U.S. Fish & Wildlife Service

Fish Lines

Region 3 - Great Lakes/Big Rivers

Leadership in Conserving, Enhancing, and Restoring Aquatic Ecosystems

Jan/Feb 2004
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Carterville Fishery Resources Office

(See the "*Station Spotlight*" on Page 5)

Series of photos depicting Carterville Fishery Resources Office activities: (Top Row, Lt. to Rt.) Nate Caswell and Greg Conover showing Regional Director Robyn Thorson a Mississippi River shovelnose sturgeon; Greg Conover holds a paddlefish collected in Pool 26 of the Mississippi River; Nate Caswell holds a shovelnose sturgeon collected in the Ohio River; (Bottom Lt. to Rt.) Mark Cornish, Rock Island District - Army Corps of Engineers, holds a silver carp collected from the Mississippi River; (top) Toddler pool at the Crab Orchard National Wildlife Refuge Kid's Fishing Derby; (bottom) Fishery survey using a mini-fyke net set; Scott Schell, Ohio Department of Natural Resources, holds a shovelnose sturgeon collected by Carterville FRO staff in the Ohio River as part of a reintroduction effort in the Scioto River.

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

Region 3 - Great Lakes/Big Rivers Region

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

Conserving America's Fisheries

Fisheries Program Vision for the Future

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.

Strategic Plan Vision Focus Areas

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

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

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

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

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

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

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

Inside this Issue

Click here to visit our Fisheries Web Site

Great Lakes - Big Rivers Region Fisheries Field Offices

National Fish Hatcheries

National Fish Hatcheries develop and maintain brood stocks of selected fish strains with our primary focus on native species such as lake trout, pallid sturgeon, lake sturgeon and brook trout. Hatcheries also provide technical assistance and sources of fish and eggs to cooperating agencies, provide fish and eggs for research, stock fish and eggs as part of native fish restoration programs, stock fish in fulfillment of federal mitigation obligations and assist with restoration and recovery of native mussels and other native aquatic species.

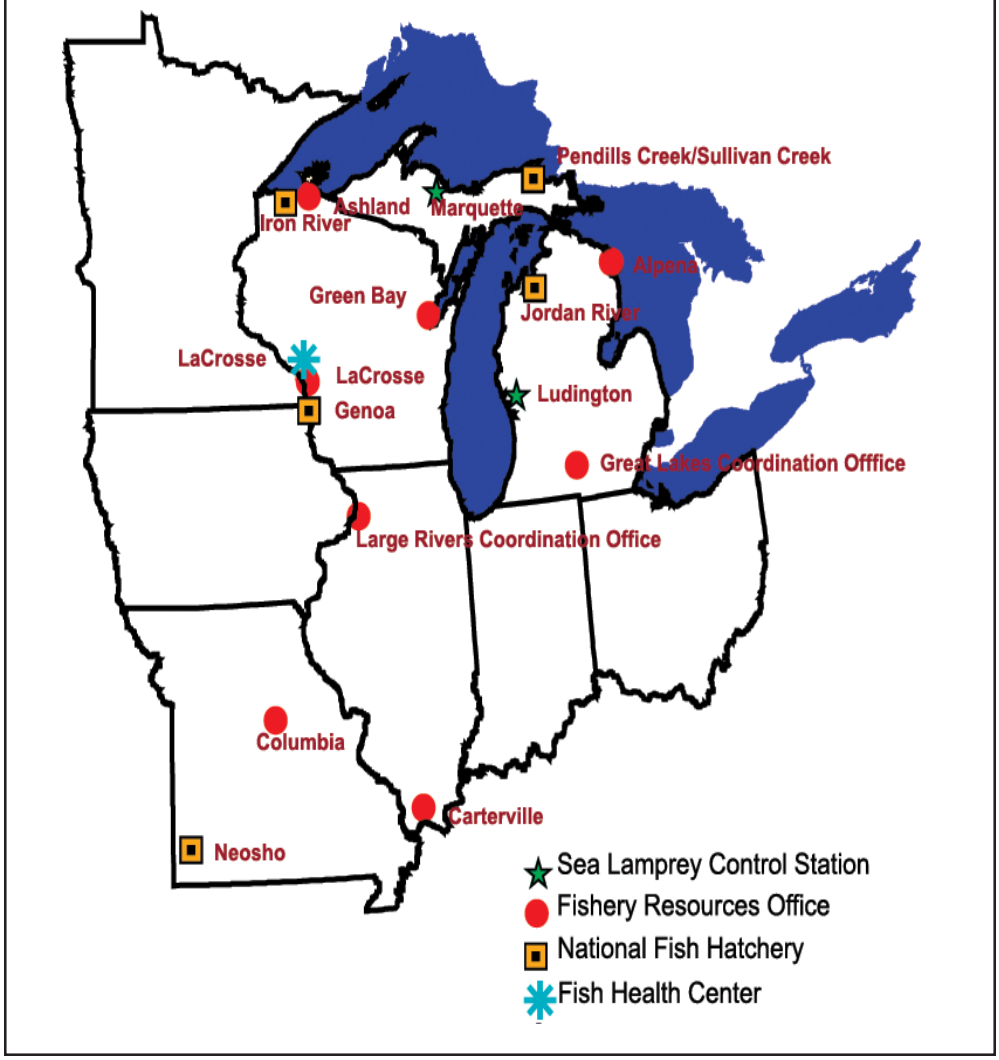
Sea Lamprey Control Stations

Sea Lamprey Control Stations assess and control sea lamprey populations throughout the Great Lakes. This program is supported through funding from the State Department and administered through the Great Lakes Fishery Commission.

Fishery Resources Offices

Fishery Resources Offices perform key monitoring and control activities related to invasive aquatic species; survey and evaluate native fish stocks and aquatic habitats to identify restoration 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 Private Lands and the Great Lakes Coastal Programs; provide coordination and technical assistance toward the management of interjurisdictional fisheries; maintain and operate several key interagency databases; provide technical assistance 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.

Great Lakes - Big Rivers Region Fisheries Field Offices



Fish Health Center

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

Fishery Coordination Offices

Fishery Coordination Offices work with Canadian and state natural resource agencies, county, local and tribal governments and other public and private organizations to provide crucial facilitation and interagency coordination functions affecting the management of native fishes and aquatic habitats.

Great Lakes - Big Rivers Regional Fisheries Program

Station Spotlight - Carterville Fishery Resources Office

Carterville Fishery Resources Office (FRO) was established in 1981 and is located at the Crab Orchard National Wildlife Refuge in Marion, Illinois. The office provides fishery management assistance to other Fish and Wildlife Service offices, federal and state agencies, and Department of Defense military bases in Illinois, Indiana, Missouri, and Ohio. Carterville FRO accomplishes its mission of conserving, enhancing, and protecting fish and aquatic ecosystems by working with partners.

Carterville FRO, in partnership with the Columbia FRO, assists the 28 states of the Mississippi Interstate Cooperative Resource Association (MICRA) with a basin-wide paddlefish stock assessment. Carterville FRO has operated a processing center for coded-wire tags and assisted in database management for this national project since 1997. Twenty-three states depend upon these services and are using the data to develop 4 multi-jurisdictional plans to manage paddlefish with assistance from the Fish and Wildlife Service.

Carterville FRO was recently appointed as the Chair of a Work Group on Asian carp by the Aquatic Nuisance Species (ANS) Task Force. The staff are leading a national effort to develop a Management Plan for four species of Asian carp: grass, bighead, silver, and black carp. The Asian Carp Work Group includes a wide array of partners and stakeholders with interests and expertise in Asian carp. They are charged with development of a collaborative, integrated plan to address the expanding Asian carp populations in our Nation's rivers. The Carterville, Columbia, and La Crosse FROs are currently working together to evaluate sampling gear efficiencies and develop standardized methods for collecting Asian carp.

-USFWS

This is a young-of-the-year invasive silver carp collected from the Illinois River.

-USFWS **Carterville Fishery Resources Office**
Left to Right: Greg Conover, Judy Patrick, Colby Wrasse, Nate Caswell

A high priority for the Carterville FRO is working with our partners to manage sturgeon populations in the Ohio and Mississippi Rivers. The station is assisting the Ohio Department of Natural Resources (DNR) with shovelnose sturgeon restoration in the Scioto River, a tributary of the Ohio River. Shovelnose sturgeon have not been seen in this portion of their range for more than 50 years. The Illinois DNR and Carterville FRO are assessing commercially harvested shovelnose sturgeon populations in the lower Ohio, Wabash, and middle Mississippi Rivers. Carterville FRO is assisting the Middle Mississippi River National Wildlife Refuge to better understand the use of main channel border habitat by sturgeon. The study is important for developing habitat restoration and enhancement projects. The U.S. Army Corps of Engineers, Missouri Department of Conservation, Southern Illinois University, and Carterville FRO are investigating population demographics and habitat use of the Federally endangered pallid sturgeon in the middle Mississippi River. The partners hope to identify critical habitats used by sturgeon for spawning and nursery areas during 2004.

For detailed information about the Carterville Fishery Resources Office, contact the office at (618) 997-6869 or visit the Regional website at:
http://midwest.fws.gov/Fisheries/fisheryoffices.htm

Partnerships and Accountability

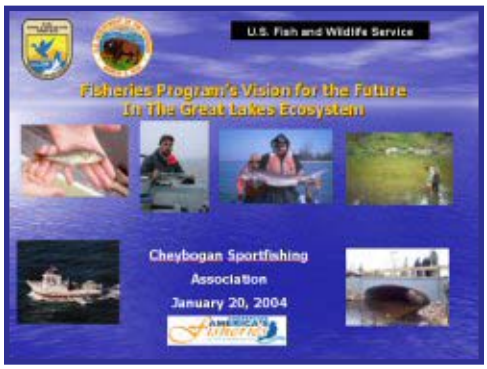
Fisheries Program Offices in Region 3 reached out to Partners and Stakeholders to talk about the Fish and Wildlife Service's Fisheries Program's National Strategic Plan

Mark Dryer and Frank Stone, Ashland Fishery Resources Office (FRO), met with several tribal cooperators and received their input regarding the "Step Down" goals. A summary was drafted for review by all the Wisconsin Tribes that participated, but the information provided is relevant for our Minnesota and Michigan Tribal cooperators as well. Discussions with tribal managers and biologists focused on resource needs of each reservation that could be accomplished in the next five years.

