



U.S. Fish & Wildlife Service

Fish Lines

Region 3 - Great Lakes/Big Rivers

Leadership in Conserving, Enhancing, and Restoring Aquatic Ecosystems



March 2003
Vol. I No. 1



Inside this Issue

A Message from Gerry Jackson, ARD-Fisheries: Page 3

Fishery Field Office Functions: Page 4

Partnerships and Accountability: Page 5

Aquatic Species Conservation and Management: Page 9

Public Use: Page 13

Cooperation with Native Americans: Page 16

Leadership in Science and Technology: Page 18

Aquatic Habitat Conservation and Management: Page 21

Workforce Management: Page 22

Great Lakes/Big Rivers Fisheries Field Offices: Page 25



A Glimpse into our Proud Past

*How would you describe this picture?
Check out our next issue.*

Great Lakes - Big Rivers Regional Fisheries Program

PREFACE

Welcome to “**Fish Lines**”! This is the first in a regular series of consolidated highlight reports for the Fisheries Program (Program) in Region 3. We in the Fish and Wildlife Service refer to Region 3 as the Great Lakes-Big Rivers Region for good reason. Our eight State region (Minnesota, Wisconsin, Michigan, Ohio, Indiana, Illinois, Iowa and Missouri) includes much of the Great Lakes, the Upper Mississippi River, the Lower Missouri River and the Ohio River. They and their associated tributaries, lakes and wetlands constitute some of the largest freshwater ecosystems in the world and dominate much of our landscape. Those watersheds support some of the most biologically diverse freshwater systems in the world and support 54 million people contributing billions of dollars to the economy. These lakes and rivers are truly a national treasure!

The purpose of this report, and those that will follow, is to ensure that our many partners and the American taxpayers are aware of the activities that engage us in the Fish and Wildlife Service as we carry out the mission of our agency. The Fisheries Program recently completed a “Strategic Vision for Conserving America’s Fisheries”, which was developed in collaboration with the Sport Fishing and Boating Partnership Council and its Fisheries Steering Committee. Representatives of the States, Tribes and conservation community participated in that effort and we now structure our activities within each of the seven focus areas delineated in that document:

1. Partnerships and Accountability
2. Aquatic Species Conservation and Management
3. Public Use
4. Cooperation with Native Americans
5. Leadership in Science and Technology
6. Aquatic Habitat Conservation and Management
7. Workforce Management

Timely and effective communication is critical to the success of our program and our efforts to conserve, protect and enhance fish populations and other aquatic resources. It is important for our constituents



Regional Office Staff (left to right); Mike Oetker, Rick Schuldt, Gerry Jackson, Pat Maylone, Dave Radloff, Lyn Grillo, Todd Turner, Mike Hoff, Bob Adair

to not only understand what we are doing but also to understand why it is important and the benefits to our Nation’s natural resources and the public. We constantly challenge ourselves with the “So What?” question to better ensure that our efforts have practical application and positive results. We will attempt to communicate that information in Fish Lines. Finally, we want to reiterate that virtually everything that we do and accomplish is in close coordination and cooperation with one or more partners. Only by working together can we deliver on our promise to better serve the American Public in managing our aquatic resources.

We solicit your comments and suggestions on how we can better work cooperatively to protect, restore and recover the aquatic habitats and species in the Great Lakes-Big Rivers Region of the Fish and Wildlife Service and welcome your feedback on our report.

Gerry Jackson
Assistant Regional Director - Fisheries

Please send comments and suggestions to:
 Fish Lines
 U.S. Fish and Wildlife Service
 Assistant Regional Director-Fisheries
 1 Federal Drive
 Fort Snelling, MN 55111
 (612-713-5111)

Great Lakes - Big Rivers Regional 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 coaster brook trout. Hatcheries also provide technical assistance and sources of fish and eggs to cooperating agencies in pursuit of their aquatic resource management goals, 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 of native mussels.

Sea Lamprey Control Stations

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

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 inter-agency coordination functions affecting the management of native fishes and aquatic habitats.

Great Lakes - Big Rivers Region Fisheries Field Offices



Partnerships and Accountability

Green Bay Fishery Office produces mortality and survey catch estimates for 1836 treaty models

John Netto of the Green Bay Fishery Resources Office has been assisting state and tribal biologists with processing data and providing analyses to facilitate the assessment modeling process in Lakes Superior, Huron, and Michigan. Recently, John has generated the estimates of sea lamprey induced mortality for the treaty management units in Lakes Superior and Huron. These estimates are based on state, tribal, and federal agency sea lamprey wound data and information regarding the probability of surviving a lamprey attack to generate a matrix of mortality rates for all years and ages included in the assessment models.

This year's estimate of 2001 mortality based on 2002 data indicates that sea lamprey mortality has decreased significantly in northern Lake Huron suggesting that treatment efforts in the St. Mary's river have been effective in reducing the population of parasitic sea lamprey. This year, John also ran the mixed model analyses for generating catch per effort estimates for the lake trout surveys in Lakes Superior and Michigan. The mixed models provide a mean value of catch per unit of effort for the multiple surveys in each management unit. These models use the location of the survey, the year of the survey, and the depth of the survey site as factors that determine the overall catch per unit effort for each management unit.

John Netto, Green Bay FRO

Partners for Fish and Wildlife State of Michigan Coordinators Meeting

Michigan Coordinators of the Service's Partners for Fish and Wildlife (Partners) Program held their annual meeting March 25-27 at the East Lansing Private Lands Office in East Lansing, Michigan. The Partners Program paperwork has all been revised, and many forms have been added to each Partners project to standardize the types of data collected for each project, and to make sure each coordinator is following proper procedure. Project Leaders attended the meeting the morning of March 27, and were able to discuss issues and/or concerns they had regarding the Partners Program. Fish and Wildlife Biologist Heather Enterline, Partners coordinator for northern Michigan, and Alpena FRO Project Leader Jerry McClain attended the respective meetings.

