U.S. Fish & Wildlife Service - Midwest Region

Fisheries & Aquatic Resources Program

Fishlines

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- Another System Restored

CONSERVING AMERICA'S Fisheries
U.S. Fish & Wildlife Service

Vol. 6 No. 4
January 2008

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

-USFWS

(left to right) Anjie Baran, Nick Grueneis and Brian Pember tag coaster brook trout at the Iron River National Fish Hatchery.

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

Fish Lines

2008 Vol. 6 No. 4

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Pallid sturgeon are held in tanks at the Neosho National Fish Hatchery.

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.

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Genoa NFH Produces Disease-Free Food Source

BY JIM LUOMA, GENOA NFH

Genoa National Fish Hatchery (NFH) has been producing native aquatic species for conservation since 1932, and over the last 75 years has grown into one of the National Fish Hatchery system's most diverse field stations. The hatchery currently raises 23 species of cold-, cool- and warm-water fish and mussels for restoration efforts throughout the country.

One of the challenges of raising so many different types of fish and mussel species is keeping culture facilities free of disease pathogens that could potentially be transferred from one species to another. The introduction of a pathogen to just one of the native species being cultured at the fish hatchery could spell disaster for the station's programs and conservation commitments.

-USFWS

Fathead minnows are cultured at the Genoa National Fish Hatchery, to serve as a disease-free source of forage for pond-cultured fish.

Careful planning and disease-hazard analysis help ensure that Genoa NFH maintains a disease-free status and keeps restoration efforts moving forward. One key to disease prevention is production of certified, disease-free fathead minnows as a source of forage for pond-cultured fish.

Fathead minnows are often used as a forage species for larger fish cultured in the hatchery's ponds because they are a nutritious, natural food for fingerlings, young-of-the-year, and brood and future brood fish, all of which are key elements to the success of Genoa's native species restoration programs.

Fathead minnows are native to North America, and using them as a food source eliminates the risk of introducing an invasive species or pathogens that may be present in wild aquatic species to the hatchery grounds and surrounding environment. Because fathead minnows are part of the hatchery's production plan, they undergo health inspections for certifiable fish pathogens every six months, ensuring disease-free status before they are introduced to culture facilities and other cultured species.

Genoa NFH has been involved in the production of fathead minnows since 1995, and this year produced 3,487,000 minnows for the station's restoration efforts as well as the efforts at the Fort McCoy Army Base and Black River Falls Fish Propagation and Rearing Station in Wisconsin, and Iowa's Fairport State Fish Hatchery.

Throughout the summer months, minnows are harvested from ponds and fed to brood fish and young-of-the-year walleye, yellow perch, bluegill, black crappie, and largemouth and smallmouth bass. Young-of-the year fish are stocked annually into tribal, state, and Federal waters to enhance sport and subsistence fishing.

Yearling walleye, blue and channel catfish, and largemouth and smallmouth bass, are also used to help recover wild populations of two endangered mussel species, the Higgins' eye pearlymussel and the winged mapleleaf mussel. These species also make suitable host fish for several other threatened mussel species and species of concern used in propagation and research at the station. Genoa NFH cultures these fish species for the first life cycle stage of these mussels. Keeping host fish fit and healthy by feeding disease-free, nutritious minnows is a top priority for the mussel restoration program at Genoa NFH, and goes a long way in providing healthy juvenile mussels that will have a great chance for survival on their own.

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

Wildcat Creek Culvert Replacement Completed - Another System Restored

BY GLENN MILLER, ASHLAND NFWCO

With funding from the Fish Passage Program, the Ashland National Fish and Wildlife Conservation Office (NFWCO) and partners completed a culvert replacement on Wildcat Creek, which flows into the Marengo River in Ashland County, Wisconsin. Wildcat Creek is part of the Bad River watershed, the largest watershed on the southern shoreline of Lake Superior. Native fish species such as brook trout, sculpin and redhorse inhabit Wildcat Creek, along with naturalized brown and rainbow trout. The creek also provides spawning and nursery habitat for introduced coho salmon.

A flood in the area in the late 1980s forced the Town of Lincoln to replace a culvert, but it was not properly placed. The upstream side was lower than the slope needed causing pooling above. Rain events created a perched culvert on the lower end which prevented fish from passing during normal flows.

The Ashland NFWCO purchased a new 6-foot by 60-foot culvert, and the Town of Lincoln supplied staff and funding to hire the Ashland County Highway Department to supply a large excavator for the construction work. Ashland NFWCO and the Ashland County Land Conservation Department (LCD) conducted a pre-construction survey for correct placement of the culvert, and plans for the culvert replacement were engineered by the LCD with assistance from the Natural Resources Conservation Service.

-USFWS

Ashland National Fish and Wildlife Conservation Office coordinated pre- and post-construction fishery surveys to determine any fish passage improvements from a culvert replacement on Wildcat Creek in Ashland County, Wisconsin.

Ashland NFWCO conducted pre-and post-construction fish surveys at the site. In the August pre-construction survey, with assistance from the University of Wisconsin - Stevens Point interns Abby Purdy and Ryan Huber, crews collected all trout species in a segment of creek below the culvert using a backpack electrofishing unit.

In this stretch, 176 trout were captured - 86 brown trout, 50 brook trout and 40 rainbow trout. All fish received a lower caudal clip and were measured and released. The crew also shocked a segment above the culvert capturing 64 trout—7 brown trout and 27 brook trout. These fish received an upper caudal clip, were measured and released.

The recapture run was conducted in October, with assistance from Dr. Derek Ogle's Fisheries Science and Management class at Northland College in Ashland. The same segments below and above the culvert were electrofished and all trout species were collected.

-USFWS

Intern Abby Purdy of the University of Wisconsin-Stevens Point marks a fish as part of a pre-construction fishery assessment involving a fish passage project in Ashland County, Wisconsin. A subsequent post-construction assessment indicates that the new culvert allows fish passage to upper reaches of Wildcat Creek.

Below the culvert, crews captured a total of 68 fish. This included 47 brown trout — 5 with the lower caudal clip, 5 rainbow trout - no clipped recaptures, and 16 brook trout - two clipped recaptures.

Above the culvert, three brown trout and two rainbow trout were caught. Two of the brown trout were clipped, one with a lower caudal clip and the other an upper caudal clip. These results indicate that the culvert allows fish passage and the inhabitants are now able to assess the upper reaches of Wildcat Creek.

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

Let's Go Outside

BY DARLA WENGER, GENOA NFH

Last December, Fish and Wildlife Service representatives from across the country traveled to the National Conservation Training Center for a conference titled "Connecting People with Nature: Making It Happen in Your Community," to create a strategic plan to reconnect children and families with nature. The result, developed with guidance from Director Dale Hall, is a campaign called "Let's Go Outside."

Participants in the conference had been serving as ambassadors at their field stations and in their local communities, working with children and families to develop strong conservation values. Participants attended concurrent sessions that discussed different strategies such as using nature classrooms, creating ambassador programs, and developing partnerships with the health industry. They also heard motivational presentations by Director Hall, Dr. Mamie Parker and Dudley Edmondson, author of *Black & Brown Faces in America's Wild Places*, to name a few.