Sea Lamprey Control staff presented the Fishery Program's Vision in the Great Lakes Ecosystem to over 70 Lake Michigan charter boat operators, watershed council representatives, and interested sportspersons at a Regional Fishery Workshop in Ludington, Michigan convened by Michigan Sea Grant called "Conserving America's Fisheries: U.S. Fish and Wildlife Service Fisheries Program Vision for the Future and how the Region will step it down."

Alpena FRO Biologist Anjanette Bowen presented the Fisheries Program Vision at the monthly meeting of the Cheboygan Area Sportfishing Association in Cheboygan, Michigan. The presentation reviewed components of the Vision and provided a step down plan of activities to be conducted in Michigan over the next 5 years.

The vision of the Fish and Wildlife Service and its Fisheries Program is working with partners to restore and maintain fish and other aquatic resources at self-sustaining levels and support Federal mitigation programs for the benefit of the American public.
Frank Stone, Ashland FRO
Dennis Lavis, Ludington Biological Station
Anjanette Bowen, Alpena FRO



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Regional fisheries employees are sharing our Fisheries Vision with our partners.

Michigan Department of Natural Resources and Fish and Wildlife Service discuss Partnership Opportunities

In February, staff from the Michigan Department of Natural Resources (DNR) and the Fish and Wildlife Service met in Roscommon, Michigan to discuss partnership opportunities. The meeting was a follow-up to a coordination meeting held last July. Current efforts by the Michigan DNR to develop River Assessments and River Management Plans could benefit from Fish and Wildlife Service funding programs such as Partners for Fish and Wildlife, Fish Passage, and Coastal Programs. The meeting was an opportunity for our employees to better understand the process for Michigan DNR planning and an opportunity for their personnel to better understand the funding processes for Fish and Wildlife Service programs. Priorities identified in the River Assessments are consistent with objectives of the Fish and Wildlife Service's funding programs and could lead to much closer working relationships between the two agencies. Changes were agreed upon to provide for better coordination between the two agencies. Development and enhancement of partnerships with natural resource agencies are critically important to the Fish and Wildlife Service and its Fisheries Vision for the Future, and to the collaborative management of fish and wildlife resources.
Jerry McClain, Alpena FRO

Genoa National Fish Hatchery Staff gives Mussel Presentation to the Iowa Department of Natural Resources

Ice rapidly melting off the Mississippi River is a sure sign that the fisheries field season is rapidly approaching in the Upper Midwest. Like most fisheries agencies, the Iowa Department of Natural Resources (DNR) held their annual meeting just before the field season gets into full swing at Springbrook Education Center, which is located west of Des Moines, Iowa. This year the Iowa DNR invited the staff from Genoa National Fish Hatchery (NFH) to give a presentation on the status of freshwater mussels in the Upper Midwest and Genoa NFH's mussel work. Roger Gordon, Assistant Project Leader, and Biologist Tony Brady combined efforts to give a joint presentation covering mussel status, biology, life history, propagation history, and ongoing

propagation activities. The presentation was followed by a workshop that also consisted of mussel identification, examples of gravid (egg bearing) and non-gravid female mussels, and a demonstration on glochidial (mussel larvae) removal and viability testing. Iowa DNR is an important partner for recovery efforts of the endangered Higgins' eye pearlymussel.
Tony Brady, Genoa NFH

Working with Partners to Develop a Management Plan for Asian Carp

Greg Conover, Acting Project Leader at Carterville Fishery Resources Office (FRO), was appointed by theAquatic Nuisance Species (ANS) Task Force to chair a group on Asian Carp. Carterville FRO is leading a national effort to develop a management plan for four species of Asian carp; grass carp, bighead carp, silver carp and black carp. The Asian Carp Work Group, which includes a wide array of partners and stakeholders with interests and expertise in Asian carp, will develop a collaborative, integrated plan to address the expanding Asian carp populations in our Nation's rivers. Carterville FRO will host two Work Group meetings to develop the plan, as well as an Asian Carp Workshop to discuss issues and develop the plan with stakeholders. A final draft of the plan will be submitted to the ANS Task Force in late 2004.
Greg Conover, Carterville FRO

Sea Lamprey Control Display visits Milwaukee

The Sea Lamprey Management Program was featured at the 15th Annual Milwaukee Boat Show and Wisconsin Sportfishing Expo, February 11-15, at the Midwest Express Center. The annual show is the largest indoor boat show in Wisconsin, displaying over 300 boats and featuring numerous seminars. The program display was staffed by personnel representing the Fish and Wildlife Service, the U.S. Geological Survey, the Department of Fisheries and Oceans-Canada, and the Great Lakes Fishery Commission. The show was attended by an estimated 12,500 people over the 5-day period. The display was well received and generated interest from the public.
Terry Morse, Marquette Biological Station

-GLFC photo by Ted Lawrence

Representatives from the U. S. Geological Survey, Department of Fisheries and Oceans – Canada, Great Lakes Fishery Commission, and Fish and Wildlife Service team up to present sea lamprey control at the Milwaukee Boat Show.

Pendills Creek Staff and Friends give Presentation to Sault Sportsman's League

At the February meeting of the Sault Sportsman's League in Sault Ste. Marie, Michigan, the featured speakers were all from the Pendills Creek National Fish Hatchery (NFH). Manager Curt Friez, Biologist Tracy Roessner, and four members of the newly formed Friends of the Pendills Creek NFH were all on hand to offer information and answer questions. Friez talked about the new fisheries vision and strategic plan, while Roessner gave a presentation outlining what it takes to raise production fish and brood stock. Much interest was taken in the spawning operation, and a few people have already volunteered to help this fall. The Friends Group gave a brief talk about itself, emphasizing that they would like to work with the Sportsman's League on upcoming events such as volunteering at a Kids Fishing Day that the League has planned for July. A couple of new members were also added to the Friends Group.
Tracy Roessner, Pendills Creek NFH

Great Lakes Captains learn about Aquatic Nuisance Species

The Great Lakes Captains Association invited the Alpena Fishery Resources Office (FRO) to speak on aquatic nuisance species (ANS) at their 2004 Industry Days held in January at the Holiday Inn in Traverse City, Michigan. Biologist Anjie Bowen provided information on ANS in the Great Lakes, discussing the origin, current range, and problems associated with a variety of fish, mussel, planktonic, and plant invaders. Anjie also discussed actions that should be taken in the event an aquatic invasive species is discovered. Informational handouts were provided on a number of invaders. Over 100 attendants were present and the topic sparked a great deal of interest. The Fisheries Program emphasizes education and outreach as important components of the Fisheries Strategic Vision to provide public use and access to fishery information, and address the threats to aquatic species.
Anjanette Bowen, Alpena FRO

Monitoring Iron River National Fish Hatchery's Waste Water

The Wisconsin Department of Natural Resources (DNR) issued a new and revised Wisconsin pollution discharge elimination system permit for Iron River National Fish Hatchery (NFH). Past records show that under normal conditions the hatchery operates well below required pollutant minimums. Changes in the permit include a reduction in the frequency of samples taken from weekly to monthly. The state also added new quarterly samples for total hardness and recoverable copper at the hatchery's influent and effluent points. This will determine if the hatchery is adding copper to the water supply as it passes through the facility.

The DNR also requires the hatchery to keep a record of certain chemicals used daily and whether they are discharged into the watershed. Along with regularly used chemicals, the hatchery notifies the state of any additional chemicals used at the hatchery. An example is the recent use of hydrogen peroxide to prevent the growth of fungus in lake trout eggs during incubation.

The hatchery is commited to keeping the environment clean and has had negligible impact on naturally reproducing trout populations down-stream of the hatchery.

Nick Grueneis, Iron River NFH

Green Bay Fisheries Office hosts Wisconsin Stock Assessment Meeting

The Green Bay Fishery Resources Office (FRO) hosted the second meeting of the Wisconsin stock assessment work group. The work group is comprised of biologists from the Wisconsin Department of Natural Resources (DNR) and the Green Bay FRO. The group provides a forum for cooperation on stock assessment activities. An effective stock assessment program requires expertise in biology, regional fishery dynamics, and analytical methodologies. This cooperative effort between agencies allows a merging of various levels of expertise to benefit Wisconsin waters of the Great Lakes.

The major focus of this recent meeting was to review the development and preliminary results of the Green Bay yellow perch stock assessment model. John Netto of the Green Bay FRO has been working with Justine Hasz of the Wisconsin DNR to develop a Statistical Catch at Age model for this fishery. John gave a presentation that detailed the methodology used in this model and presented some preliminary results to the work group. Members provided feed back to John and Justine on modeling assumptions and interpretation of model results and diagnostics. This cooperative effort continues to enhance the stock assessment process on the Great Lakes. A quality stock assessment improves the effectiveness of management activities to ensure the sustainability of fish stocks while providing fishing opportunities.

John Netto, Green Bay FRO

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Green Bay Fishery Resources Office and Wisconsin Department of Natural Resources biologists work cooperatively to enhace yellow perch stock assessment capabilities.

Lake Superior Lake Trout Database Work Progresses

The Ashland Fishery Resources Office (FRO) is assisting the Michigan Department of Natural Resource's (DNR) Marquette Fisheries Station with the entry of lake trout scale sample data from spring assessment fishing conducted from 1970 through 1989 in Lake Superior. Fish age data was previously determined from scale samples by Fish and Wildlife Service staff from the Ashland FRO. Information in this database will assist in calculating length-at-ages for lake trout in Lake Superior. This work provides critical information to biologists that study restored lake trout populations in Lake Superior.

Joan Bratley, Ashland FRO

Aquatic Species Conservation and Management

Genoa National Fish Hatchery hosts Annual Mussel Event

Genoa National Fish Hatchery (NFH) held its third annual "mussel cage build off" in February. This event marks the starting point of the station's annual recovery efforts for the federally endangered Higgins' eye pearlymussel. The hatchery hosted approximately 25 volunteers from the Region's fishery stations, National Wildlife Refuges, Ecological Services Field Offices; natural resource professionals from Minnesota, Wisconsin, Iowa; and concerned local citizens. Volunteers assisted hatchery staff in construction of over 80 mussel culture cages to be used as part of a comprehensive recovery effort for this endangered mussel species.

