires operators of all department watercraft to successfully complete MOCC training and complete refresher training every five years.

Woldt, Kowalski, Pember, Reid, and Lilla staged an informative, well-organized course that included classroom, pool, and on-water instruction. Instructors lectured on topics ranging from boat orientation, state boating regulations, boat and trailer maintenance, emergency procedures, rules of the road, aids to navigation, towing, anchoring and beaching, slow and at-speed maneuvers, marlinspike, fire suppression, and weather. Thirteen students from six Fish and Wildlife Service offices, Wisconsin DNR, and the U.S. Department of Agriculture's Animal and Plant Health Inspection Service successfully earned MOCC certification.

Aaron Woldt, Alpena FRO



-USFWS photo by Aaron Woldt
Pictured are attendees of the May 2006 Department of the Interior Motorboat Operator Certification Course (MOCC) held in Onalaska, Wisconsin. Thirteen students from six Fish and Wildlife Service offices, Wisconsin Department of Natural Resources, and the U.S. Department of Agriculture's Animal and Plant Health Inspection Service successfully earned MOCC certification.

New Employee Arrives at the Ashland FRO

The Ashland FRO is very proud to announce that Jessica Krajniak will once again be assisting the staff with fish and wildlife projects. Jessica's temporary appointment as a biological technician began on May 30 and will involve special assignments at three field offices—Ashland FRO, Whittlesey Creek NWR, and Iron River NFH. Jessica's salary will be portioned out based on the length of time she works at each field office. This kind of creative approach will allow Jessica to be exposed to a wide range of activities such as coaster brook trout assessments, aquatic invasive species surveys, database management, habitat restoration, and fish culture operations.

Jessica Krajniak, Ashland FRO

Local Students Hired for Temporary Employment Program at Genoa NFH

Ashley Umberger and Brandon Keesler of the Genoa, Wisconsin, area were hired this summer for Genoa NFH's Student Temporary Employment Program (STEP). With ongoing summer fish culture activities that include lake sturgeon restoration, freshwater mussel recovery and restoration, and ongoing pond management programs to keep them busy, they will be much appreciated by the rest of our staff! Ashley has volunteered at the hatchery and participated in a diversity intern program the last two summers, one summer at the Genoa NFH and other summer at the La Crosse FHC. She is pursuing a degree in biology at University of Wisconsin-Eau Claire. Brandon's stint as a Youth Conservation Corps enrollee at the hatchery last summer piqued his interest in natural resources. He is currently enrolled at the University of Wisconsin/Stevens Point in pursuit of a fisheries biology degree.

The Student Temporary Employment Program is a one year program that works around a student's school schedule, while providing valuable work experience that should make the enrollee a more rounded job applicant when their degree is completed. Welcome Brandon and Ashley. The sturgeon and clams can't wait!
Doug Aloisi, Genoa NFH

Great Lakes - Big Rivers Regional Fisheries Offices

Regional Office, 1 Federal Drive, Fort Snelling, MN 55111-4056; 612/713-5111

Gerry Jackson (gerry_jackson@fws.gov)

Michigan

Alpena Fishery Resources 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
Rick Westerhof (rick_westerhof@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
1924 Industrial Parkway
Marquette, MI 49855
Katherine Mullet (katherine_mullet@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 Fishery Resources 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

Carterville Fishery Resources Office
9053 Route 148, Suite A
Marion, Illinois 62959
Rob Simmonds (rob_simmonds@fws.gov)
618/997-6869

Wisconsin

Ashland Fishery Resources Office
2800 Lake Shore Drive East
Ashland, WI 54806
Henry Quinlan (henry_quinlan@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 Fishery Resources 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
Richard Nelson (rick_nelson@fws.gov)
608/783-8441

LaCrosse Fishery Resources Office
555 Lester Avenue
Onalaska, WI 54650
Pamella Thiel (pam_thiel@fws.gov)
608/783-8431



Fish Lines
Region 3, Great Lakes/Big Rivers
2006 Vol. 4 No. 8

U.S. Fish & Wildlife Service
Region 3
Division of Fisheries
1 Federal Drive
Ft. Snelling, MN 55111

Phone: 612/713-5111

Questions or comments concerning *Fish Lines* can be addressed to Dave Radloff, 612/713-5158 or email at david_radloff@fws.gov



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-Jerry French Postcard Collection; U.S. Fish Hatchery; Cortland, New York

Windows in time

A Glimpse into our Proud Past

The Cortland Fish Hatchery was established in 1931 near the city of Cortland in Cortland County, New York. This fish hatchery served as an experimental hatchery and training school from 1946 to the 1960s. The hatchery was transferred to the Division of Fishery Research in 1972. Aside from the small residence in the center of the photo, there were other residences located near the entrance gate. (circa mid-1950s)

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