The conference ended with a Partners Exposition, with interactive sessions and regional meetings. As Fish and Wildlife Service employees, we can help fulfill the Fish and Wildlife Service's mission of conserving our nation's resources for future generations by reminding the American people that conservation is an important part of our value system.

-USFWS

Boy Scouts of America highlights their program at the Partners Exposition held at the National Conservation Training Center in West Virginia. Scout troups are a natural venue to re-connect children and families with nature.

Strategies for adopting the "Let's Go Outside" campaign include creating a stronger volunteer program at field stations, hosting festivals and events aimed at children and families, and providing safe places for families to have unstructured play time. The benefits of connecting people with nature are many. Children can enhance their observation skills, increase their concentration, improve their fine motor skills and become more physically active. For big kids—adults—satisfaction in knowing that we are doing the "right" thing by raising healthier children (physically and mentally) but also knowing that the health of the earth will benefit by increasing the health of our children and the environment.

For additional information on "Let's Go Outside," visit http://www.fws.gov/children/.

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

Jordan River Friends Group, Volunteers Build Interpretive Pavilion

BY TIM SMIGIELSKI, JORDAN RIVER NFH

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.

Last summer, the Jordan River NFH received a challenge cost share grant to build an interpretive pavilion on hatchery property. Much planning and brainstorming occurred at the *Friends of Jordan River National Fish Hatchery* meetings until the final plan for the pavilion was set. Frankly, hatchery Friend's Group representative Tim Smigielski was getting a bit nervous about the length of the "planning" effort, but he kept it together and considered that this was the first effort and thought everyone should take ownership and they sure did! It was finally going to happen.

-Joan Moore

***Friends of the Jordan River National Fish Hatchery* and volunteers build an interpretive pavilion at the Jordan River National Fish Hatchery.**

Friend's Group vice president Jon Sumner and board member Tim Moore coordinated the effort. They came to the hatchery mid-week and bored the holes for the pavilion's footing and posts. A few days later, the posts were set and concrete delivered. The group thought by waiting until fall that we would encounter cooler weather for outdoor work. That didn't happen!

On Oct. 6, a beautiful autumn day with temperatures near 80 degrees, a group of Friends and volunteers began work on the first major project for the *Friends of the Jordan River National Fish Hatchery*. It was a long hot day, but Tim and Jon kept directing the lifters, holders, carriers, and "go fors," and by day's end we had a pavilion. It was an impressive day and an even more impressive experience for all involved. Many visitors and fall color tourists stopped to marvel and ask questions. The main question was, "Who is it being built for?" The answer? "Well, it's for you and everyone like you. Come back and enjoy it in 2008!

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

MICRA Subcommittee discusses Sturgeon Issues

BY ANN RUNSTROM, LA CROSSE NFWCO AND BRIAN ELKINGTON, COLUMBIA NFWCO

The Mississippi Interstate Cooperative Research Association (MICRA) had its annual Paddlefish-Sturgeon subcommittee meeting in Nashville this January. Regional biologists Ann Runstrom, Joanne Grady, Brian Elkington, Greg Conover and Tracy Hill attended. Minutes of the 2007 meeting cited numerous presentations providing evidence that shovelnose sturgeon are being over-harvested and that the commercial harvest of shovelnose sturgeon is affecting endangered pallid sturgeon. A recommendation was made for the committee to send a letter to the MICRA executive board suggesting that MICRA petition the Fish and Wildlife Service to list shovelnose sturgeon based on similarity of appearance with pallid sturgeon where their ranges overlap. The MICRA executive board later decided that they did not have enough data to support the petition.

At the Paddlefish-Sturgeon sub-committee meeting, presentations and discussion focused on the caviar trade and the profit incentive for illegal harvest. The wholesale value of shovelnose sturgeon roe is $85 to $100 per pound, and one fisherman harvested 6,000 pounds of roe. Another fisherman sold 1,000 pounds, but reported selling none. In general, the data show that very few individuals are exploiting

and endangering a public resource for significant personal profit.

Imports and exports of caviar are closely regulated through CITES, so the Fish and Wildlife Service Division of Management Authority has very good data on the amount of caviar imported and exported. Laura Noguchi of the Division of Management Authority reported that export of shovelnose caviar is picking up. Twenty kilograms of shovelnose caviar were exported in one shipment in 2003, the first year for shovelnose exports. In three years, that amount has increased ten-fold to 208 kg exported in 2006. During the same period, exports of paddlefish caviar have increased from 4,910 kg in 2003 to 8,600 kg in 2006. Only 1,950 kg of paddlefish caviar were exported in 2001.

Data on the domestic trade of caviar are more difficult to acquire; however, we know that the amount of caviar in the domestic trade is significantly greater than what is exported. The MICRA Paddlefish-Sturgeon subcommittee is working on establishing a roe database to improve the data available on domestic trade and the amount of roe being harvested.

Closing the shovelnose sturgeon fishery across the range of the endangered pallid sturgeon is not a solution that will fully protect either species. It would put tremendous harvest pressure on populations where shovelnose fisheries are still permitted. In addition, increased demand for caviar coupled with a decrease in supply from shovelnose sturgeon harvest due to closure will increase harvest pressure on paddlefish. It will also increase illegal harvest of all *Acipenseriformes* species across their ranges. A solution will need to be formulated soon to conserve these species.

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

Upper Mississippi Mussels get Coordinated

BY ANN RUNSTROM, LA CROSSE NFWCO

Biologists from the Fish and wildlife Service and cooperating agencies met in January to coordinate efforts to protect and restore the endangered Higgins' eye pearlymussel and winged mapleleaf mussel. This Mussel Coordination Team comprises representatives from the U.S. Army Corps of Engineers, U.S. Geological Survey, Fish and Wildlife Service, National Park Service, and the Wisconsin, Minnesota, Iowa, and Illinois Department of Natural Resources (DNR), Macalaster College, Iowa State University, and Ecological Consultants, among others.

Participants shared information on mussel activities conducted in the past year, including mussel cleaning and stockpiling, propagation, sub-adult placements, and relocation efforts. Data from studies on mussel population estimates, zebra mussel density monitoring, and habitat surveys were also presented. Team members discussed field work in the upcoming year, including the need to identify appropriate reintroduction sites for the winged mapleleaf mussel.

Biologists attending from the La Crosse NFWCO included Mark Steingraeber, Scott Yess and Ann Runstrom. Mark has been instrumental in research to identify the host fish species and develop culture techniques for both the winged mapleleaf mussel and Higgins' eye pearlymussel. Scott has been active in mussel restoration efforts as a member of the Region 3 dive team and more recently as the coordinator for the Upper Mississippi River Conservation Committee. Ann has contributed her knowledge of conservation biology to guide management actions related to these species, and is also a member of the Midwest Region dive team and participates in field recovery efforts.

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

Friends Group is Appreciated

The La Crosse National Fish and Wildlife Conservation Office, Genoa National Fish Hatchery and La Crosse Fish Health Center presented an Appreciation Award to the Friends of the Upper Mississippi Fishery Services for an extremely successful first annual awards banquet held October 10, 2007. The Friends made more than $6,000 to put toward their planned exhibit in the La Crosse Eco-Park.

Coaster Brook Trout Eggs arrive at Genoa NFH

BY NICK STARZL, GENOA NFH

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.