The Higgins' eye pearlymussel is one of many freshwater mussel species that has experienced severe reductions in population and range in the United States in the past half century. Habitat alterations, poor land management practices, pollution, and invasive species have all contributed to freshwater mussels being recognized as one of the most endangered aquatic fauna in North America. It is hoped that this project, which involves several federal agencies and four upper Midwestern states, will reverse the downward population spiral that this species has experienced through population augmentation and habitat identification/ protection. This project is funded primarily through a U.S. Army Corps of Engineers recovery grant and Region 3 fisheries dollars.
Roger Gordon, Genoa NFH
Heidi Keuler, La Crosse FRO

-USFWS

Mark Frost, Savanna National Wildlife Refuge, works with local volunteers to construct a mussel culture cage. Genoa National Fish Hatchery needs these cages as part of a comprehensive recovery effort for the Endangered Higgins' eye pearlymussel.

Aquatic Nuisance Species Work

In February, Biologist Scott Koproski began aging scales and otoliths collected during Alpena Fishery Resources Office's (FRO) ruffe control efforts in Lake Huron from 1998-2003. Otoliths are small, white bones found in the head of fish and are one of the most important tools for understanding growth and age of fish. Fish scales and fin spines have rings similar to tree growth rings that record age and growth. Not much is known about the ages of ruffe in Lake Huron as few, if any, have been previously aged. In addition to scales and otoliths, dorsal fin spines were collected from most of the ruffe captured by the Alpena FRO, but these structures have not been analyzed yet. Koproski will obtain age data of the ruffe population and year class strength from this analysis. He will also examine any differences in age estimates among the three fish structures with the goal of developing accurate age estimates for ruffe in Lake Huron. Aquatic Nuisance Species (ANS) pose a serious threat to native fish once they become established. Invasive species typically out-compete native fish for food and preferred habitats, and in the absence of native predators, their populations can grow very quickly. Work performed during field and lab activities at the Alpena FRO helps resource agencies obtain a better understanding of invasive species like ruffe and their abundance and habitat preferences. This work also helps fulfill the Fish and Wildlife Service's goal of preventing and reducing the establishment and spread of aquatic invasive species.
Scott Koproski, Alpena FRO

Pallid Sturgeon Recovery Work at Neosho National Fish Hatchery

Pallid sturgeon recovery work continues at Neosho National Fish Hatchery (NFH). At last sample count in February, the fish averaged 7.5 inches in length. The target length for tagging and stocking is 9 inches. Personnel from the La Crosse Fish Health Center conducted a health assessment on the pallid sturgeon and the Neosho fish were shown to be in great condition. We contributed this to a diet of bloodworms and the caring hands of hatchery staff.
Roderick May, Neosho NFH

Pallid Sturgeon Monitoring Program enters the Winter Season

Pallid sturgeon monitoring by the Columbia Fishery Resources Office (FRO) for the month of December found 116 shovelnose and 2 lake sturgeon in 10 overnight gill net sets. Lake sturgeon were stocked by the Missouri Department of Conservation (DOC) beginning almost a decade ago and continued annually in an effort to reintroduce this state endangered species. The lake sturgeon, stocked at about 8 inches, are now appearing at lengths exceeding 39 inches. The ability of lake sturgeon to survive and grow from hatchery fish is evident and encouraging. Both the Missouri DOC and Fish and Wildlife Service are now tagging these fish with Passive Integrated Transponder tags to track movement and growth in the coming years.
Wyatt Doyle, Columbia FRO

-USFWS

Wyatt Doyle holds a large lake sturgeon collected during winter gill net sampling for endangered pallid sturgeon. Lake sturgeon are stocked by the Missouri Department of Conservation in an effort to reintroduce this state endangered native fish.

Biologist updates Lake Huron Commercial Sturgeon Report

During the month of February, Biologist Adam Kowalski compiled lake sturgeon data collected by commercial fishers in Lake Huron and updated the Alpena Fishery Resources Office (FRO) Commercial Fishery Sturgeon Project annual report with data through 2003. Participating commercial fishers tag lake sturgeon and collect data such as tag number, total length, fork length, girth, water depth and temperature, bottom type, and capture location from lake sturgeon incidentally caught in trap nets that target lake whitefish and yellow perch. Fishers also remove the first pectoral fin ray for aging. Previously tagged sturgeon are released after data is collected. Since 1995, when the project started, commercial fishers in United States waters have tagged 301 lake sturgeon in the main basin of Lake Huron. Forty-nine tagged lake sturgeon have been re-captured, and an additional 31 sturgeon have been captured, measured, and released untagged. All project data are stored at the Alpena FRO and are used to help track lake sturgeon movement in the Great Lakes and to monitor lake sturgeon recovery. This project will continue in 2004, and copies of the current year's report will be available on the Alpena FRO website. In future reports, a movement map will be produced showing lake sturgeon capture and recapture locations. This will help biologists track the movement of lake sturgeon throughout Lake Huron over the course of the project.

Lake sturgeon are listed as threatened or endangered in 19 of 20 states in its original range. All commercial fishers in this program are volunteers working toward a common goal of rebuilding this native population. This program is an excellent partnership between the Fish and Wildlife Service and the commercial fishing industry to monitor and assess the status of the Lake Huron lake sturgeon populations.
Adam Kowalski, Alpena FRO

-USFWS

Many commercial fishers volunteer to collect data on lake sturgeon incidentally captured during fishing operations. Biological information is lacking on this native species which is listed as threatened or endangered in 19 of 20 states in its original range.

The "Stork" delivers to Iron River National Fish Hatchery

This fall, Iron River National Fish Hatchery (NFH) received Superior Isle Royal Wild strain of brood eggs from the Crystal Springs State Fish Hatchery in Minnesota. Iron River will raise these eggs to adults to replace and/or supplement the brood stocks. Currently, this strain of lake trout is used in Lakes Michigan and Superior along the Minnesota shoreline. Lake Michigan receives coded wire tagged yearlings for a study on the Northern Refuge. The State of Minnesota receives yearling lake trout for stocking along the North Shore of Lake Superior. Of the Great Lakes, Lake Superior is considered one of the success

stories for the lake trout rehabilitation program. Small portions of the lake are still stocked by federal, state, tribal and Canadian hatcheries, but the majority of the lake trout populations are considered restored.
Angela Baran, Iron River NFH

Lake Sturgeon Restoration Program expanded at Genoa National Fish Hatchery

Restoration efforts for several populations of lake sturgeon are scheduled for a "boost" during 2004 with the construction of additional culture facilities at Genoa National Fish Hatchery (NFH). The lake sturgeon, once widespread throughout the Great Lakes/Big Rivers Region, has experienced large reductions in population and range across the United States during the last century. Factors such as habitat destruction, fish passage, and over fishing have all contributed to range wide declines of this ancient native species. Recent federal, tribal, and state initiatives in the upper midwest, northeastern, and the southern United States have shed light on these significant losses and have begun the long process of restoring this fish as a viable component to several fish communities.

Genoa NFH has been involved with lake sturgeon restoration since the mid-1990s, starting with efforts on the Menominee Indian Nation in northeastern Wisconsin. Over the last ten years, the program has expanded to include sturgeon strains from the Mississippi and Red River drainages involving three states, two Native American tribes, and the First Nations Tribe of Canada. In addition to fish produced on the facility, the hatchery provides fertilized eggs to other National Fish Hatcheries and federal research programs. This current expansion will add additional culture space to a burgeoning program and allow increased production capabilities to fulfill management objectives of federal and cooperator agencies. Resources for this project have been provided by a Fisheries Operational Needs (FONS) project funded for FY2004. Monies from this initiative will fund the construction of sturgeon culture facilities and the purchase of equipment.
Roger Gordon, Genoa NFH

-USFWS photos

This new building, with culture facilities for lake sturgeon, will boost restoration efforts for native lake sturgeon at the Genoa National Fish Hatchery.

What would you do for a Klondike?

Iron River National Fish Hatchery (NFH) has created a new brood lot of Superior Klondike Wild lake trout. Reciprocal crosses between the 1995 and 1997 year classes will yield two new brood classes. Currently there is only one egg request for this strain of fish, for Lake Erie by Allegheny NFH in the Fish and Wildlife Service's Northeast Region. Because of the small request for eggs, Sullivan Creek NFH, located in the Upper Peninsula of Michigan, is able to meet the number needed without additional help. Iron River NFH maintains two separate year classes of this strain to have on hand as a back-up to Sullivan Creek NFH in case their eggs become unavailable.
Angela Baran, Iron River NFH

-USFWS

A new brood lot of lake trout are started in troughs and later put into the culture tanks below. Iron River National Fish Hatchery is a back-up for the Superior Klondike strain of lake trout ensuring that eggs will always be available for restoration programs.

Recent Lake Trout Losses due to Predation: A Cause for Action

A group of ducks were the cause of a recent mortality at Jordan River National Fish Hatchery (NFH). An estimated 4,500 lake trout died on the morning of January 30, due primarily to stress induced suffocation. The birds landed in the raceways and caused a flight response in the trout. The fish smothered each other in attempts to escape predation. These lake trout were already coded wire tagged and adipose fin clipped in preparation for stocking in northern Lake Huron. Since Jordan River NFH began operating in 1964, avian predators including great blue herons and mammalian predators such as mink, raccoons, and opossums have been responsible for the annual loss of 150,000 to 300,000 fish.

The 4,500 yearlings lost in January were part of an ongoing strain evaluation comparing the survival and wounding rates of two different lake trout strains in the presence of sea lamprey populations. This study also serves as an assessment of the sea lamprey control program by examining sea lamprey wounding rates on Superior-Marquette Domestic (now replaced with Superior-Traverse Island Wild) strain of lake trout. In 2002 an independent consultant, retained by the Fish and Wildlife Service to evaluate the Regional lake trout production hatcheries, recommended construction of an enclosure that would exclude predators, reduce sun exposure, eliminate snow removal difficulties, and prohibit algal growth while providing an efficient and safer environment for employees.

Rick Westerhof,Jordan River NFH

Fish Health Samples collected during the Lake Winnebago Spearing Season

Lake Winnebago, in east-central Wisconsin, is the largest inland lake in the state (about 132,000 acres) and is inhabited by one of the largest, naturally sustained lake sturgeon populations in the world. Due to its great abundance here, Winnebago-strain sturgeon are used as an egg source for lake sturgeon re-introduction and rehabilitation projects. Lake sturgeon are also harvested from Lake Winnebago during a popular mid-winter spear fishing season that began in the early 1930s and has been held for more than 70 consecutive years. The total number of state-licensed spearers has grown dramatically in recent years as more people seem willing to travel greater distances from around Wisconsin and beyond to annually participate in what has become a unique recreational fishing event. Given the ecological significance of this fish population and the local cultural and economic importance of the spear fishery it sustains, the health status of this sturgeon population is of interest to fishery managers.