Heather Enterline, Alpena FRO

Accord Reached Between Service, Commission, and Michigan

A memorandum of agreement between the Service, the Great Lakes Fishery Commission, and the Michigan Department of Natural Resources for cooperation in the construction, operation, and maintenance of sea lamprey barriers on select streams in Michigan recently was signed. Each of the parties was represented on the sea lamprey barrier task force where the policy framework for constructing new sea lamprey barriers in Michigan was developed. The accord allows

for progress toward an expedited barrier design and construction program to stop the upstream migration of sea lampreys while also providing for the passage of desirable fish. The majority of sea



-GLFC

A low-head sea lamprey barrier on the west Branch of the Whitefish River in Delta County Michigan

lampreys are currently controlled through the application of the lampricide TFM. Sea lamprey barriers are a proven alternative to lampricide control and this agreement allows for progress on an integrated approach to management of sea lamprey populations in Michigan waters. The Service, a contracted agent of the Commission, is currently pursuing the construction of about 12 sea lamprey barriers in Michigan over the next 10 years. The barriers will reduce or eliminate the need to treat the streams with the lampricide TFM as the program moves toward the Commission strategic vision milestone of achieving 50% of control of the exotic parasites through alternative control methods by 2010.

Dennis Lavis and Kasia Mullett, Ludington Biological Station

Fish Health Inspections Extend Beyond Natural Resource Agencies

The La Crosse Fish Health Center conducted a fish health inspection at a Wisconsin private fish hatchery raising Rainbow Trout under contract with the Department of the Army's Fort McCoy military base located in Tomah, Wisconsin. The inspection will check for any certifiable fish pathogen present in the fish prior to being stocked. Once the inspection results are completed then fish can be shipped to the base.

Cory Puzach, La Crosse FHC

US and Canadian Partners Work to Create Lake Sturgeon Spawning Habitat

Fishery Biologist James Boase initiated a conference call between biologists from Alpena FRO, Ontario Ministry of Natural Resources (OMNR) and Department of Fisheries and Oceans (DFO) on March 20, 2003. The purpose of the conference call was to bring interested parties together to discuss the possibility of constructing an artificial lake sturgeon spawning reef in the St. Clair River. The proposed site is located in Canadian waters and is part of a remediation project at the Sarnia Dow Chemical Facility. This effort, if successful, would be a major advancement for the rehabilitation of lake sturgeon in the Great Lakes that involves partners from US, Canada, and private industries. Because of the conference call, recommendations from biologists at Alpena FRO are now being considered for future remediation projects on the St. Clair River by OMNR and DFO.

James Boase, Alpena FRO

Partners Inspect Health of Missouri Paddlefish



-USFWS

La Crosse Fish Health Center staff Cory Puzach takes samples from a paddlefish collected during a Missouri special snagging season

Staff from the La Crosse Fish Health Center and members of the Missouri Department of Conservation inspected the overall health of local populations of paddlefish in selected watersheds in Missouri. Thirty-two paddlefish were sampled at two sites during Missouri's special snagging season. Fish were sampled as anglers returned to the boat landings. The fish samples were then checked for bacterial and virus pathogens. These fish can reach 30 plus years in age and weigh up to 200 pounds. Most fish were between 10 and 40 pounds.

Cory Puzach, La Crosse FHC

Green Bay Fisheries Office Participates in Annual Lake Michigan Committee Meeting

Green Bay Fishery Resources Office staff attended and participated in the annual meeting of the Lake Michigan Committee of the Great Lakes Fishery Commission in Milwaukee, Wis., Mar. 19 - 20. Fishery Biologist

Rob Elliott was selected as the chair of the newly formed Lake Sturgeon Task Group for Lake Michigan. Fishery biologists Jessica Richards and Charles Bronte prepared a summary of trout and salmon stocking in Lake Michigan from the Great Lakes Fish Stocking Database maintained by the Green Bay FRO. Mr. Bronte chaired and Mark Holey, Green Bay FRO project leader, participated in a meeting of the Lake Trout Group of the Lake Michigan Technical Committee. Fishery biologist Dale Hanson prepared a summary of Lake Michigan recreational harvest and fishing effort from the lakewide database base maintained by the Green Bay FRO. The Lake Michigan Committee is the primary interjurisdictional body that addresses the lakewide management of fish stocks of common concern and the progress toward achieving the goals and objectives for the Lake Michigan fish community.

Mark Holey, Green Bay FRO

Green Bay Fisheries Office Provides Lake Trout Data to Fishery Managers in Lake Michigan

The U.S. Fish and Wildlife Service Green Bay Fishery Resources Office assisted state and tribal management agencies with the recovery of coded-wire-tag data from 2,372 lake trout collected in Lake Michigan. The data collected from these tags will help to set harvest quotas and evaluate the success of stocking efforts.

The lake trout heads from adipose clipped fish were collected throughout 2002 from recreational fishers, creel surveys and assessment surveys. Cylindrical

steel tags, known as coded-wire-tags are embedded in the snouts of some juvenile lake trout prior to their release from hatcheries. Each tag contains a series of binary codes that reveal information on the fish's age, strain and when and where the fish was stocked.

These data form a vital component of the Great Lakes lake trout management program, particularly in waters covered under the Consent Decree of 2002. The tags give known ages for lake trout of a given size, provide a relative measure of abundance by year-class, and provide a relative measure of stocking success.



Sea lamprey mortality rates on lake trout in Northern Lake Huron. Recent treatment efforts in the St. Mary's river are believed to be responsible for the recent declines in sea lamprey abundance

Comparisons of adult capture locations to original stocking locations also provide information on lake trout movements and can aid our understanding of recruitment processes within specific regions of the Great Lakes.