The Genoa NFH received its annual allotment of coaster brook trout eggs in December and January from the Iron River NFH. Several spawns throughout the spawning season are taken to ensure genetic conservation of the brook trout strains perpetuated at the hatchery. The brook trout produced at Genoa NFH are part of an ongoing Great Lakes multi-agency restoration effort involving the Fish and Wildlife Service, National Park Service and the states of Wisconsin, Minnesota and Michigan.

-USFWS/JimSolberg

Coaster brook trout are raised at the Genoa National Fish Hatchery in support of a multi-agency restoration effort in the Great Lakes.

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. Each year, the Genoa NFH distributes thousands of brook trout to restore populations in and around areas such as Isle Royale National Park, Michigan, and Grand Portage Indian Reservation in Minnesota. Genoa NFH's 2008 production is scheduled to include over 40,000 stockable fish ranging in size from two to nine inches and two backup brood stock groups for the Iron River NFH.

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

Video Highlights Coaster Brook Trout

BY FRANK STONE AND HENRY QUINLAN, ASHLAND NFWCO

Biologists are trying to restore the once abundant coaster brook trout in the few places where it has survived over-fishing and loss of spawning areas since the 1980s. The Ashland NFWCO has undertaken several efforts to better understand coaster brook trout population trends and help re-establish this magnificent fish in its native range.

Ashland NFWCO, Iron River NFH, Wisconsin DNR and volunteers from the local Wild Rivers Trout Unlimited chapter have been helping stock coaster brook trout eggs, fingerlings and adults in Whittlesey and North Fork Whittlesey creeks. A 13-minute video showing the initial stages of this project is available on the Ashland NFWCO web site.

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

-USFWS

A video titled "Returning of Coaster Brook Trout to Whittlesey Creek" can be viewed at: http://www.fws.gov/midwest/ashland/.

Finding Brood Stock Pallid Sturgeon... A Needle in the Haystack

BY WYATT DOYLE , COLUMBIA NFWCO

Columbia NFWCO met with the River Studies Branch of the U.S. Geological Survey (USGS) Columbia Environmental Research Center to review telemetry locations of pallid sturgeon tracked in the Missouri River since 2003. Our offices have been working together for over six years implanting and tracking pallid sturgeon on the Missouri to determine their seasonal habitat use and spawning movement. This year we have the greatest need to obtain egg-bearing pallid sturgeon because two new hatcheries will be ready to spawn and hold about 25,000 hatchery yearlings. Additionally, USGS will need gravid pallid sturgeons to conduct research on spawning movements. In 2008, we need 5 females and 15 males to meet our combined goal. Working with a GIS specialist, our brood stock crew reviewed historical locations of pallid sturgeons at different seasons and determined a strategy to refine our techniques and target suspected pallid sturgeon habitats in upcoming months. To date, only one reproductive female and male have been captured for use in a brood stock program on the lower portion of the river.

Our collaboration with USGS will be the first step in striving to ensure research and stocking goals are met. We remain hopeful that our efforts will provide at least partial success and that subsequent stocking efforts will prevent a potential genetic bottleneck that threatens Lower Missouri River pallid sturgeon. Advancement in telemetry technology, expertise in sampling methodology, and collaboration between sister agencies are keystones that solidify our vision of recovery for the endangered pallid sturgeon.

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

Ask Not What Your Trammel Nets can do for You...Ask What You Can Do for Your Trammel Nets!

BY BRETT WITTE, COLUMBIA NFWCO

Trammel nets are one facet of our suite of sampling gears at Columbia NFWCO. We have nets in 50, 125 and 200-foot lengths. Each serves a unique purpose.

The 125' nets have the most hazardous job of the trio. They are used to sample bottom-dwelling fish in the Missouri River. One end of a trammel net is tied to the boat and the other to a buoy. It is then stretched out perpendicular to the flow of water. The net is carried downstream by the current, dragging on the bottom. Many species of interest are captured in this manner, including the endangered pallid sturgeon.

So why is this hazardous? The Missouri River is one of the world's largest rivers. It carries a lot of debris—everything from leaves to large household appliances. High water events routinely uproot or pick up large trees and carry them downstream. Saturated with water, these trees can become lodged on the river bottom. When a drifting trammel net encounters one of these, it often ends badly – for the net. A big, gnarly root wad can ensnare a trammel net better than anything else. We use various strategies to try to untangle the net but it ultimately leads to one thing—one of our large, powerful boats has to pull on the net. Maybe it comes unstuck easily, maybe not. In as few as one or two drifts, the 125-foot net can become a 67-foot net — or a 125-foot net sporting a 50-foot hole.

Mending trammel nets is one of our more popular winter boat-barn activities. These nets feature three layers of mesh. An eight-foot wall of one-inch mesh is sandwiched between two six-foot walls of eight-inch mesh. This combination entangles fish (especially bony species) in any number of 'bags' along the net. The smaller mesh is pushed through one of the larger squares, surrounding the fish. Though trammel nets are useful for catching fish, the design of the net demands tedious mending. Trammel net repair requires far more man-hours per net than gill nets. This winter, many trammel nets are being sacrificed for the greater good. Where two or three damaged trammels may have once lain in their bags, one good net now resides. As long as trammels are being drifted on the "Big Muddy," mending will take place. Especially when it's bitterly cold, Columbia NFWCO staff and volunteers can be found in the boat-barn, doing the behind-the-scenes portion of trammel netting.

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

Prevention Plan for Spread of Viral Hemorrhagic Septicemia Virus

BY KEN PHILLIPS, LA CROSSE FHC

During the week of January 14, Ken Phillips attended a meeting sponsored by the National Park Service (NPS) in Chicago, to develop strategies for preventing the spread of the deadly fish virus viral hemorrhagic septicemia (VHS) into the Lake Superior basin. The plan will help to protect tribal and NPS fishery resources in areas such as the Apostle Island National Lakeshore in Wisconsin, Grand Portage National Monument in Minnesota, and Isle Royale National Park and Pictured Rocks National Lakeshore in Michigan. The plan also includes a rapid response if VHS is detected in NPS-managed waters of Lake Superior. Agencies assisting in review of the plan include the Fish and Wildlife Service, U.S. Forest Service, U.S. Environmental Protection Agency, U.S. Department of Agriculture's Animal and Plant Health Inspection Service, U.S. Coast Guard, Great Lakes Indian Fish and Wildlife Commission, Great Lakes Commission, U.S. Geological Survey, National Oceanic and Atmospheric Administration's National Center for Aquatic Invasive Species, Sea Grant programs and DNRs from Wisconsin, Minnesota and Michigan.

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.