Dave Wedan from the La Crosse Fishery Resources Office (FRO) and Corey Puzach from the La Crosse Fish Health Center (FHC), aided by volunteer Scott Hansen, teamed up with Wisconsin Department of Natural Resources personnel to collect fish health samples from lake sturgeon harvested February 14th, the opening day of the 2004 spear fishing season. A total of 60 spearers permitted Fish and Wildlife Service staff to collect fish health samples which were later analyzed by the La Crosse FHC in their laboratory. Length, weight, and spawning condition of each registered fish were also taken. Spearers registered a record number of 1,303 sturgeon on opening day. The lake record was also broken when a 188 pound lake sturgeon was registered. The season ended Sunday, February 15th with a grand total of 1,854 sturgeon taken.

Diagnostic tests are now underway on these lake sturgeon samples to determine the overall health of the fishery on Lake Winnebago. In 2003, all 60 samples were negative for certifiable diseases. Presence of any of these pathogens could significantly affect this ancient fish species in the Lake Winnebago system. Test results are entered into the Fish and Wildlife Service's National Fish Health Survey data base to improve efforts to protect, restore, and manage fish populations across the country. For more information on the Survey, visit the internet at: http://wildfishsurvey.fws.gov/

Corey Puzach, La Crosse FHC
Dave Wedan, La Crosse FRO

-USFWS

Fish and Wildlife Service employees Dave Wedan, Corey Puzach, and volunteer Scott Hansen collect fish health samples from a lake sturgeon that was harvested by a fisherman on Lake Winnebago in eastern Wisconsin. No sign of disease or virus was detected from this population of lake sturgeon.

Public Use

Walleye Fishery established for Crane Naval Base

Carterville Fishery Resources Office (FRO), Indiana Department of Natural Resources (DNR), and Crane Naval Base Natural Resources Section worked in cooperation to create a walleye fishery at Lake Greenwood. Located at the Crane Naval Base in southwestern Indiana, Lake Greenwood has received walleye fingerlings from Genoa National Fish Hatchery since 2000. Last October, 2,740 six-inch walleye were stocked into the lake. Carterville FRO conducts an annual fall walleye survey during November. The two-night survey included the assistance of Crane Naval Base staff and a volunteer base employee. The data collected is used to assess the walleye population and the effectiveness of the stocking program. Fish up to 16 inches were collected in this year's sample, and over 45% of the walleye were greater than 14 inches, which is the minimum harvest size. The survey indicates that walleye stocking at Lake Greenwood has been successful in providing additional angling opportunities.

Colby Wrasse, Carterville FRO

-USFWS

Roger Gordon, Genoa National Fish Hatchery, releases 6 inch walleyes into Lake Greenwood at Crane Naval Base in Indiana.

Flying Fish brought Crowds in Flocks at the La Crosse Sports Show

Flying fish brought diverse crowds in flocks to the Fish and Wildlife Service's booth at the 27th Annual La Crosse Boat, Sports and Travel Show. Over 3,000 visitors viewed our booth consisting of displays from the Genoa National Fish Hatchery, La Crosse Fish Health Center, La Crosse Fishery Resource Office (FRO), La Crosse District of the Upper Mississippi River National Wildlife and Fish Refuge, and the newly formed Friends of the Upper Mississippi River Fishery Services. Fish mounts that were hung from the ceiling appeared to "fly" above the heads of the onlookers and a computer monitor was set up showing the "flying" (jumping) invasive silver carp.

Children of all ages were drawn to live juvenile lake sturgeon, walleye, bluegill, perch, and several other species displayed in an aquarium, as well as animal pelts and mounted ducks on a stick. A brand new freshwater mussel display was exhibited that included specimens of the endangered Higgins' eye and winged mapleleaf mussels. The Refuge's Friends Group sponsored a photo contest in which visitors could vote for entries from photographers from the La Crosse area. Issues discussed by La Crosse area citizens included: the Mississippi River draw-down, aquatic invasive species control such as information about Asian carp, freshwater mussel propagation, bird and mammal viewing opportunities, waterfowl issues, native fish restoration, and several other topics. Several members of our Friend's Group volunteered their time to speak with the public about issues of concern and about being a member of a Friends Group.

We would like to thank the La Crosse National Weather Service for donating half of their exhibition area to the Fish and Wildlife Service Offices. With this superb outreach opportunity, thousands of people learned about our partnership programs, projects, and all the benefits the public receives from federal natural resource management.

Heidi Keuler, La Crosse FRO

-USFWS

Over 3,000 visitors viewed the Fish and Wildlife Service's booth at the La Crosse Sports Show. Display items were provided by several local Fish and Wildlife Service stations and the Friends of the Upper Mississippi River Fishery Services.

Visitor Center Attendance remains High At Jordan River National Fish Hatchery

The winter of 2004 was a snowy one for northern Michigan, much to the delight of snowmobile enthusiasts. Since the winter of 2000, the visitor center at the hatchery has been an inviting stop for local snowmobilers interested in a warm-up and some interesting interpretive displays. The Jordan River National Fish Hatchery (NFH) visitor center is open 24 hours a day, seven days a week.

The visitor center provides hot beverages, clean restrooms, plus the opportunity to gain insight into the mission of the hatchery as it relates to the Fish and Wildlife Service's lake trout restoration efforts in the Great Lakes. Jordan River NFH staff has partnered with the East Jordan Snowmobile Club to provide this outreach opportunity.
Rick Westerhof, Jordan River NFH

Mitigation/Recreational Fisheries

Neosho National Fish Hatchery (NFH) stocked 35,244 rainbow trout during the months of January and February. Most of the catchable (8-9 inch) trout were stocked into Lake Taneycomo, near Branson, Missouri. The trout stocking is part of a fishery management plan for Lake Taneycomo. The Missouri Department of Conservation provides 500,000 rainbow trout and Neosho NFH provides 225,000 rainbow trout annually. Neosho NFH was built in 1888 and is the nation's oldest operating federal fish hatchery in the United States. Since 1966, Neosho NFH's has provided rainbow trout for sport fishing on Lake Taneycomo, mitigating the effects of a Federal dam on the White River in Missouri.

As part of a reimbursable agreement with the Department of Defense, Neosho NFH also stocked another 1,000 rainbow trout in a lake at Fort Riley, Kansas. The 11 inch rainbow trout will provide a fantastic recreational fishing opportunity for the service men and women and their families.
Roderick May, Neosho NFH

Working Together to improve Recreational Fishing at Crab Orchard Lake

Crab Orchard Lake is among the most popular lakes in southern Illinois among recreational anglers. The lake provides high quality fishing opportunities for largemouth bass, white bass, hybrid striped bass, flathead catfish, channel catfish, crappie, and sunfish. Local anglers take great interest in the lake which is cooperatively managed by Crab Orchard National Wildlife Refuge, Carterville Fishery Resources Office (FRO), and the Illinois Department of Natural Resources. Crab Orchard Lake has little aquatic vegetation or natural wood cover to provide fish habitat. Cooperators worked with more than 20 volunteers to improve fish habitat and enhance fishing opportunities. Brush piles were constructed at eleven sites using more than 200 cedar trees and Christmas trees. These brush piles serve as fish attractors and are popular angling locations. This annual event is an excellent example of natural resource agencies working with the community to achieve a common goal.
Colby Wrasse, Carterville FRO

-USFWS

Volunteers construct brush piles at Crab Orchard National Wildlife Refuge. This is a cooperative effort to improve fish habitat in Crab Orchard Lake.

Friends Group sponsors Scouts Ice Fishing Clinic

The Friends of the Upper Mississippi River Fishery Services hosted an ice fishing derby for Boy and Girl Scouts in January at Goose Island County Park near Shelby, Wisconsin. Even though the roads were icy, approximately 50 local area scouts and their parents showed up to learn more about ice safety, ice fishing tips, and to try their new found skills on the local fish population. After 20 minutes of instruction, the group was let loose to try to tempt the local bluegill population to bite on their wax worms and minnows.

After a few hours on the ice the Friends Group fed the hungry group hotdogs and snacks. Donated ice fishing rigs were given away as prizes and each scout was sent off with a packet of trinkets and information relating to fishing and aquatic conservation. Many thanks go to our Friends Group and other sponsors that made the day a memorable experience for all! For more information on the Friends Group, and how to join, please contact the station at 608/689-2605.
Doug Aloisi, Genoa NFH
Scott Yess, La Crosse FRO

-USFWS

This youngster is now convinced that you can catch a fish through the ice. The Friends of the Upper Mississippi River Fishery Services sponsored an ice fishing clinic for local Scouts at Goose Island County Park near Shelby, Wisconsin.

Great Lakes Critters and Cruisers at the Cobo Convention Center

Representatives from the Department of Fisheries and Oceans-Canada, the Great Lakes Fishery Commission, and the Fish and Wildlife Service worked together to share the story of Sea Lamprey Management in the Great Lakes at the 46th annual Detroit Boat Show. The event was held from February 7-15 at the Cobo Convention Center in downtown Detroit, Michigan which is owned by the Michigan Boating Industries Association, a non-profit association representing marine businesses throughout Michigan. More than 250 exhibitors trailered in 1,000 model boats to display at the event. Canada's impressive floor display was used for the sea lamprey booth, and was well equipped with bilingual panels of photos with captions, maps, and a parasitic sea lamprey and lake trout mount. The highlight of the display; however, was the live tank of very toothy adult sea lampreys.

Thousands of boat show visitors from Michigan and Canada dropped by to browse the 400,000 sq. ft. of exhibit space at the Cobo Center over the course of the nine day show. Much to their disbelief and distaste, many of them found more than they bargained for among the great deals at the show. As visitors walked through the pontoon boat display and rounded the corner of towering cabin cruisers, they came face to face with one of the most unsightly invaders of the Great Lakes. Although many visitors came with heroic stories of catching sea lampreys during fishing excursions, others were not familiar with the parasitic fish or its destructive feeding habits. Sea lamprey representatives were at the booth to answer questions and explain the complex life cycle and native origin of the invasive species. Families received maps, posters, and coloring books that illustrated the different aspects of sea lamprey management. Large events geared toward outdoor enthusiasts, such as the Detroit Boat Show, provide incredible opportunities to interact with the community and promote awareness of sea lamprey management in the Great Lakes.

