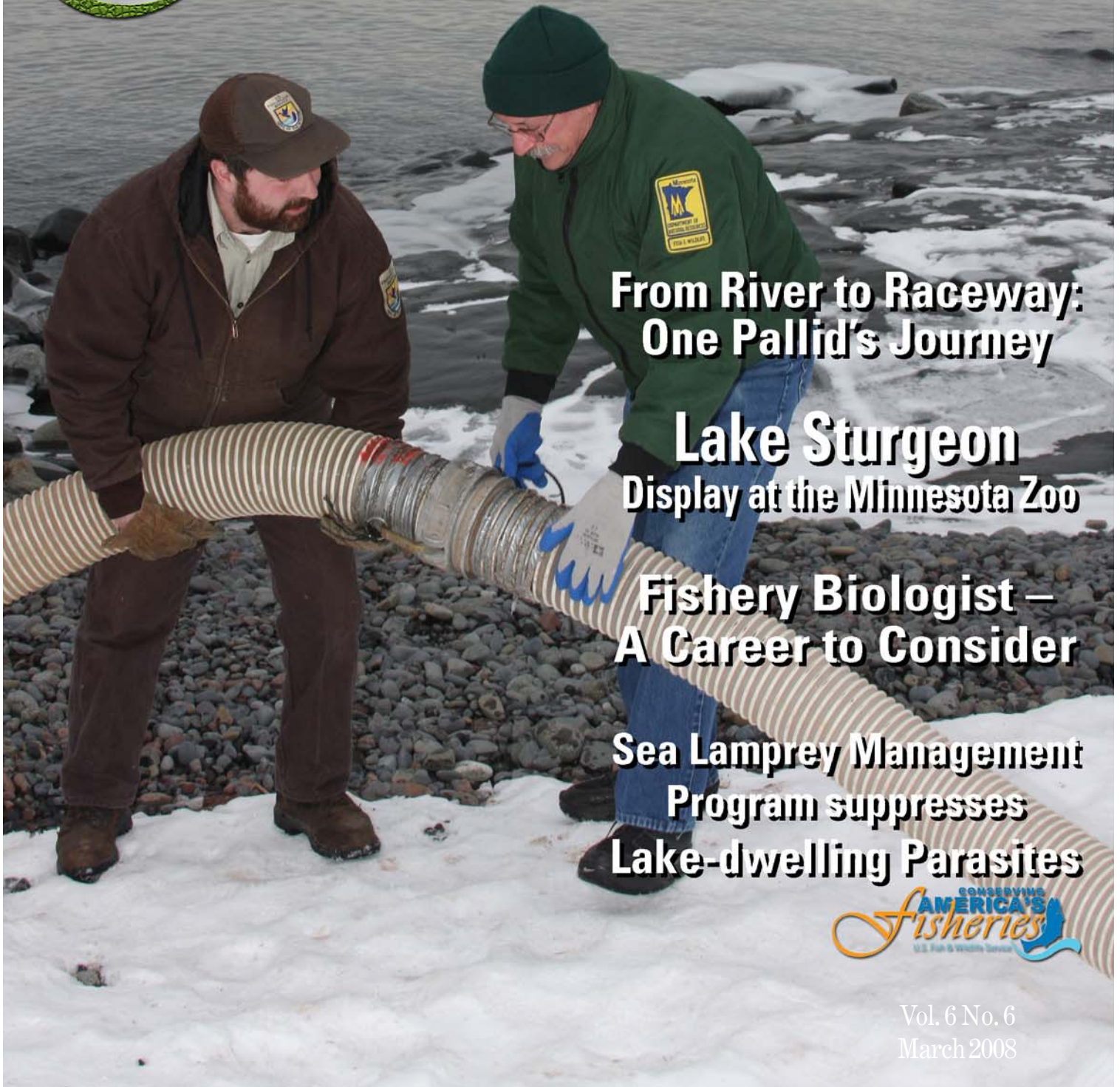




U.S. Fish & Wildlife Service - Midwest Region

Fisheries & Aquatic Resources Program

fish lines



**From River to Raceway:
One Pallid's Journey**

**Lake Sturgeon
Display at the Minnesota Zoo**

**Fishery Biologist –
A Career to Consider**

**Sea Lamprey Management
Program suppresses
Lake-dwelling Parasites**



Vol. 6 No. 6
March 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.

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-USFWS

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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. 6

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-USFWS

Fish and Wildlife Service and Minnesota Department of Natural Resources staff prepare a discharge tube to stock lake trout.

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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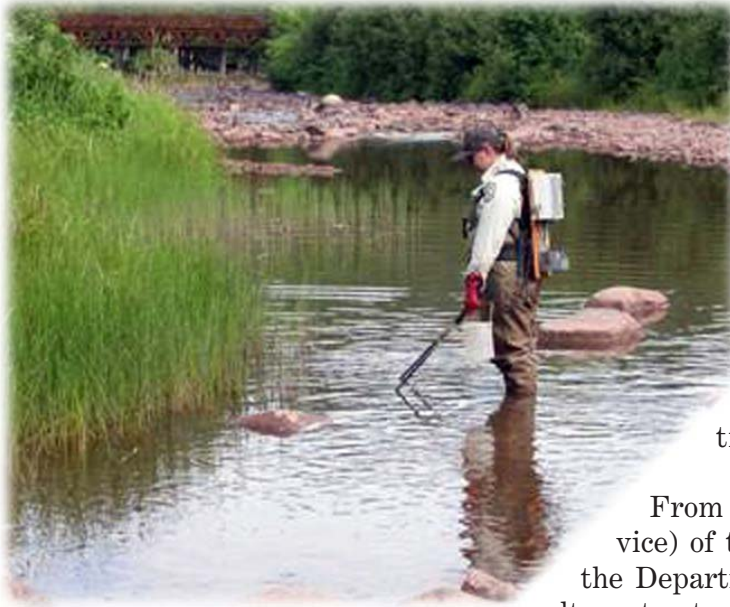
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Sea Lamprey Management Program suppresses Lake-dwelling Parasites

BY MICHAEL FODALE, MARQUETTE BIOLOGICAL STATION

In an attempt to further suppress the number of parasitic sea lampreys in the Great Lakes, the Sea Lamprey Management Program is implementing a new, less costly, research-tested approach to replace its relatively expensive quantitative assessment program. The new approach uses rapid assessment techniques to rank tributary streams for lampricide treatment and use the savings to kill more sea lamprey.



-GLFC

A biologist conducts an electrofishing survey to index abundance of invasive sea lamprey larvae in a Great Lakes stream.

control, how many dollars should be spent on assessment, with the understanding that fewer dollars then become available for lampricide treatments. Results of the comparative testing were so promising that the Commission directed its agents to implement the new stream selection program during 2008, one year earlier than expected. The new technique relies more heavily on historic measures of larval sea lamprey habitat in streams, uses expert judgment based on over 50 years of experience to help determine which streams to examine and when, and employs a rapid assessment technique to index the abundance of larger larvae in those streams. As implemented during 2008, efforts to rank streams for treatment are reduced by about 60% and those redirected resources are being used to target and remove more sea lampreys by conducting additional lampricide treatments.