These quantities are essential components of the models used to calculate lake trout harvest quotas in the Great Lakes.

Dale Hanson, Green Bay FRO

Great Lakes Fishery Commission Meetings Held in March

Fishery Biologist James Boase traveled to Milwaukee, Wisconsin on March 17 – 19, 2003 to attend the Upper Lakes Committee Meeting and traveled to Port Huron, Michigan on March 24 – 25 to attend the Lake Erie Committee Meeting. The annual meetings are sponsored by the Great Lakes Fishery Commission. Professionals from the Upper Great Lakes presented a wide range of information including; sea lamprey control, lake trout movement and rehabilitation, natural chinook salmon reproduction, and Lake Huron GIS. The agenda for the Lake Erie meeting included; changes in yellow perch and walleye harvest for 2003, fish health, benthic habitat surveys, and the construction of an artificial lake sturgeon spawning reef. The forum was an excellent opportunity for Boase to interact with fishery biologists from across the Great Lakes and to learn about research taking place in the Great Lakes. Boase also used the opportunity to distribute the report titled "2001 Activities of the Central Great Lakes Binational Lake Sturgeon Group" and to discuss lake sturgeon research that will be occurring in 2003.

James Boase, Alpena FRO

Fish Health and Pallid Sturgeon Recovery

The La Crosse Fish Health Center Project Leader attended a meeting of the Upper Basin Pallid Sturgeon Workshop held in Miles City, Montana as the Region 3 fish health representative during March. The workgroup is comprised of representatives from many Federal, State and utility

programs in Regions 3 and 6 to implement and coordinate recovery efforts for Pallid Sturgeon in the Missouri and Upper Mississippi Rivers.

Rick Nelson, La Crosse FHC

Ottawa National Wildlife Refuge Centennial Celebration

The Ottawa NWR held their centennial cake cutting event on Friday March 14th. This was a day long event in which Congresswoman Marcy Kaptur and other congressional representatives were key note speakers. They spoke of their support for the USFWS, the refuge system, and the new visitors' education center for Ottawa NWR. Recently congress appropriated funds for an Ottawa NWR visitors' center. This new center was celebrated during this event by conducting an official ground breaking for the education center. The theme of the new center will incorporate the design of the duck hunting club house at the Little Cedar Point unit of the refuge. Fishery Biologist Wells assisted with the preparation for and participated in festivities for the Alpena FRO. A refuge centennial display was designed and constructed by Biologist Wells. The newly constructed display will be used throughout the year at Ottawa NWR to celebrate the centennial. It depicts the history of the refuge system and the resources it protects. Biologist Wells also assisted the refuge staff by providing input for the ground breaking event and visitors services on the day of the event. Approximately 60 people attended the event including local television news channels and local newspapers.

Susan E. Wells, Alpena FRO

Fish Health Biologists Develop a Standardized Fish Sampling Guide

La Crosse Fish Health Center Project Leader attended the annual Great Lakes Fish Health Committee Meeting in South Bend, Indiana. The Fish Health Committee membership is made up of fish health experts and administrators from all Great Lakes Basin states, Fish and Wildlife Service Labs in Region 3 and 5, Canadian Federal Department of Fisheries and Oceans, Ontario Provincial Ministry of Natural Resources and private fish hatchery cooperatives in Ontario and the basin states. The agenda included approval of a Model Fish Health Program revision, a new risk assessment protocol, and final draft of a new cool/warm-water fish health inspection sampling guide.

Rick Nelson, La Crosse FHC

Technical Assistance Reaches Canada

When the Toronto Zoo needed information regarding the paddlefish, who did they contact? Columbia FRO fisheries staff, of course. Education staff at the Toronto Zoo are coordinating a Virtual Zoo Collaboration Project. This project aims to link Canadian zoos and aquariums in an on-going effort to educate the public about Canadian species at risk. The paddlefish has been extirpated from Canada for 70 years due primarily to dam construction and pollution. Joanne Grady of the Columbia Fisheries Resource Office provided the zoo staff with paddlefish life history information, population distribution information, and photographs of large paddlefish to use on their website.

Joanne Grady, Columbia FRO

Fish Health Biologists Share Issues

The La Crosse Fish Health Center in Region 3 participated in the Annual National Fish Health Biologist Meeting held in Tucson, Arizona. Project Leaders and staffs from all nine Fish Health Centers along with representatives from the Washington Office met to discuss several issues of significance to the Service's Fish Health Program. Items such as the newly revised National Fish Health Policy, budgets, and new disease outbreaks, such as Largemouth Bass Virus, Spring Viremia of Carp and Whirling Disease and increasing cooperation with our many partners were discussed.

Becky Lasee, La Crosse FHC



-USFWS

Fishery biologists examine fish for signs of health problems. In the above picture, gills are checked using a dissecting scope.

Aquatic Species Conservation and Management

Major Range Expansion Documented in 11th Annual Ruffe Surveillance Report



The offices of Ashland, Alpena, and Lower Great Lakes Fishery Resources, as well as the Ontario Ministry of Natural Resources, collaborated on publishing the 11th annual Ruffe Surveillance Report. The report summarized all dedicated and reported incidental ruffe surveillance in the Great Lakes during 2002. The report also contained a chronology of ruffe expansion since surveillance began in 1991. Ruffe were reported to have expanded into Lake Michigan and into the Keweenaw Waterway, Lake Superior, but no range expansion was reported in Lake Huron or into the Lower Great Lakes. No ruffe were confirmed in waters unconnected to the Great Lakes. See the report on line at <http://midwest.fws.gov/ashland/>.