Dennis Lavis, Ludington Biological Station

-GLFC

Pictured is an aquarium tank containing invasive sea lampreys and very interested observers at the Detroit Boat Show, Cobo Convention Center.

La Crosse Fishery Resources Office helps Winona District of the Upper Mississippi River Wildlife and Fish Refuge with their Annual Ice Fishing Clinic

La Crosse Fishery Resources Office (FRO) staff and volunteers worked at the Annual Ice Fishing Clinic on February 21. The event was sponsored by the Winona District of the Upper Mississippi River Wildlife and Fish Refuge and took place on Lake Winona in front of the Lake Park Lodge in Winona, Minnesota. Approximately 40 kids between the ages of 6-13 participated in ice fishing, fish identification and minor regulations activity, and a safety ice pick building activity. Children first learned how to safely ice fish and the benefits of certain types of warm clothing. Children were split into groups with a group leader and went ice fishing for about an hour before heading in for a lunch.

While inside the Lake Park Lodge, children were able to "ice fish" through a table for about 15 different species of cutout fish images. Children then identifed their catch, measured them, and decided if the fish could be legally kept. Gummy worms were given as prizes for participating in the activity. Children also constructed safety ice picks with the help of adults. The ice picks were made with two wood handles, a nail protruding out of each handle, and a cord connecting the picks. These picks can be used to pull someone out of a hole in the ice if they accidentally fall through.

After lunch, the kids headed back outside to fish for another hour or two. Children had the opportunity to try fishing in several different kinds of ice fishing shanties. Although the fishing was slow, the day was a success with several of the children catching some nice bluegills and black crappies. At the end of the day, prizes such as ice fishing poles and fishing tackle were raffled off. Every participant went home happy because everyone received something to take home, such as a photo of themselves, sunglasses, key chains, etc. This public outreach event was a great way for the Fish and Wildlife Service to give something back to the community and for the public to learn about our natural resources.

Heidi Keuler, La Crosse FRO

Cooperation with Native Americans

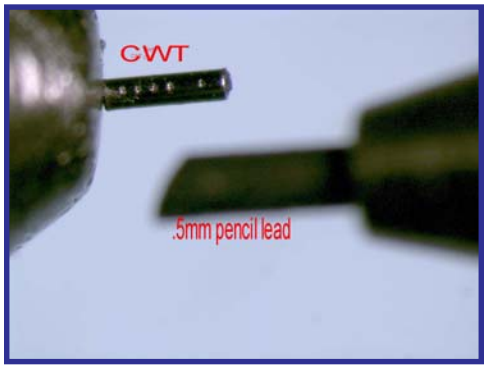
2003 Coded-Wire-Tag Data

Throughout January, 2004 Biologist Aaron Woldt from the Alpena Fishery Resources Office (FRO) compiled the 2003 lake trout coded-wire-tag (CWT) data for submission to the Lake Huron Technical Committee (LHTC) CWT database. The database was created in 1999 and includes lake trout CWT return data from 5 partner agencies: Michigan Department of Natural Resources (DNR), Chippewa/ Ottawa Resource Authority (CORA), Ontario Ministry of Natural Resources, U.S. Geological Survey (USGS), and the Fish and Wildlife Service.

CWTs are microscopic tags placed in the snouts of hatchery lake trout prior to stocking. Tags are extracted from lake trout at harvest and yield information such as hatchery of origin, year planted, fish age, and fish strain. The Alpena FRO captures CWT lake trout in its fishery independent lake whitefish surveys and its mid-lake lake trout surveys. Recreationally caught CWT lake trout sampled by Michigan DNR creel clerks and survey caught CWT lake trout sampled by CORA are also processed by the Alpena FRO. Woldt summarized all CWT returns processed by the Alpena FRO in 2003. CWT's were extracted and read by Biologists Scott Koproski and Adam Kowalski. Woldt formatted all the data to conform to common database standards developed by the LHTC and forwarded Alpena FRO data to Scott Nelson of USGS in Ann Arbor for inclusion in the database. The database is used by members of the LHTC to evaluate lake trout movement, strain survival, effects of quality at release on survival, and effectiveness of the northern and mid-lake refuges.

Woldt will use the LHTC database to update his analysis of Lake Huron lake trout movement for presentations at the 2004 Upper Lakes Meeting. Movement results will also be used to update lake trout catch-at-age models used to set harvest limits in 1836 Treaty waters. Capturing, processing, and analyzing lake trout CWT returns directly supports lake trout rehabilitation by allowing agencies to assess lake trout movement patterns, differences in strain survival, effects of hatchery practices, and effectiveness of refuges. CWT analysis also affects population models used to set sustainable lake trout harvest limits for 1836 Treaty waters. These outcomes are consistent with the Fish and Wildlife Service's goal of building and maintaining self-sustaining populations of native fish species while meeting the needs of tribal communities.

Aaron Woldt, Alpena FRO



-USFWS

This image shows the size comparison of a microtag to the lead of a pencil. The microtag is injected into the snout of a yearling fish prior to stocking. Tags have a unique numeric code etched onto the surface which allows biologists to identify fish groups when they are caught.

Ashland Fishery Resources Office's 2004 Circle of Flight Partnerships

Through the Fish and Wildlife Service's Partners for Fish and Wildlife Program (PFWP), the Ashland Fishery Resources Office (FRO) partners with the Bureau of Indian Affairs - Circle of Flight Program (CoF) and Native American Tribes to restore fish and wildlife habitat. Each year, a portion of the PFWP allocation is used to partner on CoF projects. During the annual CoF meeting, hosted by the Fond du Lac Band in February, Ashland FRO renewed its partnership with the Prairie Island Indian Community. Phase one of the Tribe's prairie restoration project, restoring 40 acres of native prairie, was completed. Phase two will restore an additional 40 acres of native prairie as well as restoring wild rice within tribal wetland and backwater areas of the Mississippi River.

Updates were also received on two ongoing projects initiated last year. We are currently assisting the Forest County Potawatomi Community restore a 5 acre wetland. This project site was impacted negatively by nearby development and restoration is on schedule for the summer of 2004. Also, in partnership with the Lac Courte Oreilles Band, we are helping to enhance and protect a 232 acre wild rice wetland. Construction is scheduled for 2004 on the lake's failing dam. The dam is unsafe and causes large fluctuations in lake levels which destroys wild rice beds.

Ted Koehler, Ashland FRO

Lake Trout Stock Assessment Models Updated in 1836 Treaty Waters

Biologists Aaron Woldt of the Alpena Fishery Resources Office (FRO) and Ji He of the Michigan Department of Natural Resources (DNR) updated the lake trout statistical-catch-at-age (SCAA) models for 1836 Treaty waters of Lake Huron. Each year the Modeling Subcommittee (MSC) of the Technical Fisheries Committee (TFC) is charged by the Year 2000 Consent Decree with updating stock assessment models for lake trout and lake whitefish in 1836 Treaty waters to produce safe harvest limits.

The Year 2000 Consent Decree is a 20 year fishery allocation agreement for 1836 Treaty waters signed by the State of Michigan, United States, Bay Mills Indian Community, Sault Ste. Marie Tribe of Chippewa Indians, Grand Traverse Band of Ottawa and Chippewa Indians, Little River Band of Ottawa Indians, and Little Traverse Bay Bands of Odawa Indians. There are two lake trout SCAA models for 1836 Treaty waters in Lake Huron. The (MH-1) north-western Lake Huron model includes statistical district MH-1 in United States waters and management area 4-1 in adjacent Canadian waters. The (MH-2) north-central Lake Huron model includes statistical district MH-2 in United States waters and management areas 4-2, 4-3, and 4-7 in adjacent Canadian waters.

Woldt and He added 2003 commercial harvest, recreational harvest, biological survey, and stocking data to the Lake Huron models. They began analyzing model output, performing diagnostic tests of the models' performance, and produced preliminary 2004 harvest estimates for the state-licensed recreational fishery and the tribal commercial fishery. Preliminary model results and harvest limits will be presented at the March 16-18 meeting of the MSC and to the TFC on March 30.

Model results from these analyses will determine 2004 lake trout harvest limits for both the state-licensed recreational fishery and the tribal commercial fishery in 1836 Treaty waters of Lake Huron. The harvest limits produced will allow fishing while still protecting lake trout stocks. This outcome is consistent with the Fish and Wildlife Service's goal of building and maintaining self-sustaining populations of native fish species while meeting the needs of tribal communities.
Aaron Woldt, Alpena FRO

-USFWS

Jerry McClain, Project Leader of the Alpena Fishery Resources Office, holds a lake trout captured during an assessment. Information gathered during assessments is used to help develop harvest limits for both the state-licensed recreational fishery and the Tribal commercial fishery in 1836 Treaty waters of Lake Huron.

Another Edition of the Midwest Tribal Aquaculture Network goes to Print

The Ashland Fishery Resources Office (FRO) has the unique distinction of providing technical assistance for the development of numerous tribal fish hatchery programs. One of the ways we contribute to these programs is by publishing a quarterly newsletter. The Midwest Tribal Aquaculture Network (MTAN) is dedicated to assisting tribal hatchery programs through the sharing of cool/cold water fish culture practices. The most recent addition of the MTAN (volume 47) has just been completed and is now available for review on the Internet. This quarter's newsletter discusses the use of an algicide called SCI-62, the nutritional diseases of fish, and using ultraviolet radiation (germicidal) energy to treat water.