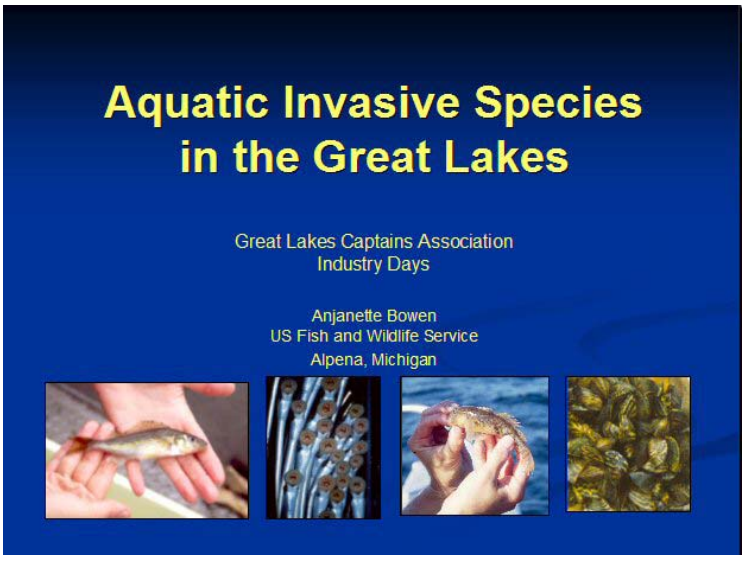
For further info about the La Crosse FHC: http://www.fws.gov/midwest/Fisheries/library/StationFactSheets/lacrosse-fhc.pdf

Invasive Species Information Provided to Great Lakes Captains

BY ANJANETTE BOWEN, ALPENA NFWCO

On Jan. 17, Anjanette Bowen of the Alpena NFWCO presented information on aquatic invasive species at the Great Lakes Captain's Association's annual "Industry Days" conference in Traverse City, Michigan.

Bowen provided a presentation on problems associated with some invasive species currently found in the Great Lakes. She also provided information on Asian carp, which are not found in the Great Lakes but are within 50 miles of entering the system via the Mississippi River and Illinois River systems. Bowen also provided information on the Chicago Shipping and Sanitary Canal Dispersal Barrier Project in Illinois, which prevents movement of Asian carp into Lake Michigan. Approximately 150 people attended the event.



-USFWS/Anjanette Bowen

Information on aquatic invasive species was provided to the Great Lakes Captains Association at their Industry Days conference held in Traverse City, Michigan.

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

Partnership Prevents Release of Pet Fish

BY MARK STEINGRAEBER, LA CROSSE NFWCO

Reports of large, exotic fish caught by recreational and commercial anglers and fishery resource 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 aquarium owners and water gardeners who can no longer care for ornamental fish that grow to an unmanageable size and release the fish into nearby surface waters as a quick solution. Pet owners should know that the release of these fish (and the disease pathogens that may infect them) could adversely affect native fish, with serious consequences for sport and commercial fisheries.

Faced with a dilemma like this, fish hobbyists need to learn of approved alternatives to abandoning their aquatic pets in the wild. One such option now offered in Western Wisconsin is a government-business partnership established in 2006 by the La Crosse NFWCO. Several pet retailers in this region, that do not offer these frequently problematic fish for sale, 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 for these businesses to re-sell such large fish to other pet owners, the La Crosse NFWCO will accept custody of these fish and humanely euthanize them at no cost.

-J. Morrison

Large pet fish, such as this koi which was caught in the Upper Mississippi River in 2006, have been illegally released into the wild by owners who no longer want to care for them.

The partnership is already paying off. Last fall, the Marineland Pet Center in Onalaska, Wisconsin, accepted seven large hobby fish from owners who no longer wanted them. On Dec. 4, the La Crosse NFWCO took possession of these native South American species, including four 10 - 11 inch black-fin sharks and three 11-12 inch oscars. The fish were humanely euthanized with an anesthetic and preserved.

With these fish, this partnership program has helped to prevent the potential release of 10 large, unwanted pet fish into Coulee Region surface waters in 2007. After preparation by a taxidermist, some of these specimens will become part of an informative 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/

Viral Hemorrhagic Septicemia Virus and Ballast Water

Ken Phillips participated in a ballast water planning meeting with the U.S. Coast Guard in Cleveland on Jan. 31, providing regional input for the development of a response plan for viral hemorrhagic septicemia outbreaks that may occur in 2008.

Kids Heat Up for Ice Fishing Day

BY DOUG ALOISI, GENOA NFH AND SARAH BAUER, LA CROSSE FHC

More than 90 children and their parents took to the Mississippi River backwater ice on January 26th at Goose Island County Park in Shelby, Wisconsin, to try their hand at one of the coolest winter sports around....literally! Participants braved the Wisconsin winter weather and got outside for at least half a day to learn how to safely and successfully participate in one of the northlands favorite winter past times – ice fishing.

-USFWS

A young angler patiently waits for a fish to bite during the Friends of the Mississippi Ice Fishing Day.

Participants were first introduced to an ice fishing safety session by Heidi Keuler and treated to a Vexilar fish finder demonstration by Scott Gartner, a representative of Bob's Bait and Tackle. Then the kids were turned loose to try their hand catching fish through the ice. Poles and rigs were made available, but not without a quick how-to demonstration by Eric Leis. Old ice fishing salts from the Fish and Wildlife Service and *Friends of the Upper Mississippi River Fishery Services* members helped the kids with fishing tips and tackle selection. After a couple dozen panfish and bass were caught, everyone went back to the warming tent for a light lunch and hot drinks to warm their hands back up.

This event is part of the "Children and Nature" initiative, to promote both structured and unstructured time in natural settings and reconnect youth to the land and the natural resources. The Friends Group helped sponsor the event and functions as a support group for three local Fish and Wildlife Service Fisheries program offices - the La Crosse FHC, La Crosse NFWCO and Genoa NFH.

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

For further info about the Genoa NFH: http://www.fws.gov/midwest/genoa/
For further info about the La Crosse FHC: http://www.fws.gov/midwest/Fisheries/library/StationFactSheets/lacrosse-fhc.pdf
For further info about the La Crosse NFWCO: http://www.fws.gov/midwest/lacrossefisheries/

Jordan River NFH and Partners develop "Imaginature" Outdoor After School Program

BY TIM SMIGIELSKI, JORDAN RIVER NFH

Mancelona Public Schools' "Choose Success" program and Jordan River NFH have been forging partnerships with many organizations and citizen volunteers to deliver after-school programs designed to get students outdoors and into nature. As part of the program, students from Mancelona Elementary and Middle School will be raising brook trout at the Hatchery. These brook trout will be cared for by the students until the fish are ready to be stocked into Johnson's Pond for the Annual Opening Day Children's Fishing events. Since the fry that recently hatched won't be catchable size this spring, hatchery staff has arranged to transfer about 500 mature fish to the Hatchery from Iron River and Genoa NFH's. While tending to the trout during their visits to the hatchery over the next year, the students will learn about brook trout biology and ecology, fish culture and hatchery operations. If you are interested in volunteering for any of the Imaginature activities or just want to know more about this exciting new program please contact Tim Smigielski from the Jordan River NFH at 231-584-2461.

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

Ozark Mountain Anglers Sport Show

BY COLBY WRASSE AND JEFF FINLEY, COLUMBIA NFWCO

January can be a tough time for sportfishing enthusiasts. Howling winds, frigid temperatures, and icy rivers and lakes can deter even the most avid anglers. In these conditions, boredom and cabin fever can quickly set in. Most anglers find themselves at the mercy of Mother Nature with little to do but wait out the winter. In the meantime, they can find some relief at local sports shows.