While only time will tell if parasitic sea lampreys will be further suppressed through our new approach, the future looks brighter today for lake trout rehabilitation and for achieving Great Lakes fish community objectives.

For further info about the Marquette Biological Station: <http://www.fws.gov/midwest/marquette/>

From 1994 through 2007, a labor-intensive, quantitative habitat-based larval assessment program was developed to accurately rank the production of metamorphosing larval sea lampreys and the cost to remove them from those streams. The technique was based on measuring year-specific larval habitat, densities, and size structure in streams, and predicting the number of metamorphosing larvae from those streams. At that time, the quantitative program was developed with the underlying assumption that further suppression of sea lamprey populations would be achieved through better choices of specific streams to treat.

From 2005 through 2007, the agents (Fish and Wildlife Service) of the Great Lakes Fishery Commission (Commission) and the Department of Fisheries and Oceans Canada (DFO) tested an alternate stream treatment selection model that targets additional sea lampreys using a less expensive, albeit somewhat less accurate technique, and use the savings to treat additional infested streams. The research focused on the question of what an optimal control program should look like; with a finite amount of financial resources available for

From River to Raceway: One Pallid's Journey

BY PATTY HERMAN AND COLBY WRASSE, COLUMBIA NFWCO

It started off as a foggy, grey morning. The cold river water soaked through our cotton gloves as we began to pull the first trotline of the day. The line had the usual suspects; blue catfish, shovelnose sturgeon – then, suddenly, a ghostly shimmer broke the surface of the water. “Wow! We got a big one!” “It’s a pallid! Quick, get it in the boat!” rang out in the still morning air. In a flash, the hook was removed from its’ mouth and a holding tub was set up for the impressive fish. The rest of the line was quickly pulled in and a frenzy of activity broke out on the boat. The 29 inch pallid sturgeon was checked for coded-wire tags, microchips and any other obvious hatchery markings. None were found. As the wild-born sturgeon was being measured and weighed, phone calls were placed to get the ball rolling. This fish was going to the hatchery!

We still had nine more trotlines to pull – and no time to waste. With the brood stock pallid on board, we set off to finish our work. Luckily, the second line had few fish on it and was processed very quickly; however, the third and fourth trotlines slowed our progress. A total of four more pallid sturgeons and a large hybrid (pallid x shovelnose) sturgeon were caught on those lines! Finally, we managed to pull all the trotlines and work up our catch, all the while tending to the large wild pallid sturgeon in the holding tank.

By the time we made it back to the boat ramp, the fog had burned off and a beautiful spring day was unfolding. Larry Steding of the Missouri Department of Conservation’s Blind Pony State Fish Hatchery met us at the ramp with a hauling tank. A quick check of temperatures and the addition of therapeutants to the hauling tank water were performed before the transfer was made. Our brood stock fish was on her first big adventure over land. Once at the hatchery, she was transferred to a raceway and allowed to acclimate for a few days. Endoscopy was performed and confirmed that she was female but not quite ready to spawn. Just a week after her ordeal began, she was hauled back to the river from the hatchery and released at the same spot from which she was caught.



-USFWS/PattyHerman

Colby Wrasse of the Columbia National Fish and Wildlife Conservation Office holds a large, wild pallid sturgeon caught near the I-70 bridge on the Missouri River. The fish was transported to the Blind Pond State Fish Hatchery as a potential source of eggs for the recovery program.

Because “wild” fish are used as brood stock in fish hatcheries as part of a national recovery effort for pallid sturgeon, large unmarked pallid sturgeon are carefully transported to the nearest hatchery. There is a chance the fish will outgrow or expel the hatchery identification marks; therefore, genetic analysis is used to confirm the fish’s lineage or origin. Each fish is tested for maturity using ultrasound and endoscopy. If the fish is ready to spawn, it is transferred to one of the participating National or state fish hatcheries. As in this case, if the fish is not ready to spawn it is returned to the river as quickly as possible. The collection of brood stock pallid sturgeon allows us to meet our objective of recovering fish protected under the Endangered Species Act.

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

Fishery Biologist – A Career to Consider

BY MARK STEINGRAEBER, LA CROSSE NFWCO

Biologist Mark Steingraeber of the La Crosse National Fish and Wildlife Conservation Office (NFWCO) participated for the fourth consecutive year in the 8th Grade Career Day at Aquinas Middle School in La Crosse, Wisconsin. A total of 69 students attended the March 14 event. Fifteen different careers were represented at the fair this year. Students selected from among these and attended four career presentations given by a local professional who works in that occupation. The morning event culminated a month-long guidance department program designed to encourage students to think about career options for their future.



-Coullee Catholic Schools

La Crosse Fish and Wildlife Conservation biologist Mark Steingraeber discusses his career for the Fish and Wildlife Service with 8th grade students at Aquinas Middle School in La Crosse, Wisconsin.

Information on the duties, responsibilities and requirements of a professional biologist for the Fish and Wildlife Service was described while images were displayed of the diverse work performed by biologists around the country. Based on personal experiences dating back more than 30 years, Mr. Steingraeber described the educational path and life-journey that led him to a satisfying natural resource career in service to the nation.

The importance of communication, information technology, math and interpersonal skills was stressed in whatever career a student may select. Students were also encouraged to closely examine potential career choices by actively participating in job-shadow and volunteer opportunities offered to them in high school and college.

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

U.S. Fish & Wildlife Service

Careers

Midwest Region

Careers

- Career Choices
- Career Development
- Compensation and Benefits
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- How to Apply
- Office Locations
- Learning About FWS

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Lake Sturgeon on Display at the Minnesota Zoo

BY JENNY WALKER, GENOA NFH

Lake sturgeons have been raised at Genoa National Fish Hatchery (NFH) since 1995 in an effort to restore declining populations to Minnesota, Wisconsin and Missouri waters. This year, three young-adult sturgeons from the program were transferred to the Minnesota Zoo, and will make their new home as part of a 3.5-acre display that includes grizzly bears, salmon, wild boars and otters. The display will help educate the public about wildlife conservation and the necessary interactions of animals in an ecosystem.



-USFWS

This four year old lake sturgeon, raised at the Genoa National Fish Hatchery, is now part of a new 3.5 acre exhibit at the Minnesota Zoo. The exhibit will help educate the public about wildlife conservation and the interactions of animals in an ecosystem.

Connecting People with Nature is one of Genoa NFH's top priorities as well. Recently, Genoa has bolstered its education and outreach programs with the introduction of a Wonders of Nature Program which includes creation of an outdoor classroom in the Sense of Wonder Discovery Wetland.

While parts of the Wonders of Nature Program are still under construction, Minnesota Zoo's new lake sturgeons are scheduled to be on exhibit June 7. A partnership such as this promises to help both agencies in their conservation and wildlife connected missions, and bring joy and appreciation for wildlife to all ages.