Gary Czypinski, Ashland FRO

Lake Sturgeon Survey Planned for the Rifle River

On March 14, 2003 Fish and Wildlife Biologist Adam Kowalski talked with Jim Baker, Michigan Department of Natural Resources Southern Lake Huron Management Unit Supervisor, and other personnel from the Michigan DNR about starting a lake sturgeon assessment project at the mouth of

the Rifle River. The Rifle River mouth is located in lower Michigan about 2 hours south of the Alpena FRO near the town of Omer. In the fall of 2002 FWS personnel surveying the Rifle River for sea lamprey saw a juvenile lake sturgeon in the river. Biologist Kowalski proposed setting large mesh gill nets off the mouth of the Rifle River to document the presence of spawning adult lake sturgeon this spring. Jim Baker agreed to the project and offered to report daily water temperatures of the river to alert the Alpena FRO of the proper temperature to start sampling. Once river temperatures reach 9°C, lake sturgeon may begin staging at the river mouth prior to spawning. Sampling will consist of 100 ft long eight and ten-inch stretch mesh gill nets set over night. These sizes were chosen to focus on adult sturgeon and reduce by-catch of other fish species. All sturgeon captured will be tagged with an external, serially numbered floy tag and internal PIT tag. A fin ray sample will be taken for genetic analysis and to age the fish.

Adam Kowalski, Alpena FRO

Trapping of Spawning Phase Sea Lampreys in Great Lakes Tributaries has started for 2003

Abundance of spawning-phase sea lampreys are estimated annually in each of the Great Lakes as the primary measure of the overall effectiveness of the sea lamprey control program. In-stream traps and fyke nest are the main field tool used in this work. The first assessment traps of the 2003 field season have been set in three Great Lakes tributaries and are

beginning to capture sea lampreys. Traps were set in the St. Joseph, and Jordan rivers of Lake Michigan, and the Saginaw Rivers of Lake Huron. Eventually, traps will be set in 56 U.S. tributaries of the Great Lakes. In addition to measurement of lamprey abundance, traps are operated to harvest male lampreys for the sterilization technique and to reduce reproduction by spawning pairs. The U.S. Fish and Wildlife Service delivers an integrated program of sea lamprey management in U.S. waters of the Great Lakes as contracted agent of the Great Lakes Fishery Commission.

Michael Twohey, Marquette Biological Station

Columbia FRO Receives Challenge Cost-Share Program Grant to Assess Exotic Asian Carp Populations on Big Muddy National Fish & Wildlife Refuge

The invasive carp species, bighead carp, silver carp, grass carp, and common carp have become more prevalent in the Lower Missouri over the last four years. Columbia FRO fish monitoring has found all four of the carp species and evidence of natural reproduction in units of the Big Muddy NFWR. Fisheries staff will tag exotic carp species with uniquely numbered T-bar tags to assess movement between the Missouri River and refuge units. Hard parts, including scales and fin spines, will be removed to determine age and growth of the fish. This information will be compared to available published values for the carp from their native range. An assessment of carp population numbers will be made based on the



-USFWS
Jim Milligan and Jeff Finley (now with MDC)
with large grass carp caught in Missouri River

combined tag-recapture and age & growth information. Establishing baseline Asian carp information will aid the refuge in future management decisions.

Andy Starostka, Columbia FRO

Winter Sampling for Lake Sturgeon in Green Bay Successful

Biologists from the Green Bay Fishery Resources Office, in collaboration with a commercial fishing business, recently completed the first winter collection of lake sturgeon from Green Bay. The information collected during this study will help to estimate the population size, river of origin and distribution of lake sturgeon residing in Green Bay. This work was funded in part through the Great Lakes Basin Ecosystem Team Lake Sturgeon Committee, and is part of the basin-wide Lake Michigan Lake Sturgeon Status Assessment Project funded by the Great Lakes Fishery Trust and the Giovanni Auletta Armenise Harvard Foundation. The project is a cooperative effort between nine agencies and universities to determine the status of this species that is currently listed as threatened or endangered in 19 of the 20 states in its original range.

Using bottom-set gill nets fished under the ice in southeastern

Green Bay, Service Fishery Biologists Brian Gunderman and Robert Elliott, working in conjunction with commercial fishermen Doug Tahlman and Dan Daubner, collected data on 23 lake sturgeon during the first two weeks of March. Most of the fish captured were juveniles, total length less than 100 cm, but a few adults were collected. The genetic samples collected during this assessment and other assessments conducted throughout the year are helping to identify the status and importance of the various remnant populations inhabiting Green Bay and Lake Michigan.

Brian Gunderman, Green Bay FRO



Commercial fishermen take a genetics sample from a recently captured juvenile lake sturgeon.

Hydrology Vital to Floodplain Fish - Nathan's Lake Report Now Available

The Columbia Fishery Resources Office's report of their 2002 survey of Nathan's Lake is now available to interested parties. Columbia FRO conducted a fish survey of Nathan's Lake in August 2002. The lake is a component of Boyer Chute National Wildlife Refuge. Nathan's Lake was renovated by the U.S. Army Corps of Engineers in 1996 as part of their efforts to restore Missouri River floodplain

habitats. During the 2001 fish survey, Nathan's Lake proved to be a rearing area for young of the year bigmouth buffalo and common carp. Low Missouri River water levels in 2002 limited connectivity of Nathan's Lake to the river. This decreased connectivity may have prevented adult riverine species such as bigmouth buffalo and smallmouth buffalo from entering the lake to spawn. The majority of the fish collected in 2002 were suited more to lakes and ponds than to rivers. This report verifies that fish need a combination of habitat restoration and appropriate hydrology.

Corey Lee, Columbia FRO

Genoa National Fish Hatchery Begins Spring Fishery Operations

Fishery crews from Genoa National Fish Hatchery, Genoa, WI, began plying reaches of the Upper Mississippi River Fish and Wildlife Refuge as part of their annual fish production efforts.