The MTAN has been assisting tribal fish hatchery programs for the past twelve years. The rewards from this kind of technical assistance is in knowing we are providing information that enables hatchery programs to utilize their resources better and provide a healthier product for the fishery. The newsletter has helped to educate fish hatchery workers and direct them to other areas of opportunity so they can better research their specific needs. Information from previous issues of the MTAN plus tribal hatchery stocking information is accessible from the Ashland FRO web page. Readers can access this information by pointing their web browsers to: http://midwest.fws.gov/ashland/mtan/mtanhome.html.
Frank Stone, Ashland FRO

Leadership in Science and Technology

Fishery Staff targets a Pallid Sturgeon bearing a Sonic Transmitter

Biologists at the Columbia Fishery Resources Office (FRO) have been working in conjunction with the U.S. Geological Survey's (USGS) Columbia Environmental Research Center for two years to track the movements of pallid sturgeon in the Lower Missouri River. Columbia FRO captured a pallid sturgeon in March 2003 and USGS staff implanted a sonic transmitter to track the fish's movements. The fish has consistently inhabited a section of river immediately downstream from its original capture site for the last nine months. Columbia FRO have been trying to recapture this pallid sturgeon and retrieve valuable information. The sonic transmitter tags record daily temperature and depth for a year. If biologists are able to recover these tags, they would be able to review seasonal and average water depths. This data would help biologists in their search for other pallid sturgeon in the Missouri River. Even though biologists have not been able to recapture this specific pallid sturgeon, it is helping biologists locate other sturgeon. While towing an otter trawl net, biologists captured 9 juvenile shovelnose sturgeon and a hatchery stocked juvenile pallid sturgeon containing a uniquely numbered PIT tag. This PIT tagged fish was also marked with a unique color combination of elastomere tags to designate its family group and stocking location. For instance, this PIT tagged sturgeon was raised at the Neosho National Fish Hatchery and stocked at Boonville, Missouri (15 miles upstream) about 2 weeks earlier. Biologists do not know yet if this sturgeon will settle into this part of the Missouri River, but the presence of the other young sturgeon was very encouraging.

The large catch of young sturgeon was collected adjacent to an island. Radio-tracked adult pallid sturgeon were reported to use similar areas in the Middle Mississippi River. Targeting these island areas may increase our ability to collect rarely seen young sturgeon.

Wyatt Doyle, Columbia FRO

-USFWS

These sturgeon were collected in an otter trawl in the Missouri River.

Laboratory Study Jump-Starts Winged Mapleleaf Recovery Efforts

After several years of unsuccessful attempts, a total of about 11,000 living juvenile winged mapleleaf mussels were recovered from blue catfish and about 9,000 juveniles were recovered from channel catfish during laboratory fish host tests conducted in the Fall of 2003. Divers placed most of the juvenile mussels produced by the blue catfish into cages submerged at sites near existing mussel beds in the St. Croix River. These efforts have "jump-started" winged mapleleaf recovery efforts in the Mississippi River basin. The overwhelming test results achieved in 2003 by colleagues from 3 Department of the Interior agencies and the University of Minnesota conclusively indicate that both blue catfish and channel catfish are suitable hosts for glochidia (larvae) of the endangered winged mapleleaf mussel. These findings may soon be applied to artificially propagate winged mapleleaf juveniles for augmentation of existing populations and for reintroduction at Mississippi River basin sites within the species' historic range where populations have long been absent, and may help to recover this species from the brink of extinction.

Mark Steingraeber, La Crosse FRO

-USFWS

U. S Geological Survey laboratory equipment was used during La Crosse Fishery Resources Office's research to determine the host fish for the endangered winged mapleleaf mussel.

National Oceanic and Atmospheric Administration Grant will continue Sturgeon Research in the St. Clair River

Biologist James Boase from Alpena Fishery Resources Office (FRO) collaborated with Mike Thomas of the Michigan Department of Natural Resources (DNR) and Professor James Diana from the University of Michigan to

draft a proposal for continued juvenile lake sturgeon research in the St. Clair River. The National Oceanic and Atmospheric Administration (NOAA) Grant was awarded in February 2004 for the 2005–2006 fiscal seasons to the University of Michigan and will receive matching dollars from Michigan DNR and the University with the Fish and Wildlife Service providing in-kind assistance. Biologists from the Alpena FRO are conducting research in the St. Clair River looking at juvenile lake sturgeon movement patterns and habitat use. The project, funded by the National Fish and Wildlife Foundation (NFWF), is a collaborative effort with Michigan DNR Mt. Clemens Fishery Research Station, U.S. Geological Survey Great Lakes Science Center, Ontario Ministry of Natural Resources Lake Huron Management Unit, and Purdy Fisheries Ltd. Funding for the NFWF grant will be exhausted by December 2004. Funding through the NOAA Grant will enable the Fish and Wildlife Service to participate as a supporting member of the ongoing research taking place in the St. Clair River and will help further our understanding about the early life history of lake sturgeon in the Great Lakes. Working with other governmental agencies and commercial fishers has been beneficial in aiding the ongoing lake sturgeon research that the Alpena FRO is currently involved with in the St. Clair River. Maintaining and adding to these networks is key to the success for Alpena FRO's reasearch in this area of the Great Lakes and to the overall interagency efforts to restore lake sturgeon throughout the Great Lakes basin.

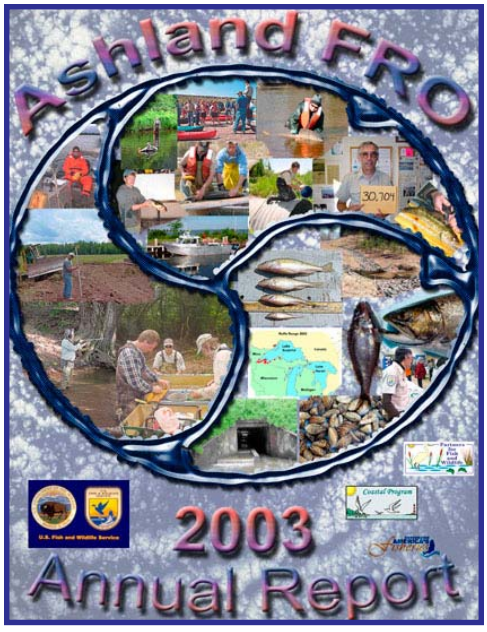
James Boase, Alpena FRO

Ashland Fishery Resources Office's 2003 Annual Report is now on the Internet

The Ashland Fishery Resources Office (FRO) has compiled a final listing of their 2003 accomplishments. This annual report summarizes all the efforts and accomplishments regarding our resource restoration projects, tribal assistance, inter-jurisdictional fisheries, federal lands assistance, aquatic invasive species, and outreach/ partnerships. To learn more about these programs and accomplishments, please direct your Internet browser to: http://midwest.fws.gov/ashland/accom_rpts/accom03/ccom03.html.

Additional tools such as the Internet are just one piece to a much larger puzzle that helps to inform the public about the fishery restoration activities now underway by the Fish and Wildlife Service. Web pages can have a tremendous influence to fill in the pieces of a much larger informational network.

Frank Stone, Ashland FRO



Jordan River completes Annual Tagging Project

On January 13, Jordan River National Fish Hatchery (NFH) began tagging lake trout with coded-wire tags. A month later, 535,000 yearling lake trout were tagged and adipose fin-clipped. These efforts are accomplished using a crew of six permanent-intermittent staff at a cost of approximately $11,000. Six different strains including Green Lake, Lewis Lake, Seneca Lake, Superior Apostle Island, Superior Isle Royal, and Superior Traverse Island were tagged with a unique code number. The tagging effort remains paramount to the Lake Trout Restoration Program in Lakes Huron and Michigan. The 2003 year class will be released at 22 different sites. Future tag return data is used to monitor and evaluate lake trout rehabilitation efforts. Specifically, these tagged fish will be used to compare survival rates of different lake trout strains, characterize migrations of the Lewis Lake strain, and assess sea lamprey predation rates in northern Lake Huron.

Rick Westerhof,Jordan River NFH

-USFWS

This lake trout (held upside-down) is having a microscopic coded wire tag inserted into its snout prior to stocking. This tagging effort is critical to monitor lake trout restoration efforts in Lakes Michigan and Huron.

Aquatic Habitat Conservation and Management

Asian Carp on the Middle Mississippi River National Wildlife Refuge

Carterville Fishery Resources Office (FRO) is working with the Middle Mississippi River National Wildlife Refuge to understand the dynamics of isolated backwater lakes on the Refuge. Floods in 1993 and 1995 breached interior agriculture levees creating large scour holes called "blew holes". These blew holes provide seasonally connected backwater habitats that are utilized by fish. A levee borrow ditch system also provides seasonally connected backwater habitats and is known to be heavily utilized by invasive Asian carp. Extensive fish kills of Asian carp have been documented in the levee borrow ditch system on the refuge. Carterville FRO is investigating fish usage of these backwater areas in relation to river levels and seasonal trends. Of particular interest is Asian carp movement in and out of these backwater areas.
Colby Wrasse, Carterville FRO

-USFWS

This is a "blew hole" on the Middle Mississippi River National Wildlife Refuge. Blew holes are holes in interior agriculture levees created by flood events that provide seasonally connected backwater habitats and is known to be heavily utilized by invasive Asian carp.

Additional Funding required for Modification of the Grayling Dam

On February 24, Biologist Susan Wells conducted an on-site inspection of a potential Fish Passage Program project on the Au Sable River in Grayling, Michigan. The 5 foot by 50 foot steel and concrete Grayling Mill Pond Dam will be considered for funding in 2005. The Au Sable River system is prized for its trout fishing but within the impounded area of the Grayling Mill Pond Dam, water temperatures can get as high as 78 degrees Fahrenheit, making the waters unsuitable for trout. The proposed project will help improve water flow and temperatures as well as fish passage into the headwaters of the Au Sable River. An Environmental Assessment (EA) has been completed for this project by the Michigan Department of Natural Resources (DNR) to determine the impacts of the dam removal. The findings of the EA concluded "No Significant Impacts" to the river system. The project is being proposed and conducted by the Michigan DNR and Huron Pines Resource Conservation & Development and is recognized as a top priority for the State of Michigan. Michigan DNR secured a portion of the funding needed for the project but additional funding is required. Local support is strong and, if fully funded, the project is scheduled to begin in the summer of 2005. This project is a priority for the DNR's Lake Huron Basin Team. Once this project is complete, it will increase brook and brown trout access to an additional 17 miles of headwater stream habitat.
Susan Wells, Alpena FRO

Saginaw Bay Watershed Assessment Workgroup

On January 9, the Saginaw Bay Watershed Barrier Assessment Workgroup held their first meeting in Lansing, Michigan. Susan Wells, biologist from the Alpena Fishery Resources Office (FRO), participated. The workgroup was formed to oversee a feasibility study being conducted within the Saginaw Bay Watershed. The study will look at fish passage options and identify the most cost effective restoration opportunities to promote self sustaining populations of native fish. The Fish and Wildlife Service's Fish Passage Program provided funding for the study with completion scheduled for August. Evaluation of the Dow and Chesaning dams will be completed first. Fish passage in the Saginaw River watershed is a top priority in the Michigan Department of Natural Resource's (DNR) Saginaw Bay Walleye Recovery Plan. A private fish passage design consultant will be hired to design a structure that will pass native fish through the city of Frankenmuth. The Michigan DNR, Michigan Department of Environmental Quality, Public Sector Consultants, City of Frankenmuth, and the Fish and Wildlife Service are participants on the workgroup. This is an example of collaboration between federal, state, and local governments to enhance aquatic habitat and will foster positive working relationships and benefit fish and wildlife resources. This project is a priority for the Michigan DNR's Lake Huron Basin Team. They have identified this watershed as a valuable resource for walleye reproduction.
Susan Wells, Alpena FRO