This new partnership supports both the Fish and Wildlife Service mission, "Working with others to conserve and protect fish, wildlife, and their habitats for the enjoyment of the American people" and Minnesota Zoo's mission "To connect people, animals and the natural world," by providing quality exposure to wildlife and educational programs to over one million visitors annually.



-USFWS

Eggs are gently "stripped" from a wild, female lake sturgeon. Eggs will be used for lake sturgeon restoration efforts. Some of the fish will even be used for visitor displays - a live example of

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

Pendills Creek NFH hosts “Friends of Pendills Creek Hatchery” Meeting

BY CURT FRIEZ, PENDILLS CREEK NFH

Pendills Creek NFH hosted a very important meeting between the *Friends of Pendills Creek Hatchery* Friends Group, Sheri Davie of Senator Debbie Stabenow’s Office, and Amy



Berglund of Senator Carl Levin’s Office. The meeting was quite informal and consisted of the Friends Group President George Goetz explaining current projects. Currently, the Friends Group has three grant proposals submitted to Federal and state agencies and supplemental appropriation requests submitted to both Senators. Another important issue discussed at the meeting was the formation of a National Fisheries Friends Association. Finally, the discussion turned to the hatchery public access area in which the Friends Group desires to conduct several work bees this spring and summer to develop a small picnic area for visitors. The meeting was a huge success.

-USFWS
Honored guests at the March meeting of the *Friends of Pendills Creek Hatchery* meeting included (Lt. to Rt.) Sheri Davie - Staff Member of Senator Stabenow’s Office, George Goetz - Friends Group president, and Amy Berglund - Staff Member of Senator Carl Levin’s Office.

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.

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

County Board thanks Drug Disposal Partners

BY MARK STEINGRAEBER, LA CROSSE NFWCO

At its last scheduled meeting in 2007, the La Crosse, Wisconsin, County Board of Supervisors formally recognized two collaborators who played key roles during the year to help the county establish a permanent program to collect and dispose of unwanted medications in an environmentally safe manner. La Crosse County Board Chairman Steve Doyle began the December 20 meeting by presenting commemorative plaques of gratitude to biologist Mark Steingraeber of the La Crosse NFWCO, and Joe Kruse, a vice-president at Franciscan Skemp Healthcare. Doyle acknowledged the key role and support these individuals provided to help the La Crosse County Solid Waste Department establish this innovative and environmentally conscious program, which is also providing a new source of revenue for this local unit of government.

To date, the county administered program has collected and prevented more than three tons of unwanted medications from entering regional surface waters. This effort has likewise prevented the possible misuse or abuse of these unwanted pharmaceuticals. The La Crosse Medication Disposal Program received a ‘Program Innovation Award’ from the North American Hazardous Materials Management Association earlier in 2007 and plans to serve as the disposal vendor for unwanted medications collected in 34 (or more) of Wisconsin’s 72 counties in 2008. Because of recent media reports that described the occurrence of medications in surface waters around the nation, public attention has been focused on adverse effects that low level concentrations of drugs in the environment can have on some species of fish and wildlife. It has also raised new concerns among millions of Americans about the safety of drinking water supplies. The La Crosse County Medication Disposal Program could serve as a national model to foster partnerships in other communities that help protect the integrity of local watersheds. An audio recording of comments made by Doyle, Steingraeber and Kruse at the La Crosse County Board of Supervisors December 20 meeting can be heard at: <http://www.co.la-crosse.wi.us/Audio/2007.htm>.

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

Landscape Partnerships seek Watershed Conservation

BY MARK STEINGRAEBER, LA CROSSE NFWCO

The 5th annual conference of the Minnesota Chapter of the Society for Conservation Biology (SCB) met in March at the Eagle Bluff Environmental Learning Center near historic Lanesboro, Minnesota. This popular, year-round, “bluff country” destination is perched in a hardwood forest that is bisected by the scenic Root River in Fillmore County. The quiet winter solitude of this isolated, but comfortable, educational campus provided a relaxed atmosphere where conference attendees from academia, business and government could contemplate and discuss roles they could play to help attain common watershed conservation goals through landscape level partnerships. Operating upon a premise that “The whole is greater than the sum of its parts,” participants at this retreat-like gathering were challenged to creatively think of how to combine the interests and expertise of the organizations they represent with those of others, to attain greater watershed protection than any entity could achieve individually.



-Eagle Bluff Environmental Learning Center
The Eagle Bluff Environmental Learning Center near Lanesboro, Minnesota, hosts a variety of environmental programs.

This meeting provided an appropriate forum for biologist Mark Steingraeber of the La Crosse NFWCO to introduce this pro-active, conservation-minded audience to the development and achievements of a recent partnership formed between the Fish and Wildlife Service, Franciscan-Skemp Healthcare, and La Crosse County (Wisconsin). These three seemingly disparate partners worked together during the past year to create a permanent program that collects unwanted medications and disposes them in an environmentally sound manner.

To date, this county-administered program has collected and prevented more than three tons of unwanted medications from entering regional surface waters. This effort has likewise prevented the possible misuse or abuse of these pharmaceutical products. The multiple benefits of this partnership program to society (e.g., environmental safety, human health, crime prevention) drew interest from the SCB audience that included residents of Nebraska and Iowa, as well as Minnesota. Considering recent news accounts of the widespread and persistent occurrence of a variety of medications at low concentrations in surface waters that supply drinking water for millions of Americans daily, the La Crosse Medication Disposal Program could serve as model for the development of other landscape level partnerships to help communities around the country conserve and protect the integrity of local watersheds.

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

Local Fisherman assists with Wild Fish Health Survey

BY DOUG ALOISI, GENOA NFH

Commercial fishermen on the Upper Mississippi River have a long history of assisting in ongoing fisheries research, fish collections, and population assessments for a wide variety of state and Federal research and management agencies located alongside the mighty Mississippi. This spring, Jim Boardman and his crew from Boardman Fisheries assisted in fish collection activities that occur before traditional ice-out; Genoa NFH normally begins fish collection activities after ice-out. Fish are used in surveillance efforts to determine the extent of fish pathogens in

wild fish populations. This effort known as the Wild Fish Health Survey has been conducted since 1997 and is essential to determine whether any pathogens that are serious enough to affect management efforts are present in the Upper Mississippi River system. Through these collections and the results provided from the La Crosse Fish Health Center (FHC), fisheries management decisions can be made on how to best protect the vast fisheries resources in the Upper Mississippi River basin.

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

Partnering to Capture Brood Stock Sturgeon

BY ANDREW PLAUCK AND NATE CASWELL, COLUMBIA NFWCO

To anyone who has ever been fishing, threading night-crawlers onto nearly 4,000 hooks in four days may seem like a daunting task. But this spring we found that when you have people from three Fish and Wildlife Service offices and one university working together, you can accomplish a lot very quickly.