These activities, which have been ongoing since the hatchery was created in 1934, involve collecting up to six species of fish for the purpose of producing eggs, fry and fingerlings for fishery projects within Region 3, as well as across the United States. In addition to familiar sport fishes such as Northern Pike, Walleye and Bluegill the facility produces other lesser known species associated with culture of threatened and endangered mussels. Several of these species, such as Freshwater Drum and Yellow Perch, are rarely if ever produced by any other federal hatchery in the Fish and Wildlife Service. Annual production of fish and eggs connected with these early spring efforts number in the tens of millions and benefit

fishery projects on National Wildlife Refuges, Tribal Trust responsibilities, fishery management projects on federal lands, and State cooperator conservation exchanges. Hatchery



-USFWS

Northern Pike brood stock collected from the Mississippi River

crews spend an average of 30-40 consecutive days on the Mississippi River every spring capturing donor brood stock of the species proposed for production in a particular year. Fish are captured in a combination of large frame and hoop nets set in selected areas of the river, and either spawned immediately or transported back to Genoa National Fish Hatchery for use as captive brood stock.

Roger Gordon, Genoa NFH

2003 Lake Winnebago Sturgeon Health Survey

Wisconsin's 2003 sturgeon spearing season opened, Feb. 8, on Lake Winnebago. This lake sturgeon fishery is a unique fishery known worldwide. The Winnebago system probably holds the largest natural sustaining lake sturgeon population in the world. They are commonly used as an egg source for reintroduction throughout North America. These ancient fish can weigh in at 160 lbs and have been found to be over 80 years old. It takes fish between seven and 10

years to reach legal spearing size (36 inches). Males typically reach sexual maturity between the ages of 13 to 15 years of age and then spawn every other year. Females reach sexual maturity between the ages of 22 and 24 years of age and then spawn every three-to-four years. Because of this slow reproductive rate and sexual maturity, the harvest rate is closely monitored. This year's harvest quotas were 400 juvenile females, or 400 mature females, or 1,300 males. Once the harvest numbers have approached 80 percent of any one of those numbers, the season comes to a close the following day. Dave Wedan from the La Crosse Fishery Resources Office, and Corey Puzach and Kelly Williams from the La Crosse Fish Health Center teamed up with Wisconsin



USFWS

La Crosse Fish Health staff Cory Puzach and Kelly Williams are assisted by Dave Wedan of the La Crosse Fishery Resources Office sampling sturgeon

Department of Natural Resources personnel to collect fish health samples from lake sturgeon harvested on the opening day of the season. A total of 60 spearers who registered their fish here with the DNR permitted Service staff to collect fish health samples. Length, weight, and spawning condition of each registered fish were also taken. Diagnostic tests are now underway at the fish health center to determine the overall health of the lake sturgeon

fishery on Lake Winnebago. The presence of disease in these fish could significantly affect this ancient fish species, along with a wide variety of other fish species in the Lake Winnebago system. Test results are entered into the Service's National Fish Health Survey data base to improve efforts in protecting, restoring and managing fish populations across the country. For more information on the services National Wild Fish Health Survey, visit the internet at wildfishsurvey.fws.gov.

Cory Puzach, La Crosse FRO

Genoa National Fish Hatchery Rears Non-Traditional Species

Sportfish are not the only species of fish now raised at the Genoa National Fish Hatchery located 4 miles south of Genoa, WI along the banks of the Mississippi. For approximately seventy years the Genoa National Fish Hatchery has reared and propagated millions of largemouth bass, walleye, and bluegill. However, due to the hatchery's increasing involvement in the propagation and release of endangered mussels such as the Higgins eye pearly mussel *Lampsilis higginsii*, many other species of fish are now being reared for the use as "mussel hosts". Many mussel species require a specific species of fish in order to reproduce. The female mussel releases the larval stage, called glochidia, which attach to the gills of a fish in order for it to complete its development. With the expansion of mussel species being propagated at the Genoa NFH, several non traditional species have to be reared. For instance blue catfish are a suspected host for the winged mapleleaf *Quadrula fragosa*. Freshwater drum sometimes called sheephead can be used for

the Higgins eye pearly mussel *Lampsilis higginsii*, the butterfly mussel *Ellipsaria lineolata*, and the washboard mussel *Megaloniais nervosa*. The monkey face mussel *Quadrula metanerva* parasitizes green sunfish as well as the flathead catfish. Some traditional hatchery fish such as largemouth bass, walleye, yellow perch, and bluegill are mussel hosts as well, and are also utilized for the mussel recovery effort.

Many new rearing spaces had to be constructed at the hatchery for the increased number of fish during the last year. In addition to the existing 19 ponds and 3 buildings used at the hatchery for past mitigation and recovery efforts, eleven circular tanks were set up to hold the many new species. Many of these “mussel fish” need to be reared over the winter to be used for the propagation efforts throughout the rest of the year. Visitors may stop by and see this diverse array of species at any time during working hours.



Lake Sturgeon, Freshwater Drum and Flathead Catfish are just some of the Non-Traditional Species cultured at Genoa National Fish Hatchery

The Genoa National Fish Hatchery is part of an ongoing recovery effort for the threatened and endangered freshwater mussels of the Upper Mississippi which includes the contributions and efforts of the Service's Ecological Services division, U.S. Army Corp of Engineers, and local state agencies.

Nick Starzl, Genoa NFH

Preparations for 6th Annual Commercial Fishers Appreciation Dinner

During the month of March, Fish and Wildlife Biologist Adam Kowalski has been busy setting up the 2003 commercial fishers appreciation dinner. Commercial trap-net fishers collect biological data from incidentally caught lake sturgeon during the fishing season for yellow perch and lake whitefish on Lake Huron. This data is used to monitor the status of lake sturgeon in Lake Huron. This year the dinner will be a pig roast at a city park in Bay City, MI. The Alpena FRO will present each fisher and their crew t-shirts with the fisher's company name and a plaque or gift certificate. Biologist Kowalski has ordered the t-shirts, purchased all the gifts, constructed plaques, and worked with the caterer to arrange the meal. This dinner gives the Alpena FRO personnel a chance to talk with the fishers about any problems or concerns they may have about the sturgeon project. The fishers also get a chance to talk with each other and the Alpena FRO personnel about project results and fishing in general. During the dinner, prizes such as framed prints, knife sharpeners, t-shirts, fish cleaning gear, and boating accessories are given away. The dinner is a great way for the Alpena FRO to thank the commercial fishers for the volunteer hours they contribute to the sturgeon project.