Results of Two Dredged Material Placement Studies presented at Upper Mississippi River Conservation Committee Meeting

Biologist Nate Caswell, from the Carterville Fishery Resources Office (FRO), presented the results of two dredged material placement studies at the 60th Annual Upper Mississippi River Conservation Committee Meeting in La Crosse, Wisconsin. Environmental impacts of channel maintenance dredging on the Upper Mississippi River System have long been a major concern to river resource managers. The U.S. Army Corps of Engineers (Corps) maintains a 9 foot channel for navigation by dredging bottom sediment. Under the terms of a recent Clean Water Act – Section 404 permit to discharge dredged or fill material into the waters of the United States, the Corps agreed to assess the impacts of dredged material placement on several key ecological components including fish, benthic macro invertebrates, and shoreline vegetation. Carterville FRO recently completed a 3-year evaluation of fish community response to dredge material placement at Hogback Island in the Upper Mississippi River (Pool 21) and Senate Island in the Illinois River (La Grange Pool). Preliminary analyses show no significant changes in species richness, evenness, or diversity at either study site. These results suggest that there are no short-term negative impacts to the fish community as a result of dredged material placement at historical dredged material placement sites.
Nate Caswell, Carterville FRO

-USFWS

Mark Cornish, U. S Army Corps of Engineers, and Colby Wrasse, Carterville Fishery Resources Office, net fish at a Mississippi River study site. Preliminary analyses of a 3-year study show no short-term negative impacts to the fish community as a result of dredged material placement at historical dredged material placement sites.

Cleanup Effort in the St. Clair River might provide Substrate for Lake Sturgeon

Tim Moran, president of the environmental firm Pollutech Ltd., contacted Biologist James Boase seeking information about lake sturgeon spawning substrate to facilitate one of their cleanup sites on the St. Clair River. The site is located in front of the DOW Chemical facility in Sarnia, Ontario. The chemical facility was cited for contaminants that were discharged into the river and ended up accumulating in the sediments in front of the plant. Beginning almost two years ago, Pollutech was hired to remove the contaminated sediments and are now at a point of replacing the substrate with clean gravel material. In addition to the clean, fine gravel being placed at the site, there is the possibility that larger igneous rock material, similar to what is found at the spawning reef located two km up river, may be placed at the site. Collaborating with other sturgeon researchers from the Fish and Wildlife Service, U.S. Geological Survey Great Lakes Science Center, Michigan Department of Natural Resources Mt Clemens Fishery Research Station, Department of Fisheries and Oceans Canada, and Ontario Ministry of Natural Resources Lake Huron Management Unit, Boase was able to provide a list of options and, based on the available knowledge, an approach that should provide suitable spawning substrate.

If the larger spawning material is placed at the cleanup site and if lake sturgeon begin to use the new reef, it would be the first instance where a mitigation process would directly benefit lake sturgeon restoration efforts in the Great Lakes and result in a net increase in habitat critical to lake sturgeon. This event provided a unique opportunity to create new partnerships with both governmental and non-governmental agencies. Working with other governmental agencies and private corporations has been beneficial in aiding the ongoing lake sturgeon research that the Alpena FRO is currently involved with in the St. Clair River. Maintaining and expanding these networks is key to the success to restore lake sturgeon throughout the Great Lakes basin.
James Boase, Alpena FRO

-USFWS

Lake Sturgeon

Restoring Fish Passage on Big Rock Creek, Illinois

Big Rock Creek, located in northeastern Illinois, is one of the largest tributaries to the Fox River. Big Rock Creek has excellent habitat and water quality and supports a diverse fish community. Local citizens, with support from the Illinois Department of Natural Resources (DNR), Natural Resources Conservation Service, Kane County Forest Preserve District, and Kendall County Forest Preserve District, formed the Big Rock Creek Watershed Committee to preserve this high quality resource. Maintaining connectivity to the Fox River is vital to the long term sustainability of Big Rock Creek's biotic communities.

Two dams have been identified on the lower section of the creek and are the only instream structures known to block fish movement. These barriers may impact migration and habitat availability for fish and mussels including state listed species such as the Illinois endangered greater redhorse. Carterville Fishery Resources Office (FRO) is working with the Illinois DNR and the Big Rock Creek Watershed Committee to provide fish passage at each dam by funding the installation of rock ramps through the Fish and Wildlife Service's Fish Passage Program. Providing fish passage at these dams will reconnect the entire system to fish and mussel source populations in lower Big Rock Creek and the Fox River. A total of 69 miles of in-stream habitat will be reconnected.
Nate Caswell, Carterville FRO

-USFWS

Plano Dam is one of two dams on the Big Rock Creek. Funding is being pursued though the Fish Passage Program to reconnect 69 miles of in-stream habitat.

Private Lands/Great Lakes Coastal Program Habitat Restoration Accomplishments for Fiscal Year 2003 by the Ashland Fishery Resources Office

The 2003 fiscal year was another successful one for the Ashland Fishery Resources Office's (FRO) Private Lands and Great Lakes Coastal programs. The Private Lands Program completed twelve wetland restoration projects and one pine barrens/native grass restoration. A total of 157 acres of wetlands and 25 acres of upland were enhanced or restored. These projects have restored and enhanced high quality habitat for the Region's fish and wildlife. Looking to the future, the program is moving in the exciting direction of increased emphasis on stream restoration with four projects planned for the 2004 field season.

The four year old Great Lakes Coastal Program is jointly administered by the Ashland FRO and the East Lansing Ecological Services Field Office and has produced fantastic results. In the 2003 grant cycle, 19 projects totaling $230,000 were funded by the program with partners providing matching funds of over $526,000. The projects encompassed all five Great Lakes, the St. Clair River, and the Detroit River. The kinds of projects funded included planning and research (9), restoration (9), and outreach and education (1). These cooperative projects have and will continue to produce measurable benefits to coastal ecosystems by conserving fish, wildlife, plants, and their habitats. This year's on the ground accomplishments totaled 132 acres of coastal fish and wildlife habitat enhanced, restored, or protected. One mile of riparian habitat was restored and approximately 31 miles of in-stream habitat was enhanced or restored.
Ted Koehler, Ashland FRO

-USFWS

Habitat restoration projects such as this one are accomplished through Fish and Wildlife Service programs such as the Private Lands Program and the Great Lakes Coastal Program.

Misery Bay 319 Planning Grant

Alpena Fishery Resources Office (FRO) Partners for Fish and Wildlife Coordinator, Heather Enterline, met with North-East Michigan Council of Governments (NEMCOG) representative Richard Deuell on January 15 to discuss the Misery Bay 319 Planning Grant. Misery Bay is a small bay just north of Thunder Bay in Lake Huron. This bay is rich in biodiversity and has been listed as a 1998 State of the Lakes Ecosystem Conferences

Biodiversity Investment Area. The coastal mashes, wet meadows, northern fens, and conifer swamps are habitat for federally endangered species such as the dwarf lake iris and Hines emerald dragonfly. The shoreline is etched with cliffs and karst features with a large spring coming from a sinkhole in the bay which is an outlet for an underground river. Approximately 213 migratory bird species are known to use this area as a stopover site during migration.

Mr. Deuell met with Enterline to discuss the current status of the 319 grant, potential habitat restoration projects, and to discuss general knowledge of the bay, including fisheries use, endangered species, and habitat requirements for these flora and fauna. Fish and Wildlife Service resource concerns in Misery Bay, particularly fisheries use and potential benefits to the fishery, were discussed with several biologists from the Alpena FRO. Coordination with NEMCOG so early in the planning process will only benefit the process as a whole. Concerns with endangered species habitat were directed to the East Lansing Field Office.
Heather Enterline, Alpena FRO

-USFWS

Misery Bay is a small bay just north of Thunder Bay in Lake Huron. Partners are working to preserve this site.

Carterville Fishery Resources Office Partners to Improve Fish Passage in Kishwaukee River Watershed

Biologist Nate Caswell from the Carterville Fishery Resources Office (FRO) attended a public meeting on January 15 in Belvidere, Illinois to discuss fish passage improvement in the Kishwaukee River watershed. Personnel from the Illinois Department of Natural Resources, the Kishwaukee River Ecosystem Partnership, the Fish and Wildlife Service's Ecological Services Rock Island Field Office, and the City of Belvidere coordinated the meeting to solicit community opinion and feedback on a proposed project to improve fish passage at the Belvidere Dam. Biologists and engineers took time to introduce the community to a variety of options including alteration or removal of the Belvidere Dam. The meeting provided an opportunity for the community members to voice their concerns regarding the project. If fish passage is improved at the Belvidere Dam, several hundred miles of high quality stream habitat would be opened to fish passage. Community members seemed to be generally in favor of improving fish passage at the Belvidere Dam.
Nate Caswell, Carterville FRO

Habitat Monitoring at Two Rivers National Wildlife Refuge

Swan Lake, an Illinois River backwater lake located on Two Rivers National Wildlife Refuge, was the site of an Environmental Management Program Habitat Restoration and Enhancement Project (HREP). In the early nineties, several agencies collected baseline data on fish, waterfowl, vegetation, water quality, and invertebrates prior to the implementation of the Swan Lake HREP. A three-year field study was just initiated to evaluate the response of these biotic communities to the habitat improvements in Swan Lake. Carterville Fishery Resources Office (FRO), Southern Illinois University, and the Illinois Natural History Survey are collaborating to evaluate the fisheries response. Carterville FRO will focus on population level response of the fish community. Fishery biologists from Carterville FRO recently assisted University staff to collect channel catfish, largemouth bass, and common carp which were then implanted with ultrasonic transmitters. Graduate students will track the movements of these fish, as well as invasive bighead and silver carp, between Swan Lake and the Illinois River throughout the project period.
Greg Conover, Carterville FRO

-USFWS

Carterville Fishery Resources Office staff collects information on fish caught as part of a study to evaluate a habitat project in Swan Lake, Two Rivers National Wildlife Refuge.