-USFWS/Andrew Plauck

-Columbia National Fish and Wildlife Service staff and volunteer bait trotline hooks in an effort to catch pallid sturgeon adults.

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.

Spring is the time of the year when many fish think about one thing. Many fishes' spawning behaviors make them susceptible to capture during this time. For sturgeon, that is especially true. Most species of sturgeon will swim upstream for miles to find spawning locations. Any barriers to this movement can "stockpile" fish in that area. The Chain of Rocks Low-head Dam near St. Louis, Missouri, is the lowermost barrier for fish migrating from the Middle Mississippi River to the Missouri River. Shovelnose, pallid and lake sturgeons congregate in this area regardless of river level, making it a hotspot in the Mississippi River basin. Telemetry and recapture data show that both pallid and shovelnose sturgeons are able to move past this barrier during periods of moderate to high flows. This site was selected for the first annual Pallid Sturgeon Round-Up.

Personnel from Columbia NFWCO, Carterville NFWCO and Missouri Department of Conservation (MDC) had been discussing the logistics of this large-scale sampling effort for several years. The goal of this year's effort was to capture large, wild pallid sturgeons for recovery efforts and lake sturgeons for MDC's hatchery program.

Nate Caswell and Ken Heflin from the Carterville NFWCO and Matt Mangan from the Marion Ecological Services Sub-Office joined Andy Plauck and Joe McMullen from the Columbia NFWCO to set gear on the first day of the week. Seven students in the Fisheries and Wildlife program at the University of Missouri-Columbia joined NFWCO staff Patty Herman, Colby Wrasse, Cliff Wilson and Adam McDaniel throughout the week as volunteers. MDC was also able to lend a crew for a night of trotline sampling.

Baited trotlines were set out at a rate of over nine hundred hooks per night for four nights. In total, two crews fished 3,872 hooks, capturing six pallid sturgeons, nine lake sturgeons, and 761 shovelnose sturgeons. Unfortunately, only one lake sturgeon was large enough to be transported to MDC's hatchery. We did capture two potentially wild pallid sturgeons, but they were small fish unsuitable as hatchery brood stock.

Partnerships such as this are critical to the recovery of the pallid sturgeon. By joining forces with other Fish and Wildlife Service offices, MDC and volunteers, we were able to increase the amount of effort for this event. Recovery of the pallid sturgeon and monitoring of the shovelnose and lake sturgeon populations are both high priorities in the Mississippi River basin.

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

Successful Brood Stock Program maintained by Genoa NFH

BY NICK STARZL, GENOA NFH

The Genoa NFH successfully reared another group of coaster brook trout for brood stock at the Iron River NFH to supplement their captive brood stock program.

Six hundred Tobin Harbor strain “brookies” were originally received as eggs from the Iron River NFH in December of 2006. The lot was reared for approximately 11 months and averaged 6 inches in length. Genoa NFH is able to achieve better growth rates by rearing the yearling fish on its constant groundwater temperature of 53° F throughout the winter and summer. The increased growth matures the young trout to spawning age a year sooner than could be achieved at the Iron River NFH. Eventually, brook trout eggs will be collected from these brood stock which will be hatched and reared for restocking into areas of the Great Lakes.

The coaster brook trout is a threatened strain of brook trout which is endemic to the Isle Royale region of Lake Superior. Though similar to the inland strains, coasters become larger attaining weights of 4-10 lbs. Overfishing, pollution and invasive sea lampreys have all contributed to the diminishing number of coaster brook trout in the Great Lakes. The Genoa NFH is cooperating with Iron River NFH, Ashland NFWCO, and the states of Wisconsin and Michigan to restore the coaster brook trout to its native range on the northern shore of Lake Superior.

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

Spring Spawning Activities begin at the Genoa NFH

BY JAMES LUOMA, GENOA NFH

As spring starts during mid-March, biologists at the Genoa NFH prepare captive adult fish for their annual production. The Hatchery, located in Southwestern Wisconsin along the banks of the Mississippi and Bad Axe rivers, is home to hundreds of adult brood stock sport-fish of six species. The Genoa NFH annually produces hundreds of thousands of largemouth and smallmouth bass, yellow perch, bluegills and other species to meet fishery requests from National Wildlife Refuges, military installations, tribal governments, and cooperative management projects with states and universities.

The process for filling fish requests begins in March when station biologists drain brood stock holding ponds and sort fish into species and then place the fish into production ponds on the hatchery grounds. Once the waters in the ponds warm to the species-specific requirements, the fish spawn. Depending on the species or particular management goal, the ponds are harvested from early July until late autumn.



-USFWS
Adult yellow perch are used as brood stock in hatchery rearing ponds.

Once the adults are removed from the ponds, they are placed in a communal over-wintering pond until the next spring when the process begins again. Throughout the year, the brood fish are fed a diet of hatchery produced forage fish in addition to a diet of insects and other natural foods derived from the ponds. To assure that only top quality fish are produced and stocked, the hatchery brood fish and the young-of-the-year fish are tested for specific disease pathogens. A clean bill of health is required prior to use for propagation and stocking.

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

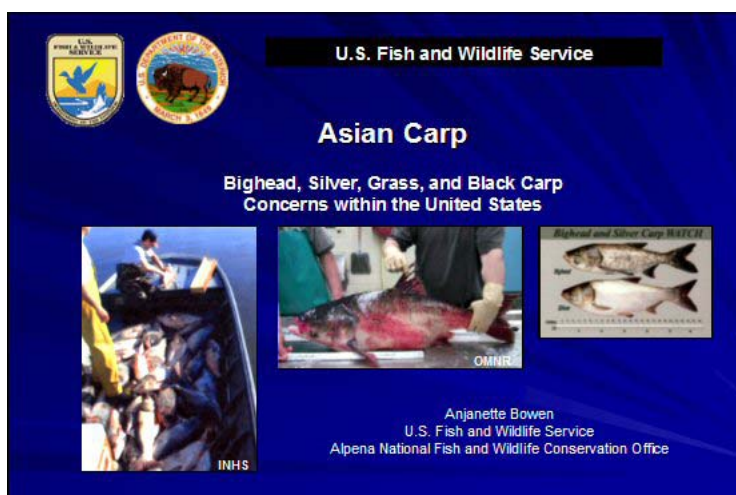
Asian Carp Information provided to the Michigan Environmental Health Association

BY ANJANETTE BOWEN, ALPENA NFWCO

Alpena NFWCO biologist Anjanette Bowen provided information on invasive Asian carps at the Annual Education Conference of the Michigan Environmental Health Association held March 11-14 in Bay City, Michigan. The focus of Bowen's presentation was to educate the environmental health community about Asian carps and the concerns associated with their spread within the United States, and potential spread into the Great Lakes. The term "Asian carp" refers to four species of non-native carps (bighead carp, silver carp, black carp and grass carp) that have become established and are spreading within the Mississippi River basin. Asian carps may reduce the diversity of native species and be hazardous to water users.