Adam Kowalski, Alpena FRO



Public Use

Genoa National Fish Hatchery Hosts March Friends Group Meeting

The Genoa National Fish Hatchery hosted the monthly Friends of the Upper Mississippi River Fisheries Services friends group meeting in March. Highlights of the meeting included guest speakers Kay and Russell Hively, of the Friends of the Neosho National Fish Hatchery Friends Group. Kay and Russell spoke on the benefits of having a Friends Group, how to get a group organized and described the incorporation process. Friends groups are currently a priority in the Service's



-USFWS

The Friends Group would like to thank Kay and Russell Hively for speaking at our meeting

Fisheries program, and are listed as such in the recently released Fisheries Vision Document. A group of 25 interested local citizens enjoyed fellowship, food and a dedication to the resource as they heard about Kay and Russell's experience in forming an effective and energized support group for Neosho. Their experiences will no doubt be a great help in forming an active friends group for the LaCrosse area FWS fishery

stations. The group supports the LaCrosse Fish Health Center, LaCrosse Fishery Resource Office, and the Genoa National Fish Hatchery, and recently picked its officers in December. Efforts of the group so far include forming the articles of incorporation, and an active membership committee to stimulate growth.

Doug Aloisi, Genoa NFH

New Reports Added To The Ashland FRO Web Page

The Ashland FRO's web page has received yet another update. Networking with the public to inform and share our accomplishments can take place in many fashions. The Ashland FRO web page is just one tool we use to communicate our office responsibilities and staff accomplishments.

Several new reports have been added this month; these include:

- Surveillance for Ruffe in the Great Lakes <http://midwest.fws.gov/ashland/ruffe/surv02.html>
- Minutes of the Ruffe Control Committee (2001) http://midwest.fws.gov/ashland/ruffe/ruf_min_3.html
- February Accomplishments from the Ashland FRO http://midwest.fws.gov/ashland/accom_rpts/Feb_03.html
- Whittlesey Creek NWR Activities Calendar <http://midwest.fws.gov/ashland/whitt-crk/Events.html>

Frank Stone, Ashland FRO

Lake Trout Were a Hit at the Traverse City Hunting and Fishing Expo

Fishery Biologist James Boase traveled to Traverse City, Michigan on 21 and 22 March 2003 to staff the Service's display booth at the Traverse City Hunting and Fishing Expo, an annual event held at Howe Arena. A coldwater aquarium complete with limestone substrate was used to display lake trout living in a natural setting. Specimens of exotic and native organisms from the Great Lakes were also available for visitors to handle. Approximately 400 visitors ranging in age from young children to senior citizens visited the booth during those two days. Boase answered questions from the general public and from other professionals attending the event. Most questions pertained to fisheries research and the health of the Great Lakes. The forum was an excellent opportunity for Boase to explain how the Alpena FRO is working with other Service program staff, natural resource agency biologists, recreational anglers, and commercial fishers from both Canada and the US in efforts to improve the e health of the Great Lakes. The event provided Boase an opportunity to interact with the public and other members or the Service from this region.

James Boase, Alpena FRO

Sea Lamprey Display Amazes Canadians

Staff from the Marquette and Ludington Biological Stations teamed up with staff of the Department of Fisheries and Oceans Canada (DFO) and the Great Lakes Fishery Commission to represent the Great Lakes Sea

Lamprey Management Program at the Toronto Sportsmen's Show held March 12-16 at the National Trade Centre. DFO, Commission, and Service staff worked side by side in uniform to emphasize the bi-national, cooperative nature of the program. More than 125,000 attended the show, most of them residents of Ontario. The centerpiece of the exhibit was an aquarium full of live spawning-phase sea lampreys. Visitors reacted to the squirming, toothy lampreys with a combination of fascination and disgust. Staff needed to repeatedly reassure visitors that sea lampreys do not attack humans.



-GLFC

A young child is in awe over an adult sea lamprey

Also popular features of the exhibit were a large satellite map of the Great Lakes marked with lamprey-infested streams and taxidermy mounts of lake trout and sea lampreys. Staff provided visitors with information about the history of the sea lamprey invasion and success of the control program, other aquatic invaders (zebra mussel questions were common), and Great Lakes fish populations.

Dennis Lavis, Ludington Biological Station

La Crosse FRO Assists Upper Mississippi River National Wildlife and Fish Refuge with Ice Fishing Day



-USFWS

On March 1, 2003 members from the Upper Mississippi River National Wildlife and Fish Refuge - Winona District hosted an Ice Fishing Day for about 30 1st time anglers on Lake Winona, Winona MN. Upper Mississippi Refuge staff - Winona and La Crosse Districts, and La Crosse Fisheries Resource Office (FRO) staff teamed up to teach the young anxious anglers about ice fishing. Winona District volunteers and members of the newly formed Friends of the Upper Mississippi Fishery Services, helped out as fishing guides for the children who were between the ages of about 2-10. Heidi Keuler from the La Crosse FRO presented information on ice safety and fish identification to the youthful group. Some of the topics covered included: clothing to wear, how to tell the difference between a bluegill and a crappie, and what to do if someone falls through the ice. Rob Hirschboeck spoke about

some of the laws of ice fishing, and Brian Stemper taught the mechanics of ice fishing. The patient crew of anglers was rewarded with excellent weather conditions and about 100 fish total!