Workforce Management

Volunteer Banquet is a Moment in History

The Annual Volunteer Banquet was held for the La Crosse Fishery Resources Office (FRO) and the La Crosse District of the Upper Mississippi River National Wildlife & Fish Refuge on February 6th. Attendance was very good despite the snow and icy roads. This year's theme was history and everyone enjoyed the down home pig roast and root beer floats. Ken Visger presented a history of the Upper Mississippi River which was followed by several unique and often times humorous short stories told by Ken and Terry Visger.

In 2003, fishery volunteers contributed over 800 hours to the La Crosse FRO by assisting in lake sturgeon and paddlefish netting, endangered mussel propagation, exotic species monitoring, lake sturgeon tagging, fish collections for the wild fish health survey, and several general fishery surveys. Over 30 individuals contributed to this volunteer effort and La Crosse FRO recognized Don Schroeder (Onalaska, Wisconsin) as the volunteer who contributed the most hours in 2003 with a total of 217 hours and Jeff Dahl (La Crosse, Wisconsin) as "Volunteer of the Year." Jeff is the youngest volunteer (16) to contribute over 70 hours in a single year.

Scott Yess, La Crosse FRO

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This banquet was held by the La Crosse Fishery Resources Office (FRO) and the Upper Mississippi River National Wildlife & Fish Refuge to honor their volunteers. In 2003, fishery volunteers contributed over 800 hours to the La Crosse FRO.

Young Adults serve their Community at the Iron River National Fish Hatchery

For the past couple months, Iron River National Fish Hatchery (NFH) had help from several young adults looking to work off their community service hours. Community service workers have kept a positive attitude towards the less than glamorous jobs at the hatchery. A number of the "back burner" projects have been completed that the staff had postponed until time allowed for these lower priority jobs. It will be an ongoing relationship between the Iron River NFH and Bayfield County as a win-win situation. The hatchery gets work accomplished, Bayfield County has a productive place for the people needing the hours, and the "volunteers" learn responsibility and accountability. This Bayfield County program has been in place for about a decade with positive results.

Laurie Gucinski, Iron River NFH

La Crosse Fish Health Center teaches the "Introduction to Fish Health Course"

A one week short course titled "Introduction to Fish Health Management" was taught at the La Crosse Fish Health Center (FHC) in La Crosse, Wisconsin during February. Eighteen people participated in a very intensive series of seminars and laboratory sessions, interspersed with videos, guest speakers, and practical problem solving. This course is put on by the staff of the La Crosse FHC with this year's guest speaker being Crystal Hudson, Director from the Bozeman FHC located in Bozeman, Montana. Fish culturists and biologists were taught a wide variety of material including anatomy of fish, fish health management, microscope use, necropsy procedures, parasitology, bacteriology, virology, nutritional and environmental problems, treatment calculations, and legal fishery chemicals. Students were from various agencies including 7 Wisconsin Department of Natural Resources culturists; a veterinarian from the Wisconsin Veterinary Diagnostic Laboratory; Tribal biologists from Pyramid Lake Fisheries, Nevada and Keweenaw Bay Indian Community, Michigan; Arizona Department of Game and Fish; U. S. Army Corps of Engineers, Dalles, Oregon; and Fish and Wildlife Service personnel from Montana, Michigan, South Dakota, Missouri, Wisconsin, and Louisiana. The annual course is sponsored by the National Conservation Training Center. This is the 33rd course taught in La Crosse and continues to be a popular training session.

Rick Nelson, La Crosse FHC

Students Shadow Mussel Recovery Efforts

Two La Crosse-area high school science students interested in biology careers had the unique opportunity to "shadow" Mark Steingraeber, a biologist for the Fish and Wildlife Service's La Crosse Fishery Resources Office (FRO), and Michelle Bartsch, a biologist for the U.S. Geological Survey. These Interior Department colleagues led successful interagency cooperative efforts to identify host fish species for the endangered winged mapleleaf mussel at the Survey's Upper Midwest Environmental Sciences Center in La Crosse, Wisconsin during fall 2003. Jeff Brown, a sophomore at La Crosse Central High School, was on hand at the start of the fish host test and helped infest four different species of fish with microscopic glochidia (larvae) from the endangered mussel. Several weeks later, Galesville-Ettrick-Trempealeau High School junior Annie Greylak accompanied the biologists for a day and learned how to recover mussel glochidia that successfully transformed into juveniles, as well as to distinguish live from dead individuals using a dissection microscope and cross-polarized light. We hope that real-world, hands-on job exploration experiences like these with Interior Department biologists will encourage young science students to continue their pursuit of careers as professional biologists.
Mark Steingraeber, La Crosse FRO

Genoa National Fish Hatchery lands New Administrative Assistant

The Genoa National Fish Hatchery (NFH) is pleased to welcome Diane Zittel as our new administrative assistant. Diane is replacing Karen Leppert, who retired last December after 23 years of government service. Diane comes to us from the Winona Diocese, where she was working as an administrative officer. Previously, she had been the administrative assistant for the Winona District Office of the Upper Mississippi River National Wildlife and Fish Refuge for 11 years. We are pleased to welcome Diane back into the many challenges and opportunities of government service. Welcome home Diane!
Doug Aloisi, Genoa NFH

-USFWS

Diane Zittel poses for her photograph in front of the National Fish Hatchery sign. Diane is the new administrative assistant for Genoa National Fish Hatchery.

Pendills Creek welcomes New Administrative Assistant

The new face seen at Pendills Creek National Fish Hatchery (NFH) is that of Debbie Jones, the new administrative assistant. Debbie comes to northern Michigan from West Virginia where she worked for the Army Corps of Engineers. Although a bit overwhelmed by the pile of papers on her desk that first day, Debbie has hit the ground running and done a lot of catching up in her first week.
Tracy Roessner, Pendills Creek NFH

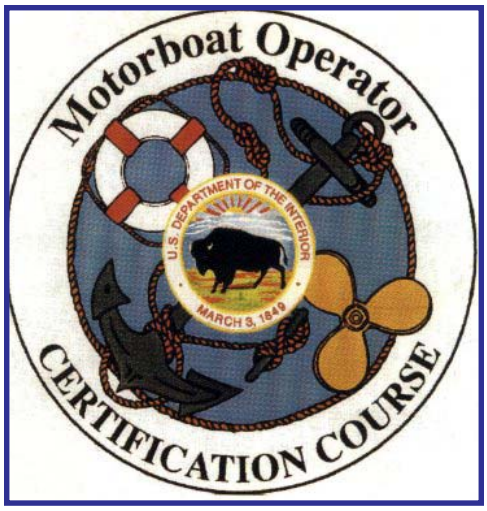
Westby Middle School Students "Fish" for Information on Fishery Careers

Career Day at Westby Middle School in Westby, Wisconsin was a great success. Heidi Keuler from the La Crosse Fishery Resource Office (FRO) spoke to about 40 seventh and eighth graders on life as a fishery biologist. A presentation highlighted Region 3, Partners of La Crosse FRO, La Crosse FRO projects, a job description, requirements for the job, hours worked, wages and much more. Pictures of fishery biologists on the job were displayed as well as diagrams of the mussel life cycle. Students were given a mini biology lesson about the life of a mussel and how fishery biologists propagate endangered mussels, such as the Higgins' eye and winged mapleleaf. Some of the students had previously heard about Asian carp so information was also provided about invasive species. Additional information on jobs in law enforcement, health care, and business was also provided. Students diligently took notes at each of the four, 30-

minute career presentations. This was a great opportunity to educate local students and teachers about daily activities of a fishery biologist, inform them about the fishery program, and how they and the environment benefit from Fish and Wildlife Service programs.
Heidi Keuler, La Crosse FRO

Motorboat Operator Certification Course (MOCC) Schedule

According to Fish and Wildlife Service Policy, all employees that operate a motorboat in their duty are required to take a Motorboat Operator Certification Course (MOCC) course and to update their certificate with refresher courses. In February, the Region 3 Watercraft Safety Course Schedule for 2004 was developed and sent to the Regional Management Team and all the Regional Project Leaders. Attachments included course descriptions, scheduling, and registration information and procedures. This year's offerings include the basic MOCC, airboat, open-water (Great Lakes), and five-year refresher course information. Project leaders and supervisors are reminded that they are responsible for insuring watercraft operators receive adequate training to safely operate watercraft within the water and environmental conditions they are assigned. Instructors are located at field stations throughout the Region and will provide staff training at the 10 scheduled courses. For more information, call or e-mail Dave Wedan, the Regional Watercraft Safety Coordinator at 608/783-8435 or dave_wedan@fws.gov
Dave Wedan, La Crosse FRO
Adam Kowalski, Alpena FRO



Recruiting Future Fishery Biologists

Illinois American Fisheries Society (AFS) invited Carterville Fishery Resources Office (FRO) to participate in a student affairs luncheon during the annual meeting. The University of Illinois and Southern Illinois University sub-units of the AFS organized the luncheon. Representatives from Academia, Illinois Department of Natural Resources, Fish and Wildlife Service, and the private sector were invited to the luncheon and asked to speak to students about careers with their respective agencies. The event provided a great opportunity for fisheries students to network with prospective employers and learn about opportunities such as our student employment programs.
Greg Conover, Carterville FRO

Fish and Wildlife Service reaches out to Students

Ashland Fishery Resources Office (FRO) participated in two Wisconsin career day events hosted by Northland College in Ashland and Washburn Middle School in Washburn. Northland's participants included more than 50 federal, state, and tribal agencies and local community businesses. Technicians Jessica Krajniak and Gary Czypinski distributed career information to more than 30 biology and resource students interested in employment. Students were briefed on where to look for federal environmental jobs, tips for obtaining a federal job, and summer opportunities with the Ashland FRO. Most students were seeking temporary summer employment and were interested in knowing what the Fish and Wildlife Service offers.

Several of the same agencies and local businesses participated in the Washburn Middle School Career Day. Seventh and eighth grade students were given the opportunity to attend three career presentations of their choice. Presenting agencies and businesses were given 30 minutes to speak, and were scheduled to deliver two to three presentations during the course of one afternoon. Krajniak and Czypinski spoke to two separate groups totaling 15 individuals. They were introduced to the Fish and Wildlife Service mission and career positions. Slides of fish restoration and aquatic invasive species projects were presented. Fish scale aging was demonstrated and preserved specimens of ruffe, round goby, and sea lamprey were available for the students to view. Questions focused on what we liked and disliked about our jobs.
Gary Czypinski, Ashland FRO

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