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.



Approximately 20 people attended the presentation which included Asian carp identification, current distribution, and concerns associated with their increase in numbers and spread to new areas. Efforts to slow the spread of Asian carps into the Great Lakes via the Chicago Dispersal Barrier Project were also discussed. Bowen also provided information on what the public can do to prevent the spread of Asian carps and other invasive species.

At the end of the presentation, a video was played that detailed the jumping behaviors and problems associated these fish species. The DVD, titled "Nuisance Fish," is an outreach tool that was recorded in partnership with Bill Dance, the Tennessee Wildlife Resources Agency, and the Fish and Wildlife Service. It is available for viewing from the Asian Carp Man-

agement website at the following web address: <http://www.asiancarp.org/>.

"The Michigan Environmental Health Association (MEHA) is a volunteer, non-profit organization dedicated to the improvement of health through management of the environment. It consists of over 750 professionals throughout the State of Michigan." For more information about the Michigan Environmental Health Association, visit their website at <http://www.meha.net/>.

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

Michigan's Call to Action on Aquatic Invasive Species

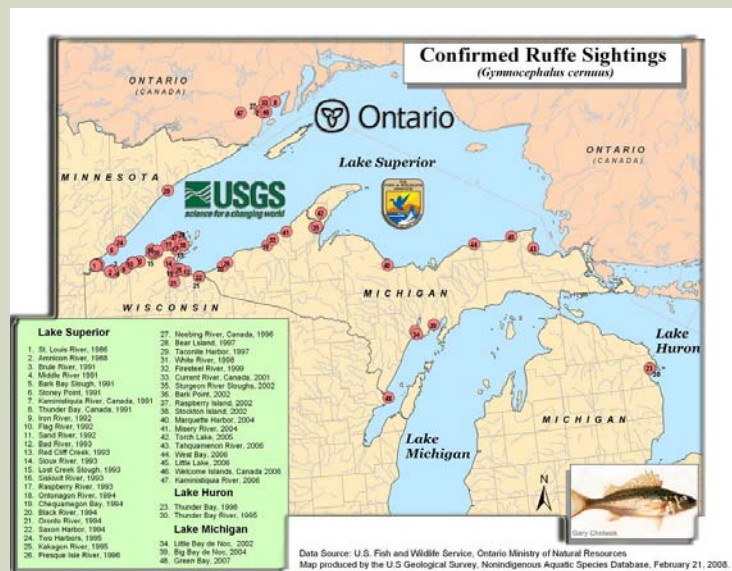
BY ANJANETTE BOWEN, ALPENA NFWCO

Fish and Wildlife Service staff from the Regional Office (Mike Hoff), East Lansing Field Office (Bob Kavetsky), Alpena NFWCO (Anjanette Bowen), and the U.S. Environmental Protection Agency Great Lakes National Program Office Liaison (Amy DeWeerd) participated in a workshop hosted by the Michigan Department of Environmental Quality (DEQ) titled "Michigan's Call to Action on Aquatic Invasive Species." The workshop was held on March 5 in East Lansing, Michigan, to generate stakeholder discussion about aquatic invasive species issues. Information shared at this meeting will be used to update Michigan's Aquatic Invasive Species Management Plan.

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

Fact Sheet on Invasive Ruffe

The NFWCO's of Ashland and Green Bay (Wisconsin), Alpena (Michigan), and Amherst (New York), along with the Ontario Ministry of Natural Resources and the U.S. Geological Survey updated a fact sheet on the range expansion of Eurasian ruffe, a Great Lakes invasive fish species. The fact sheet highlights ruffe range expansion during 2007, and illustrates the detected range of ruffe from initial discovery in 1986 through 2007. The fact sheet was made available to participants at each of the five Great Lakes technical committee meetings of the Great Lakes Fishery Commission, held in Toronto, Ontario. The fact sheet is also available to the public on the Ashland NFWCO website at: http://www.fws.gov/midwest/ashland/images/ruffe-range-map_w.jpg.



Osage River Dump Cleanup - The Rest of the Story

BY JEFF FINLEY, COLUMBIA NFWCO

Acolades to the efforts of 18 Missouri River Relief workers and the 94 volunteers that helped clean-up a “decades old” dump site along the Osage River. In a day and a half, 13.2 tons of scrap iron, 5.5 tons of garbage, 79 tires and a page long list of odds and ends were removed from a half mile stretch of riverbank...and they only scratched the surface. The details of this monumental feat, which kicked off the 2008 River Relief efforts, can be read on their website <http://www.riverrelief.org>; however, I would like to enlighten you with how this effort came about.



-USFWS/JeffFinley

River Relief volunteers and members of the Army Reserve load garbage collected from a dump site located on the Lower Osage River in Missouri.

Patty Hermann worked that event and guided these scrap sniffers to the spot. This dump turned out to be the largest congregation of garbage we’ve yet to find on the banks of a river in mid-Missouri. Steve and representatives of River Relief organized 17 local groups including the “Osage River Navy” (an organization of local river enthusiasts), and the U.S. Army Reserve’s 480th Preventive Medicine Detachment. They also recruited the help of area residents to make this event a success.

Although the dump still exists, there’s a whole lot less of it. We look forward to working with and supporting River Relief next year to whittle away a little more of this mountain of garbage. It took over a half century for this dump to form and it’ll take a few more events to make it disappear. Working with our partners to restore natural riverbanks instills a conservation ethic in the young volunteers.

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

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.

In the last river clean-up event of 2007 at Bonnets Mill, I posed a challenge to the leadership of this organization. Chad Pregracke, founder of Living Lands and Waters, the outfit that gave rise to River Relief, was in town for this event. This presented the opportunity to “speak to the boss” about a mountain of garbage. I have passed by the unsightly dump while working and recreating on the Lower Osage River many times and knew Steve Schnarr and his Missouri River crew would welcome a challenge. They toured the damage of 50 plus years of dumping through a crack in a 100 foot tall bluff.

The field crews in our office spend countless hours on the Missouri River and her tributaries and know where these landmark dumps are located. Biologist



-USFWS/JeffFinley

A boat load of scrap iron prepares to leave an illegal dump site on the Lower Osage River in Missouri.

Science Olympiad 2008

BY HEATHER RAWLINGS, ALPENA NFWCO

Alpena NFWCO biologists Anjanette Bowen and Heather Rawlings participated in the Michigan Regional Science Olympiad tournament at the Alpena Community College in Alpena, Michigan. Bowen and Rawlings developed and administered an ecology test for six junior high and nine high school teams and served as judges for the tournament's ecology category. A considerable amount of time and effort was invested in designing the two tests. Medals were awarded to 1st through 3rd place in each category, and the schools that ranked the highest advanced in the competition and became eligible to compete at the state level.