Heidi Keuler, La Crosse FRO

Community Learns about Aquatic Invaders

Moosewood Nature Center in Marquette, Michigan was presented information on past, present, and future concerns regarding the sea lamprey and other aquatic nuisance species in the Great Lakes by members of the Marquette Biological Station. About 25 children and parents had a chance to view both live and preserved specimens. This up close and personal interaction gave the audience a better understanding of the significant effects these organisms have had on the health of the aquatic ecosystem as well as economic impacts to the Great Lakes. The U.S. Fish and Wildlife Service delivers a program of integrated sea lamprey control in the U.S. waters of the Great Lakes as a contracted agent of the Great Lakes Fishery Commission.

John Weisser, Marquette Biological Station

Society of Civil Engineers Tour the La Crosse Fish Health Center

The La Crosse Fish Health Center conducted a tour of its labs and offices for the Northwest Branch of the American Society of Civil Engineers in March. A physical tour of the lab facilities was given along with an overview of the many functions of a Regional Fish Health Center.

Rick Nelson, La Crosse FHC

Westby High School and Chaseburg Middle School Natural Resource Students Visit the U.S. Fish and Wildlife Service Resource Center and the Genoa National Fish Hatchery

Thirty students from Westby Area School District visited the USFWS Resource Center in Onalaska, WI and the Genoa NFH on April 2, 2003. Junior and senior high school students from Steve Huntzicker's natural resource class and four middle school students from Paul Taylor's class heard presentations from Scott Yess and Heidi Keuler (La Crosse Fishery Resource Office), Terry Ott (La Crosse Fish Health Center), Jim Nissen (Upper Mississippi River National Wildlife and Fish Refuge – La Crosse District), Tom Dahl (National Wetlands Inventory Office) and Randy Lilla, (La Crosse District Refuge Law Enforcement Officer).



Genoa National Fish Hatchery employees giving tours to local youth -USFWS

The students learned about different careers from each office at the resource center and observed equipment used by biologists and law enforcement officers. Students were given information on how education influenced the careers of the employees. The students then headed to Genoa NFH where they

learned about hatchery operation and were taken on a tour with Nick Starzl, a fishery biologist. Coaster brook trout, rainbow trout, native mussels, lake sturgeon, and the incubation of eggs were just a few things the students observed. Doug Aloisi - Project Leader, Roger Gordon – Assistant Project Leader, Dan Kumlin – Maintenance Worker and several volunteers from Genoa NFH showed the students the process of artificially spawning of Northern Pike.

Heidi Keuler, La Crosse FRO

Ashland FRO Assists with Refuge Centennial Activities

With March 14, 2003 marking the centennial year of the National Wildlife Refuge system, many activities are taking place to celebrate this historic event. The Ashland FRO is assisting with statewide and local events. Kat Hentsch has crafted a square representing our office for the State of Wisconsin Centennial Quilt. The square depicts a lake sturgeon swimming in Lake Superior and will add "a big lake" flair. Office personnel also assisted Whittlesey Creek NWR with their time capsule dedication and celebration. Joan Bratley, Kat Hentsch, Mark Dryer, Henry Quinlan, Gary Czypinski and Ted Koehler helped with the event. Mark presented our contribution to the time capsule, which consisted of our 2002 annual report, aquatic nuisance species I&E watch cards, and fish tags. Hopefully, 100 years from now, personnel at Whittlesey Creek NWR and Ashland FRO will be able to glean some forgotten knowledge from our historic accomplishments.

Ted Koehler, Ashland FRO

Sea Lamprey "Roadshow" at Centennial Open House

A display depicting sea lamprey control in the Great Lakes was part of an open house at the Michigan Historical Library recently held in Lansing, Michigan. Organized by the East Lansing Ecological Service office, the open house showcased the 100 year history of the Refuge system through a series of displays as well as other Service programs to provide a well-rounded introduction to the Fish and Wildlife Service. State of Michigan employees, organized school groups, and the public at large were among the many that enjoyed the educational nature of the displays. The U.S. Fish and Wildlife Service delivers a program of integrated sea lamprey control in U.S. waters of the Great Lakes as a contracted agent of the Great Lakes Fishery Commission.

Dennis Lavis, Ludington Biological Station

Cooperation with Native Americans

Service Biologist Co-Chairs Modeling Subcommittee Meeting for 1836 Treaty Waters

Fishery Biologist Aaron Woldt of the Alpena FRO attended and co-chaired the March 10-12th meeting of the Modeling Subcommittee (MSC) of the Technical Fisheries Committee (TFC). The primary focus of this meeting was to generate preliminary 2003 harvest limits for lake trout in 1836 Treaty waters of lakes Huron, Superior, and Michigan, although other technical matters were discussed. As stipulated in the 2000 Consent Decree, preliminary lake trout harvest numbers must be calculated by the MSC, reviewed by the TFC, and presented to the parties to the decree by March 31 each year. The 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. The MSC will complete final lake trout harvest numbers and present them to the parties by April 30th as stipulated in the Decree. Biologist Woldt, along with Ji He of the Michigan Department of Natural Resources, presented an update of the status of northern Lake Huron (MH-1 and MH-2) lake trout stock assessment models, model diagnostic output, and preliminary 2003 lake trout harvest limits. 2003 Lake Huron preliminary lake trout harvest limits increased substantially from 2002 levels due to declining sea lamprey mortality rates and increases in stock biomass due to

decreasing mortality and increased stocking levels. These preliminary limits were presented to the TFC for review on March 26th. In addition to performing model analyses, biologist Woldt also ran the MSC meeting ensuring all agenda items were discussed and kept meeting minutes. A preliminary draft of the March 10-12th MSC meeting minutes was mailed to MSC members for review.