-USFWS/Chris Clemens

Lee Erickson of the Columbia National Fish and Wildlife Conservation Office staffs the electrofishing exhibit prior to the opening of the Ozark Mountain Anglers Sports Show.

For the third consecutive year, Columbia NFWCO participated in the Ozark Mountain Anglers Sport Show held in the University of Missouri's Hearnes Center. In years past, we have assisted the Big Muddy National Fish and Wildlife Refuge with their booth and brought in our trawl boat *Phoenix* for an exhibit. This year, we polished up our electrofishing boat *Louweeza* and parked her with the lights and anodes attached for an interpretive display on electrofishing. An informational poster explaining electrofishing theory and fishery science, made by biologist Cliff Wilson, accompanied the display. Our staff was available to answer questions from inquisitive onlookers. The boat generated a great deal of interest.

Columbia NFWCO staff handed out literature, temporary tattoos, posters and toy "squishy" sturgeon for the kids who successfully assembled our fish identification puzzle. We also answered questions about invasive species, sportfishing and the plight of sturgeon in the Midwest. As a whole, the sports show gave anglers the opportunity to learn new skills, see and buy new products, and speak to natural resources professionals. The event was successful at feeding an anxious audience awaiting outdoor opportunities, offered by the promise of spring weather.

This three-day event reached 11,000 people in mid-Missouri and gave us the opportunity to spread our message to the communities we work with. Increasing public awareness and knowledge of current fishery issues is a rewarding and important part of our job.

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

Experiencing Ice Fishing on Lake Superior

BY PAM DRYER, ASHLAND NFWCO

Washburn Wisconsin High School students braved the cold weather and ventured onto the ice covering Lake Superior, to learn about ice fishing and ice safety as was part of the school's Life Experiences physical education class. Each student had a chance to drill a hole in the ice, bait and set up a tip-up, and practice jigging with an ice-fishing pole. A few were successful in catching yellow perch. They were also taught about viral hemorrhagic septicemia and learned how, as responsible anglers, they can help prevent the introduction and spread of harmful diseases and invasive species.

Fish and Wildlife Service staff from the Ashland NFWCO and the Whittlesey Creek National Wildlife Refuge (NWR) team taught the class with teacher Sheri Collins. This is the third winter that we provided staff to teach this class on Lake Superior. Several students had ice-fished before, but it was a new experience for many of them. The objective of the class is to teach students that fishing is a life-long activity that anyone can participate in, and give them hands-on experience with it. Our office also teaches students about open-water angling in the spring and fall.

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

Divers Assist Tribe with Lake Sturgeon Assessment

BY ANN RUNSTROM, LA CROSSE NFWCO

Two members of the Region 3 dive team assisted the Menominee Indian Reservation last fall in monitoring lake sturgeon stocked in reservation waters of the Wolf River between 1995 and 2006. Fish were tagged with radio transmitters at the time of their release, but battery life has long since expired. Conditions on the river make traditional sampling methods difficult and inefficient. Although tribal biologists had received reports of lake sturgeon sightings, they wanted to confirm the sturgeons continued presence with the help of SCUBA divers. Weather cooperated with air temperatures in the low 50s, light wind and full sun. Water temperatures were around 50°F. La Crosse NFWCO biologists Ann Runstrom and Scott Yess conducted two dives, observing sturgeon on the second dive. As divers and biologists who admire this ancient species, it was a thrill to swim near them in their native habitat. This effort provides evidence that reintroduction efforts have met with some success. It also allowed first-hand observation of habitat use by this species of special concern.

-USFWS

Divers confirm that reintroduced lake sturgeon have survived in Menominee Indian Reservation waters of the Wolf River.

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.

-USFWS

A diver uses an underwater camera to document lake sturgeon survival in the Wolf River on the Menominee Indian Reservation.

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

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.

Genoa NFH Partners for Propagation Trials of Imperiled Mussel

BY JAMES LOUMA, GENOA NFH

Of the nearly 300 species of mussels known to have lived in the United States, 18 are believed to be extinct, and 60 are currently listed as endangered or threatened. The majority of losses of mussel populations have been through habitat destruction and, more recently, through invasive species. In some river systems, more than 70 percent of native mussel species are affected or in serious decline. Genoa NFH has established a world-class freshwater mussel propagation program that has produced more than eight million mussels of seven species, including the endangered Higgins' eye pearlymussel and winged mapleleaf mussel.

-USFWS

Genoa National Fish Hatchery staff will use these juvenile mudpuppies as the host for salamander mussels.

The Genoa NFH has recently partnered with the USGS Upper Midwest Environmental Sciences Center to acquire nearly 150 captive produced juvenile mudpuppies to be used in propagation trials for the imperiled salamander mussel. Propagation techniques for the host species, mudpuppies, have been developed at the Upper Midwest Environmental Sciences Center. The Genoa NFH will apply technologies in its mussel propagation program to attempt to rear the salamander mussel with the juvenile mudpuppies serving as host species for the mussel larvae.

Partnering with the USGS's Upper Midwest Environmental Sciences Center, the Genoa NFH can expand freshwater mussel production to include a new imperiled species using a captive-reared, disease-free host species.

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

Field Trial Tests Efficacy of Medicated Feed for Farmed Tilapia

BY BECKY LASEE, LA CROSSE FHC

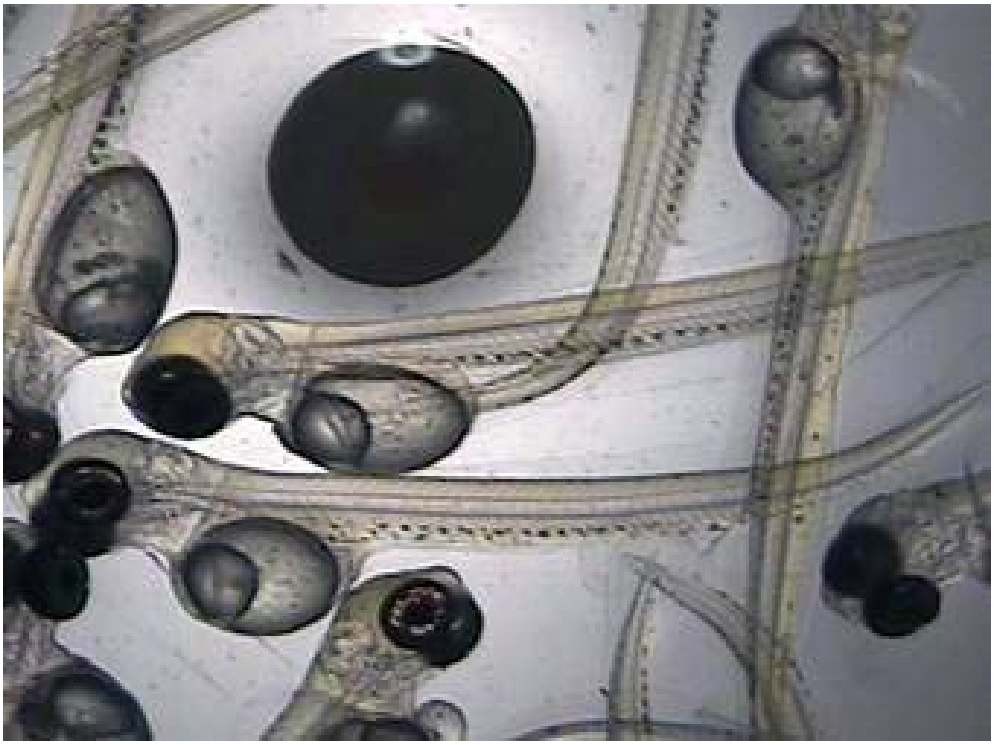
Eric Leis, Kristen Dziubinski and Becky Lasee of the La Crosse FHC completed laboratory testing to isolate and confirm the bacterial agent *Streptococcus iniae* in farmed tilapia from Minnaqua Fisheries Cooperative of Renville, Minn. The tilapia were used in field studies to assess the effectiveness of Aquaflor-medicated feed to control mortality from outbreaks of streptococcal disease. Streptococcus is responsible for large losses for tilapia producers worldwide. This study was in cooperation with the USGS laboratory in La Crosse, Wisconsin, and Schering-Plough Animal Health Corporation. The La Crosse FHC was responsible for confirming presence of the disease prior to trials and then determining prevalence of disease during feed trials. Preliminary results indicate that mortality associated with streptococcus disease was significantly reduced in fish fed Aquaflor-medicated feed.