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

Columbia NFWCO attends DeSoto NWR's 50th Anniversary

BY BRIAN ELKINGTON, COLUMBIA NFWCO

Brian Elkington of the Columbia NFWCO attended the 50 year anniversary of the DeSoto National Wildlife Refuge (NWR). The Refuge showcased their accomplishments past, present and future. Many employees

from the Fish and Wildlife Service came to celebrate and were treated to a tour. Following the tour, all ate lunch and shared stories about DeSoto NWR past and present. The day was finished off by a series of presentations about the Refuge and its mission, delivered by refuge manager Larry Klimek and Regional Director Robyn Thorson.



-USFWS
Steve Van Riper teaches kids to tie knots at the DeSoto National Wildlife Refuge Fish Fry (1992).

This was a very successful event put together by DeSoto NWR. I left that day having learned so much about DeSoto NWR and the rich history surrounding it. The Columbia NFWCO looks forward to many more wonderful years working with DeSoto NWR!



-USFWS
Jim Milligan teaches children about fish at the DeSoto National Wildlife Refuge Fish Fry (1992).

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

Red Lake Walleye Restoration Effort

BY FRANK STONE, ASHLAND NFWCO

The Ashland NFWCO continues to work with the Red Lake Band of Chippewa, Minnesota Department of Natural Resources (DNR), Bureau of Indian Affairs, and the University of Minnesota to restore a naturally spawning population of walleye in Red Lake. During a March 11th meeting, Frank Stone met with the Red Lake Task Force Committee to discuss the walleye restoration program and performance indicators of this long-term effort.

Several topics were discussed at this meeting. The main message is that the walleye fishery in Red Lake will again open for anglers in 2008. Natural reproduction and recruitment in upper and lower Red Lakes have been exceptional. For sport-anglers, 17 to 26 inch walleye will be protected with a 3 fish bag limit of which only 1 fish can be over 26 inches in length. For Tribal anglers, 20 to 28 inch walleye will be protected with a 10 fish bag limit of which only 1 fish can be over 28 inches.

Plans are being considered to once again activate the commercial fishery in 2008. Fishing crews (4-8) will be hired by the Tribe to set gillnets to help supplement the yearly catch.

Data was distributed that highlighted the 2007/2008 winter walleye harvest as well as the 2008 summer harvest plans. Invasive species, northern pike assessments, and lake sturgeon updates were also presented. The forage fish trawling assessment will be needed again in 2008 and conducted by the Ashland NFWCO.

Historically, the Red Lakes have provided food, recreation, cultural pursuits and income to many people. Government leadership, cooperation and coordination have been paramount throughout the walleye restoration process. All parties have demonstrated a willingness to provide leadership by example to achieve the community support and involvement required to achieve their goals.

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

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.

New Video for the Bad River Watershed Association

BY FRANK STONE, ASHLAND NFWCO

At the request of the Bad River Watershed Association (BRWA), Frank Stone created a slide-show video highlighting the goals and accomplishments of the BRWA. This 17 minute video, entitled *Connecting People, Land & Water*, is comprised of 250 digital images that are sequenced to music and narratives that help explain the fish passage (through culvert replacement) and water quality monitoring activities of the BRWA.

The mission of the BRWA is to promote a healthy relationship between the people and natural communities of the Bad River Watershed by involving all citizens in assessing, maintaining and improving watershed integrity for future generations. The video was first presented to the public on March 29 during a fund-raising banquet at the Northern Great Lakes Visitor Center.



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

Inouye Joint Fishery Assessment Steering Committee

BY FRANK STONE, ASHLAND NFWCO

Frank Stone participated in an annual meeting of the Joint Fishery Assessment Steering Committee held at the St Croix Indian Reservation. Representatives from the Wisconsin DNR, Great Lakes Indian Fish & Wildlife Commission, and Bureau of Indian Affairs met to discuss 2007 inland walleye, bass and musky fishery surveys that were partially funded by the Steering Committee. Fishery assessment data collected from spring/summer/fall surveys were presented as well as the 2008 lake assignments and a projected budget. There was also discussion concerned the up-coming partner's fishing day event scheduled for June.

The data collected from these surveys reflect the recruitment values for the reservation lakes and will provide information needed to determine the number of adult walleye that can be safely harvested by tribal spearing in 2008.

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

Service Biologists Co-Chair Modeling Subcommittee Meeting for 1836 Treaty Waters

BY AARON WOLDT, ALPENA NFWCO

Biologist Aaron Woldt of the Alpena NFWCO along with John Netto of the Green Bay NFWCO co-chaired the March 11-13 meeting of the Modeling Subcommittee (MSC) of the Technical Fisheries Committee (TFC). The primary focus of this meeting was to generate preliminary 2008 harvest limits for lake trout in 1836 Treaty waters of lakes Huron, Superior and Michigan, although other technical matters were discussed. As stipulated in the 2000 Consent Decree (Decree), preliminary lake trout harvest numbers must be calculated by the MSC, reviewed by the TFC, and presented to the parties to the Decree by March 31 each year. The MSC will complete final lake trout harvest numbers and present them to the TFC for review at the May TFC meeting.

Woldt and Ji He of the Michigan DNR presented an update of the status of Northern Lake Huron (MH-1 and MH-2) lake trout stock assessment models, model diagnostic output, and preliminary 2008 lake trout harvest limits. In MH-1, the 2008 preliminary lake trout harvest limit increased from 2007 due to changes in the lake trout population structure and better survival of young fish. In MH-2, the 2008 preliminary harvest limit declined from 2007, but the rate of decline has stabilized compared to previous years. The MSC will continue to evaluate and monitor these changes. Preliminary harvest limits were presented to the TFC for review on April 1.

In addition to performing model analyses, Woldt helped run the MSC meeting ensuring all agenda items were discussed and kept meeting minutes. A preliminary draft of the meeting minutes has been mailed to MSC members for review.

Harvest limits produced at this meeting, when reviewed by the parties and finalized, will become binding 2008 lake trout harvest limits for 1836 Treaty waters. These harvest limits will allow lake trout fisheries to be executed while still protecting the biological integrity of the lake trout stocks.

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

Coaster Brook Trout Tagging Study

BY MARK BROUDER, ASHLAND NFWCO

Biologists from the Ashland NFWCO and Red Cliff Band of Lake Superior Chippewa are working cooperatively to examine tag retention, survival and growth of fingerling coaster brook trout implanted with a passive integrated transponder (PIT) tag. Results of this study will help guide future tagging and stocking efforts of coaster brook trout. This study is in support of a long-term experiment to establish a coaster brook trout population in Whittlesey Creek, a Wisconsin cold-water tributary to Lake Superior. Prior to releasing PIT tagged coaster brook trout into Whittlesey Creek, a remote PIT tag sensing station will be installed near the mouth of Whittlesey Creek to allow for the detection of emigration of stocked fish out of the creek and into Lake Superior's Chequamegon Bay.



-USFWS
Passive integrated transponder (PIT) tags are being implanted into coaster brook trout to monitor their emigration from their stocking site (Whittlesey Creek) and into Lake Superior.