For further info about the La Crosse FHC: http://www.fws.gov/midwest/Fisheries/library/StationFactSheets/lacrosse-fhc.pdf

Restoration Strategies for Lake Herring

BY ROGER GORDON, JORDAN RIVER NFH

Biologists from Jordan River NFH traveled to Northwest Wisconsin to meet with staff from the University of Wisconsin Stevens Point Aquaculture Demonstration Facility. Located in remote Bayfield County, Wisconsin, the facility is administered through the University of Wisconsin to advance development of commercial aquaculture in the Upper Great Lakes region. Since its inception, the facility has been a recognized regional leader in applied research for the aquaculture industry, as well as a source of information for state and Federal natural resource agencies. The facility has done extensive work on warm-, cool-, and cold-water fish species including yellow perch, walleye, brook trout and most recently, lake herring. It is this last species which drew the attention of Fish and Wildlife Service biologists to this state-of-the-art facility.



-UWSP/Greg Fischer

These are newly hatched lake herring fry that are being cultured at the University of Wisconsin - Stevens Pt. Aquaculture Demonstration facility at Bayfield, Wisconsin.

The lake herring has long been a species of concern in the Great Lakes region. Historically, this species served as the mainstay of an extensive cisco fishery across all five of the Great Lakes. During the early twentieth century, thousands of tons of these fish were harvested annually from the lakes, providing an important food source for the country, as well as an important regional economic resource. The collapse of these vibrant fisheries, while not completely understood, has been linked to competition with invasive species of fish and perhaps water quality issues. Recent changes in the Great Lakes fish assemblage have prompted state and Federal natural resource agencies to re-examine the possibility of restoring this ecologically important species to areas in the lakes where it once flourished.

Last December, crews from the Aquaculture Demonstration Facility collected more than two million lake herring eggs from Western Lake Superior where the fish are still considered numerous, as part of ongoing research into developing best management practices for a wide range of economically important fish. Biologists from the Fish and Wildlife Service and state agencies are very interested in the results of these trials, as they will provide valuable information instrumental in developing restoration strategies for the depressed or absent populations of cisco species in the other Great Lakes.

Jordan River NFH biologists Roger Gordon and Paul Haver traveled to the facility to talk to staff, investigate methods and review equipment needs associated with the early life stage culture of lake herring. Manager Greg Fischer and his staff provided a wealth of information.

The staff of Jordan River NFH will continue to work closely with the UWSP Aquaculture Demonstration facility while they carry on further work with this species and others important to the Great Lakes.

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

Whiskey Creek Road Crossing Restored

BY HEATHER RAWLINGS, ALPENA NFWCO

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 Thunder Bay River Watershed: Road/Stream Crossing Inventory Report identified 94 road-stream crossing sites contributing excessive sedimentation to the Thunder Bay River watershed. One of these crossings, Whiskey Creek at Hunt Creek Road, was a priority of the local road commission, and presented an opportunity to improve habitat with renovation at the site. Whiskey Creek is a tributary of Hunt Creek, which supports the best trout fishery and coldest water within the watershed. This tributary provides critical spawning and rearing habitat for native brook trout and is a good cold-water source feeding into Hunt Creek.

-USFWS/Heather Rawlings

The Whiskey Creek/Hunt Creek Road stream crossing in Montmorency County, Michigan, was improved in November 2007 to allow uninhibited fish passage. These images show the crossing before (left) and after restoration (right).

The former crossing was critically failing, blocking fish passage. crews replaced this culvert on November 9, realigning it to match the stream channel. The embankments were stabilized using fieldstone, and the road approaches have a steep 10-degree grade, hardened with crushed limestone. Crews installed several check dams in the ditches and placed a sediment basin to filter out the majority of the road run-off. They also seeded and put geo-textile fabric at all disturbed areas. Erosion from the road shoulders and embankment, which was contributing nearly three tons of sediment annually to Whiskey Creek, was virtually eliminated.

Now fish passage has been reinstated, allowing access to approximately two miles of the headwaters of Whiskey Creek. Adverse fish habitat impacts from erosion and warming of water at the crossing have been reduced, benefiting approximately eight stream miles of fish habitat downstream to the confluence of the Thunder Bay River and non-fish species currently suffering the impacts of sand erosion, flooding and obstructed flow.

Funding for the project was provided by the Partners for Fish and Wildlife Program, Fish America Foundation, Huron Pines, Montmorency County Road Commission, and the State of Michigan's Clean Michigan Initiative Program. The total cost of the project was $25,268, and Fish and Wildlife Service funding ($3,000) was matched with an 8.5:1 match of equipment and labor. Alpena NFWCO's biologist Heather Rawlings coordinated the project with Lisha Ramsdell from Huron Pines.

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

18-Mile Creek Video

Meandering through Bayfield, Wisconsin, before joining a designated state natural area, 18 Mile Creek is locally known for its naturalized brown trout and brook trout fishery; however, one culvert crossing of 18-Mile Creek was perched and was a velocity barrier for most life stages of fish. Crews installed an 80-foot long culvert at the site to restore fish passage, making this the most extensive fish passage project undertaken to date by Ashland NFWCO staff. A short version of a video showing the three primary stages of the project is available at: http://www.fws.gov/midwest/ashland/. For a copy of the full length video (19 minutes), contact Frank Stone or Ted Koehler at 715/682-6185.

Gin Creek Running Clear Again

BY GLENN MILLER, ASHLAND NFWCO

Gin Creek, a small but popular brook trout stream in Ashland, Wisconsin, is now flowing clear again, at least for fish. The Ashland NFWCO has completed a culvert replacement on the Silver Brook road crossing. This improvement has opened approximately 3.7 miles to spawning/rearing habitat. Two small, perched culverts were blocking upstream migration, and flow velocities in the culvert were also a problem for smaller fish. Gin Creek is a tributary to Trout Brook, and joins just below the culvert that was replaced earlier in the year on Trout Brook.

-USFWS

This culvert on Gin Creek near Ashland, Wisconsin, allows uninhibited fish passage to upstream habitat.

Funds from the Fish Passage Program were used to purchase a new six- by 60-foot culvert and the Town of Ashland supplied manpower and equipment along with funds to contract with the Ashland County Highway Department to do the excavation at the site. Ashland County Land Conservation Department, along with Ashland NFWCO, conducted the preconstruction survey for the engineering plans. Construction took place August 8 and 9, 2007.

Even with drought conditions in Northern Wisconsin in 2007, spring-fed Gin Creek allowed a decent flow through the culvert. The preconstruction survey found 14 brook trout and numerous creek chubs. The brook trout ranged in size from 55 to 190 mm. Brook trout found below the culvert were given a lower caudal clip and the upper stretch was given an upper caudal fin clip. The post-construction survey showed that the fish hadn't moved much, as there were no significant rain events before this survey. A follow-up survey is planned for this spring.

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

The NFH System and the National Fish Habitat Action Plan: They Go Together like Ham and Eggs

BY DOUG ALOISI, GENOA NFH

The National Fish Habitat Action Plan, a new program to rehabilitate fish habitat throughout the United States by establishing coordinated geographic watershed plans, is causing excitement for people interested in healthy watersheds. This timely initiative will do much to save aquatic systems for future generations, and rehabilitate watersheds at risk of collapse from environmental pressures. Many of these systems have depressed fish and aquatic resource populations or have been affected to the point where populations have been extirpated.

For several reasons, the National Fish Hatchery System can and should be integrated early into the process of watershed planning. By developing science-based plans, conservation stockings can be independently reviewed by all signatory agencies and/or scientific groups and managed on a watershed approach, using locally adapted fish and mussel strains to rebuild stocks. The majority of these stockings could be short lived, continuing only long until enough genetic material is present in the system to ensure a reasonable chance of success to pass along heritable traits for future generations.

Using hatcheries as watershed-based genetic repositories would require hatchery-by-hatchery planning and some infrastructure development. The large-scale, one-species production hatchery of the past would have to metamorphose into many different holding areas and many different rearing habitats. Some hatcheries closely resemble that model now, while others would require large scale renovations to meet the changing needs of aquatic systems. Hatcheries would have to factor in the benefits and risks on a station-by-station basis of managing multiple species of fish requiring variable rearing regimes.

The National Fish Habitat Action Plan presents the National Fish Hatchery System with a unique opportunity to plan for the next generation of fish production, and look at how to best restore and protect tomorrow's aquatic resource heritage today.

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

Biologist is an "Ambassador" for National Initiative

BY ROGER GORDON, JORDAN RIVER NFH

Biologist Tim Smigielski was one of two representatives from the Midwest Region selected to attend the "Connecting People with Nature: Making it Happen in Your Community" workshop held at the National Conservation Training Center. Since being hired as the lead biologist at Jordan River NFH in 2003, Tim has been coordinating the hatchery's outreach, volunteer, public use and partnership programs.

Connecting people with nature is one of the Fish and Wildlife Service's top priorities, and the workshop was designed to prepare the participants to be ambassadors to their regions, field stations and partners, to develop and implement strategies.

Tim is also a member of a team tasked by Director Dale Hall to develop an action plan for Region 3. He came back from the conference with a briefcase full of literature, a head full of ideas and a snap in his step.

"The conference was not only inspiring but gave validity and an identity to the issue," he said. "It was evident to him that the Region 3 programs are already well positioned to lead the way into the future."

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

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.

Region 3 Dive Team Members Train Up!

BY ANN RUNSTROM, LA CROSSE NFWCO

January may not make for the most comfortable diving in the Midwest, but it is a good time to brush up on safety and first aid skills. Four members of our regional dive team participated in oxygen administration training at Marineland in La Crosse, Wis., on Jan. 10. Medical grade oxygen is important for treatment of diving accident victims, and all dive team members are required to be trained in proper administration of oxygen. Biologists Scott Yess, Tony Brady, Jen Walker and Ann Runstrom participated in the training.

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

Richard Nelson Retires After 35 Years of Government Service

Richard (Rick) Nelson retired on January 3 after 35 years of government service. Rick was project leader of the La Crosse Fish Health Center in Onalaska, Wisconsin, for more than 20 years. He enjoyed teaching the "Introduction to Fish Health" short course and implementing fish management practices in the Upper Midwest. Rick and his wife plan to move to Oregon and join their three children and grandson. In his spare time, Rick enjoys fishing and traveling.

So What *Do* You Do This Time of Year?

BY MARK STEINGRAEBER, LA CROSSE NFWCO

As a biologist at a northern duty station, where most surface waters remain hard for nearly half the year, I am frequently asked by friends and family at winter holiday gatherings, "What do you and your colleagues do at work this time of year?" My typical response to these queries is a listing of required indoor activities (e.g., data entry and analysis, report preparation, meeting participation, equipment maintenance, property inventory) that could eventually cause occupational cases of "cabin fever."

Fortunately, the co-location of the La Crosse NFWCO with five other Fish and Wildlife Service offices in Onalaska, Wisconsin, provides occasional opportunities for Fishery program employees to leave their office "dens," where they may otherwise "hibernate" for the winter, and resume work in the outdoors by briefly participating in cross-program activities.

Such was the case on a mild day late last November when I responded to a request to help the Upper Mississippi River National Wildlife and Fish Refuge - La Crosse District staff complete landscaping activities at the recently constructed Browns Marsh overlook adjacent to the Great River State Trail. Having worked a seasonal job decades ago restoring and maintaining remnant savannah-prairie habitats scattered amidst an expanding urban landscape in Southeastern Wisconsin, the opportunity to mix and hand-broadcast gramagrass, little bluestem, Indian grass, and a variety of other native prairie forb seeds in the sandy loam soils of Southwestern Wisconsin was a youth-replenishing tonic for my spirit of conservation.

Lest my body think that it too had found a fountain of youth, I was reminded of my middle-aged status by the end of the day after crawling for hours on hands and knees to cover the seeds with a protective layer of straw held in place by countless staples hammered (i.e., chiseled) into the mostly frozen ground. But despite any temporary stiffness due to this labor of love, friends and family likely noticed that I gave a more enthused response at holiday gatherings this winter when I told to them what I had recently been doing at work.

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

Student Employees Spend Winter Break building Mussel Culture Cages

BY TONY BRADY, GENOA NFH

The Student Temporary Employment Program (STEP) is one way the Fish and Wildlife Service introduces interested college students to careers in conservation. Genoa NFH has hired as many as two STEP workers for the last several years. These students typically work during their summer breaks. Because of this schedule, many people believe this program to be only a summer program; however, the STEP program is a one-year appointment, which means a student can work throughout the year when available.

Genoa NFH's current STEP students, Brandon Keesler and Jorge Buening, are making the most of this opportunity to earn a little extra cash. Keesler and Buening spent part of their winter break at the hatchery building mussel culture cages to house fish that have been inoculated with the parasitic larval form of mussels called glochidia. The glochidia attach to the gills of fish where they undergo a metamorphosis, dropping off the fish and often settling into the bottom of the cages, where they will grow and then harvested for relocation to restoration areas.