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

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

Genoa NFH will provide Mussels for Research to the University of Maryland

BY TONY BRADY, GENOA NFH

The Genoa NFH was contacted by aquatic biologist Steve Turley from the University of Maryland's Wye Research and Education Center to provide mussel transformers (newly metamorphosed juvenile mussels) for toxicity testing. Mr. Turley will use the transformers to test toxicity of certain chemicals to this early life stage.

Freshwater mussels must attach to a fish host to undergo the metamorphosis required to become a free-living, independent organism. Several largemouth bass were inoculated on March 30 with larvae of the plain pocketbook mussel. Largemouth bass, the host fish, will be held in a 10 gallon aquarium at the Hatchery's mussel facility where the transformers will be collected and shipped overnight to the University of Maryland.

Genoa NFH primarily produces mussels for recovery and restoration efforts across the Upper Midwest. In recent years the Hatchery has received requests for mussels to conduct toxicity test for a variety of chemicals from research centers including the University of Maryland and North Carolina State University. Results from some of these tests have shown mussels to be significantly less tolerant to chemicals such as ammonia than current Environmental Protection Agency standards. Continued toxicity testing on mussels may one day lead to safer water for not only the mussels but mankind as well.



-USFWS
The "transformer stage" of a sheepnose mussel as seen through a microscope. This stage of the mussel's life cycle is reached when the mussel drops off a host fish and becomes a free-living individual.

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

Columbia NFWCO meets with HAMP Partners

BY ANDY STAROSTKA AND CLAYTON RIDENOUR, COLUMBIA NFWCO

Members of the Habitat Assessment and Monitoring Project (HAMP) from the Columbia NFWCO met with partners in Lincoln, Nebraska, to discuss the upcoming 2008 field season activities. This meeting was intended to kick off the new field season.

The HAMP group continued to develop goals and objectives for the project. Engineers and biologists discussed the requirements and details of integrating biological and physical components of HAMP; engineers presented some examples of physical data and results to show how integration may occur. This is a fundamental concept of the project and something that has not been done on this scale for the Missouri River. In an effort to find useful descriptive metrics, Columbia NFWCO proposed using some measure of mortality as a response variable to assess fish populations and survival in river bends where habitat rehabilitation work has occurred against where it has not. Nebraska HAMP crews expressed concerns about spatial sample clustering and the group discussed whether samples were biased towards any parts of bends. Nebraska proposed a stratified random sampling scheme, and Columbia proposed a scheme to distribute sampling effort throughout bends.

Attending partners include the Nebraska Game and Parks Commission, U.S. Army Corps of Engineers, Kansas State University, University of Nebraska-Lincoln, and Ecological Services. The HAMP program is intended to monitor constructed shallow water habitat projects on the channelized portion of the Missouri River. These projects are engineered and created by the U.S. Army Corps of Engineers to meet biological compliance for the Federally endangered pallid sturgeon. This meeting will provide continued guidance and direction for the goals and objectives of HAMP.

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

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.

Thunder Bay Project Implementation Working Committee Meeting

BY AARON WOLDT, ALPENA NFWCO

Biologists Aaron Woldt and Andrea Ania participated in a Working Committee meeting for the Thunder Bay Power Company's Thunder Bay River Project Implementation. The Working Committee was created to assist Thunder Bay Power (TBP) and its parent company North American Hydro (NAH) in meeting the requirements of its Federal Energy Regulatory Commission (FERC) license.

The primary focus of the March meeting was to review results of NAH's 2007 purple loosestrife, Eurasian water milfoil, and erosion sites monitoring activities. In addition, the Working Committee discussed recent charges to the project escrow account, NAH's water quality monitoring plan, NAH's website and posting of project discharge information, a recently completed fishing pier at the Hillman site, and the status of the proposed fishing pier and public easement issue at the Hubbard Lake site.

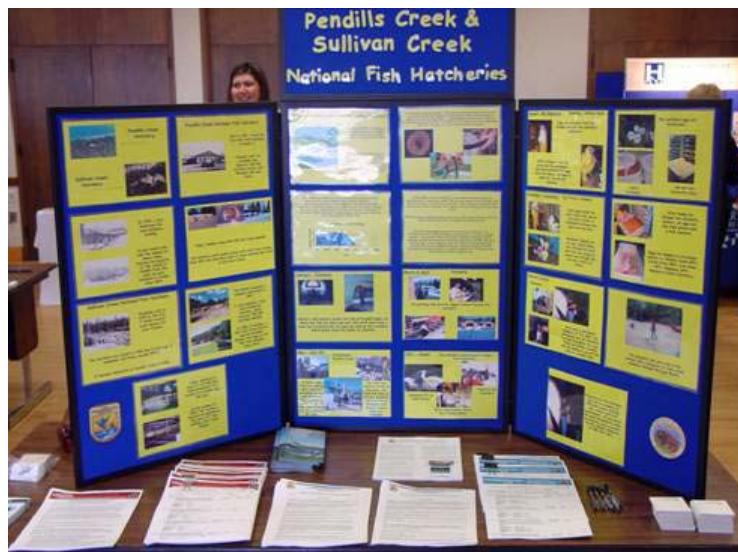
The meeting was attended by member representatives from Michigan DNR, NAH, and the Fish and Wildlife Service. In addition, representatives from the Montmorency Conservation District, Thunder Bay Audubon Society and Northeast Michigan Council of Governments also participated.

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

All Aboard for the Spring Career Fair at Lake Superior State University

BY DEBORAH JONES, PENDILLS CREEK NFH

Pendills Creek NFH participated in the 2008 Spring Career Fair at Lake Superior State University in April. Other participants included the Michigan National Guard, Michigan State Police, U.S. Border Patrol/ Customs, Michigan Department of Corrections, War Memorial Hospital, and Hiawatha National Forest, to name a few of the 45 participants.



-USFWS

Hatchery manager Curt Friez and administrative technician Deborah Jones set up a display, complete with job vacancies, at the 2008 Spring Career Fair at Lake Superior State University in Sault Ste. Marie, Michigan.

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.

Every booth had something to give away to anyone coming by their station, along with applications for summer employment. The Fish and Wildlife Service booth was staffed by hatchery manager Curt Friez and administrative technician Deborah Jones. Our booth was a little different than the rest of the participants. We provided lists of current jobs that were open and available in the United States through the "USA JOBS" web site. Not only did we have postings for anyone looking for Federal employment, but we had a mixture of postings for student employment in the United States. We included jobs in the Student and Career Experience Programs with the Fish and Wildlife Service, Bureau of Land Management, and Social Security Administration. We also included Internship Programs with the U.S. Court System, summer employment with various Federal agencies, and a hodgepodge of other student jobs for all seasons.

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

You Can Fish For A Living?

BY CLIFF WILSON AND BRETT WITTE, COLUMBIA NFWCO

Columbia NFWCO staff members Cliff Wilson and Brett Witte recently participated in career days at two middle schools in Columbia, Missouri. Their message was that, "With the right amount of education and experience you can truly make a living doing what you love to do." In their case, that meant getting paid to fish. They discussed the specifics and highlights of their careers with the 6th and 7th graders by using presentations and question/answer forums. They informed the students about careers that exist in the Fisheries program of the Fish and Wildlife Service.