Mussel culture cages have been used with great success for the past seven years in the recovery efforts for the endangered Higgins' eye pearlymussel, producing more than 30,000 two- to four-year-old mussels to re-establish populations at five recovery sites.

The success of the Higgins' eye pearlymussel program has caught the attention of the West Virginia DNR, which asked the hatchery to build 35 cages for restoration efforts planned for the Ohio River this spring. Hatchery staff built new cages and Keesler and Buening riveted hardware cloth to all the cage frames. These cages will be shipped to West Virginia in early spring for their use during this year's growing season.

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

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. 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]

S. 2758 (is) To authorize the exploration, leasing, development, production, and economically feasible and prudent transportation of oil and gas in and from the Coastal Plain in Alaska. [Introduced in Senate]

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]

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]

H.Con.Res. 248 (ih) Expressing the sense of the Congress that the United States Fish and Wildlife Service should incorporate consideration of global warming and sea-level rise into the comprehensive conservation plans for coastal national wildlife refuges, and for other purposes. [Introduced in House]

S. 2204 (is) To assist wildlife populations and wildlife habitats in adapting to and surviving the effects of global warming, and for other purposes. [Introduced in Senate]

S. 647 (rs) To designate certain land in the State of Oregon as wilderness, and for other purposes. [Reported in Senate]

H.R. 2337 (ih) To promote energy policy reforms and public accountability, alternative energy and efficiency, and carbon capture and climate change mitigation, and for other purposes. [Introduced in House]

Source is http://www.gpoaccess.gov/bills/index.html
Searched database by keyword = "fish"

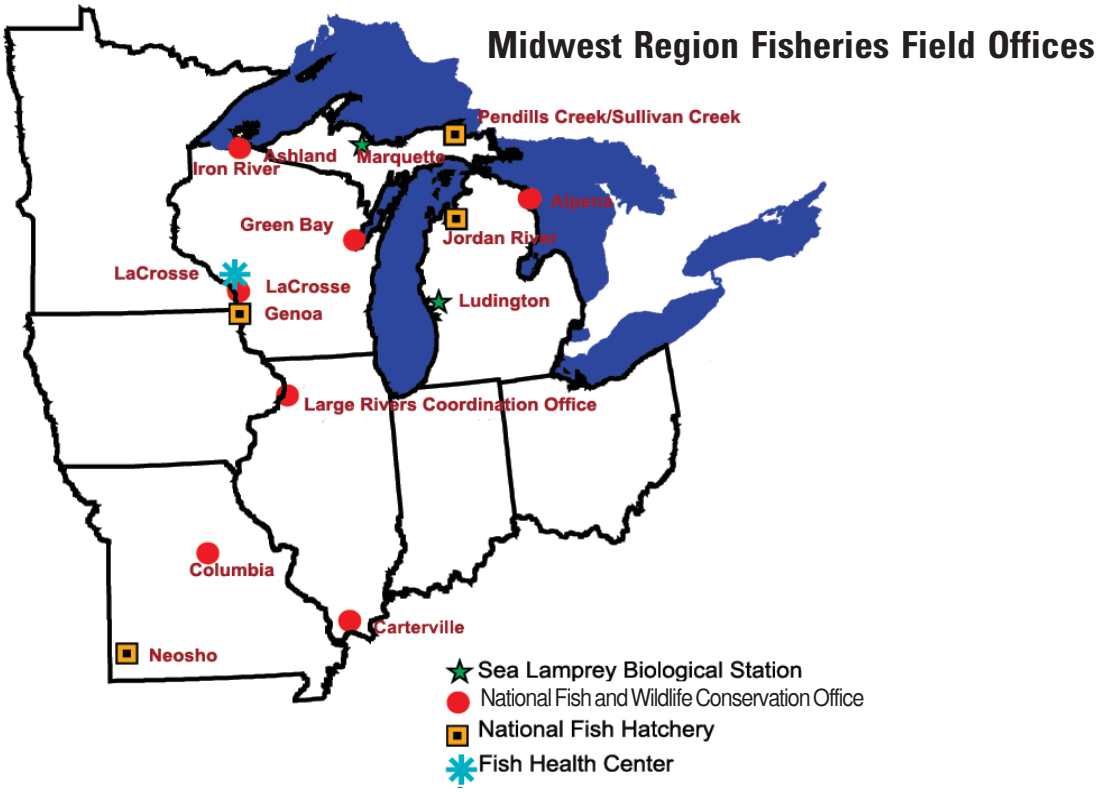
Midwest Region Fisheries Divisions

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 fisheries databases; provide technical expertise to other Service programs addressing contaminants, endangered species, federal project review and hydropower 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.



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Pendills Creek/Sullivan Creek
National Fish Hatchery
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Missouri

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Wisconsin

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Green Bay National Fish and Wildlife Conservation Office
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Area of Responsibility (Iowa, Minnesota, Wisconsin)

Fish Tails

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

Partnerships and Accountability

- Wild Health Inspection of Lake Superior Lake Herring
  - Corey Puzach, La Crosse FHC
- Middle Basin Pallid Sturgeon Workgroup Holds Winter Meeting
  - Tracy Hill, Columbia NFWCO
- Whittlesey Creek NWR Waterfowl Survey – 2007 Result
  - Ted Koehler, Ashland NFWCO
- Annual Meeting of the Great Lakes Fish Health Committee
  - Ken Phillips, La Crosse FHC
- Laboratory Testing Services
  - La Crosse FHC Staff

Aquatic Species Conservation and Management

- Maintaining Partnerships for Pallid Sturgeon
  - Nick Utrup, Columbia NFWCO
- Jordan River NFH Staff Assist in Lake Trout Egg Takes at Sullivan's Creek NFH
  - Tim Smigielski, Jordan River NFH

Public Use

- Fishery Education Provided for Area Cub Scouts
  - Anjanette Bowen, Alpena NFWCO
- Outdoor Adventure Club Tours Jordan River NFH
  - Tim Smigielski, Jordan River NFH

Cooperation with Native Americans

Leadership in Science and Technology

- Talkin' Shop with USGS
  - Patty Herman and Andy Starostka, Columbia NFWCO
- Toxicology Manuscript Peer-Review Completed
  - Mark Steingraeber, La Crosse NFWCO

Aquatic Habitat Conservation and Management

- Niangua Darter Road Crossing Surveys
  - Brian Elkington and Joanne Grady, Columbia NFWCO

Workforce Management

- Jim Luoma joins staff at Genoa (WI) National Fish Hatchery
  - Doug Aloisi, Genoa NFH
- BONJOUR MARIE!
  - Marie Delatour and Joanne Grady, Columbia NFWCO
- Jordan River NFH Gets another Spartan Volunteer
  - Tim Smigielski, Jordan River NFH
- Iron River Hatchery Produces Two New 'Fish Squeezers
  - Heidi Keuler, La Crosse NFWCO

-Jerry French Postcard Collection; U.S. Fish Hatchery at Norris, Tennessee (circa 1940)

Water Under the Bridge

A Glimpse into our Proud Past

This U.S. Fish Hatchery was located below the Norris Lake Dam on the Clinch River in Anderson County, Tennessee. The hatchery was established in 1937 as part of the Tennessee Valley Authority (TVA). The hatchery was transfered to the TVA in 1944.