Cliff and Brett explained how to build experience and the types of educational requirements the students would need. They also discussed potential salary ranges and put those amounts in relation to the cost of living in today's world. They also covered the importance of volunteering for both sampling a career field and for learning new things, and meeting people that will eventually help them to achieve their dreams.

Some of the students were genuinely interested and excited about possible careers with the Fish and Wildlife Service. Outreach events such as these are the building blocks to ensure the future of natural resource conservation by connecting people with nature.

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

Congressional Actions

S. 2907 (is) To establish uniform administrative and enforcement procedures and penalties for the enforcement of the High Seas Driftnet Fishing Moratorium Protection Act and similar statutes, and for other purposes. [Introduced in Senate]

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]

H.R. 3891 (rh) 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. [Reported 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 (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. 1533 (ih) To provide for the establishment of a national mercury monitoring program. [Introduced in House]

S. 2958 (is) To promote the energy security of the United States, and for other purposes. [Introduced in Senate]

S. 2973 (pcs) To promote the energy security of the United States, and for other purposes. [Placed on Calendar Senate]

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

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

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

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

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

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

H.R. 3891 (rfs) 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. [Referred in Senate]

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.R. 2643 (rh) Making appropriations for the Department of the Interior, environment, and related agencies for the fiscal year ending September 30, 2008, and for other purposes. [Reported in House]

H.R. 2643 (pcs) Making appropriations for the Department of the Interior, environment, and related agencies for the fiscal year ending September 30, 2008, and for other purposes. [Placed on Calendar Senate]

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

Midwest Region Fisheries Divisions

National Fish Hatcheries

The Region's National Fish Hatcheries primarily focus on native fish restoration/rehabilitation by stocking fish and eggs, such as pallid and lake sturgeon and by developing and maintaining brood stocks of selected fish strains, such as lake trout and brook trout. Hatcheries also provide technical assistance to other agencies, provide fish and eggs for research, stock rainbow trout in fulfillment of federal mitigation obligations and assist with recovery of native mussels and other native aquatic species.

National Fish and Wildlife Conservation Offices

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

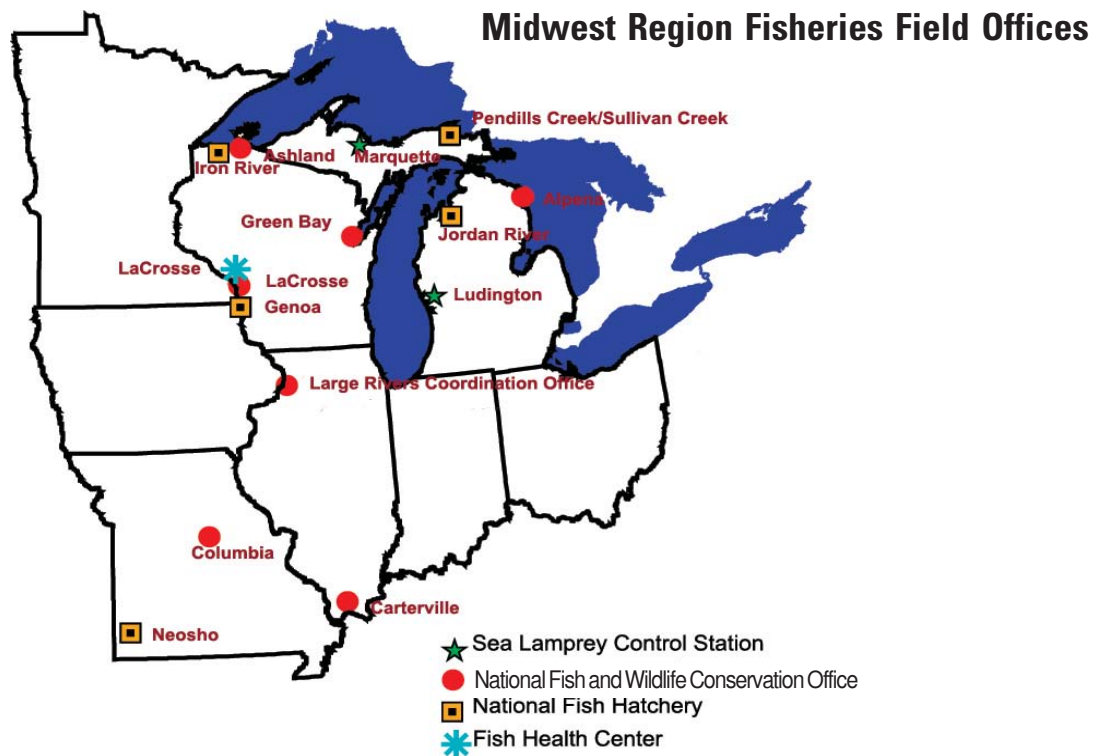
ies databases; provide technical expertise to other Service programs addressing contaminants, endangered species, federal project review and hydro-power operation and re-licensing; evaluate and manage fisheries on Service lands; and, provide technical support to 38 Native American tribal governments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

Sea Lamprey Biological Stations

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

Fish Health Center

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



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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

- [M/V Togue readied for Disposal](#)
 - Aaron Woldt, Alpena NFWCO
- [MICRA Sturgeon Workgroup Meeting](#)
 - Tracy Hill, Columbia NFWCO

Aquatic Species Conservation and Management

- [Well Project Proceeds to Supply Clean Water to Backwash Drum Filter](#)
 - Curt Friez, Pendilla Creek NFH

Aquatic Invasive Species

Public Use

Cooperation with Native Americans

Leadership in Science and Technology

Aquatic Habitat Conservation and Management

Workforce Management

- [Northland College Interns receive Valuable Training](#)
 - Glenn Miller, Ashland NFWCO
- [Washington Office Detail](#)
 - Ted Koehler, Ashland NFWCO
- [Spring Safety Training](#)
 - Anjanette Bowen, Alpena NFWCO
- [Employee Completes Fisheries Academy and Employee Foundations Training](#)
 - [Andrea Ania, Alpena NFWCO](#)
- [Stream Management 101](#)
 - Brian Elkington, Columbia NFWCO
- [The New Fad\(ler\) at Columbia NFWCO](#)
 - Brett Witte, Columbia NFWCO
- [Columbia NFWCO Welcomes Back Seasonal Fisheries Technicians](#)
 - Chris McLeland and Nick Utrup , Columbia NFWCO



-Jerry French Postcard Collection; U.S. Fish Hatchery at Orangeburg, South Carolina (circa 1920)

Water Under the Bridge A Glimpse into our Proud Past

The Orangeburg National Fish Hatchery, located on the North Fork of the Edisto River in Orangeburg County, South Carolina, was established in 1912 and continues operations today.