Aaron P. Woldt, Alpena FRO

Ashland FRO 2003 Circle of Flight Partnerships

Through the U.S. 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 on fish and wildlife habitat restoration projects. Each year, a portion of our PFWP funding is allocated to assist with funding on Tribal CoF projects. This year, the Ashland FRO will provide supplemental funding on three new habitat restoration projects. 1) We will assist the Forest County Potawatomi Community in the restoration of a 5-acre wetland site that has been negatively impacted by nearby development. 2) In partnership with the Lac Courte Oreilles Band, we will help to enhance and protect a 232-acre wild rice wetland. 3) With the Oneida Tribe we will assist with a wildlife habitat restoration project on an 80-acre site.

Ted Koehler, Ashland FRO

Tribal Wildlife Grant Programs Under Development

Nationally, the Service will administer two new grant programs for Native American Tribes in FY 2003. The State and Tribal Wildlife Grants program provides \$5 million of FY 2002 and 2003 funds (a total of \$10 million) to establish a competitive grant program for federally recognized Tribes, for the development and implementation of programs for the benefit of wildlife and their habitat, including species that are not hunted or fished.

The Service has also dedicated \$4 million of the amount appropriated for the Landowner Incentive Program in FY 2003 to be available for matching, competitively awarded grants to Indian Tribes for landowner incentive programs that provide technical and financial assistance, including habitat protection and restoration, for the protection and management of habitat to benefit Federally listed, proposed, or candidate species, or other at-risk species.

Mark Dryer continues to participate on the National Committee charged with developing and delivering these Tribal Wildlife Grants programs. There are 562 Tribal governments, each a governmental sovereign recognized by the United States, who are eligible for this grant funding.

Mark Dryer, Ashland FRO

Technical Fisheries Committee Approves Coho Stocking Proposal

On March 4 the Technical Fisheries Committee (TFC) convened a conference call to discuss a coho salmon stocking project proposed by the Michigan Department of Natural Resources (MDNR) for Lake Superior. Consistent with terms of the 2000 Consent Decree, parties proposing new fish stocking initiatives or making significant changes to existing stocking programs in 1836 Treaty waters are required to provide the proposal for review and approval by the TFC. The proposal calls for the reestablishment of coho salmon stocking in the Munising Bay area of Lake Superior to provide additional recreational fishing opportunities in the bay. A four-year stocking program will be evaluated relative to its effectiveness in restoring a self-sustaining fishery in Munising Bay. Although some concerns were raised relative to possible impacts to tribal commercial fishing and coaster brook trout restoration efforts, the parties reached consensus that allows the MDNR to move forward with the program. The conference call was coordinated by Alpena FRO Project Leader McClain, who serves as chair of the TFC. Participants in the call included representatives from MDNR, 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, Little Travers Bay Band of Onawa Indians and the Service. *Jerry R. McClain, Alpena FRO*



Tribal cooperation is a high priority for the Fish and Wildlife Service. In this photo, personnel from Neosho NFH along with our Tribal partners stock native lake sturgeon in White Earth Lake as part of a restoration plan.

Leadership in Science and Technology

U.S. Fish & Wildlife Service
Great Lakes - Big Rivers
Fisheries - Region 3

Events Calendar • Highlights (pdf, 1.2MB) • Fishery Offices

Overview

Windows in Time

Fisheries Program Vision

- Partnerships and Accountability
- Aquatic Species Conservation and Management
- Aquatic Habitat Conservation and Management
- Leadership in Science and Technology
- Cooperation with Native Americans
- Workforce Management
- Public Use

Species We Work With

Activities by State

USFWS Regions • Who We Are

USFWS Home Page • Region 3 Home Page • Fisheries.FWS.gov

There's A New Fisheries Web Site in the Great Lakes and Big Rivers Region

A new look and more information were added to the Fisheries Division web page in Region 3. The site has information on fishery programs, responsibilities, and activities in the Great Lakes and Big Rivers Region. The site is structured in alignment with the Fisheries Program Vision that was implemented in early 2003. Some interesting features on the site include "Highlights" of recent fishery activities, information on the native, threatened and endangered, and aquatic nuisance "Species We Work With", and downloadable fishery fact sheets and brochures on the "Resource Material" link. Anjanette Bowen of the Alpena Fishery Resources Office designed the site with assistance from Region 3 regional and field fishery offices. Check it out at <http://midwest.fws.gov/fisheries>.

Anjanette Bowen, Alpena FRO

Chemosterilization of Male Sea Lampreys, *Petromyzon marinus*, does not Affect Sex Pheromone Release

A recent publication in the *Canadian Journal of Fisheries and Aquatic Sciences* reports that the production of sex pheromones in male sea lampreys is not affected by the sterilization process. Males are sterilized by the U.S. Fish and Wildlife Service and released in the Great Lakes as an alternative control to sea lamprey populations. The U.S. Fish and Wildlife Service delivers an integrated program of sea lamprey management in U.S. waters of the Great Lakes as contracted agent of the Great Lakes Fishery Commission. It has been demonstrated that spermiating males release a sex pheromone that attracts ovulating females. The authors demonstrated that sterilized, spermiating males also released the pheromone and attracted

females. These results are important because sterilized males must be fully competitive with the resident population of males for the technique to reduce reproductive success. This also suggests that techniques might be developed to enhance pheromone production in sterilized male lampreys that would attract females more effectively than resident males.

Michael Twohey, Marquette Biological Station

Fish Host Test Results Inconclusive for Winged Mapleleaf

The winged mapleleaf mussel (*Quadrula fragosa*) is a federal-listed endangered species that exists only as a remnant population in a 20-km reach of the lower St. Croix River bordering Minnesota and Wisconsin. One of the primary factors identified by the Winged

Mapleleaf Recovery Team as limiting this population is a lack of knowledge of the mussel's life history. Today more is known about the winged mapleleaf reproductive cycle (e.g., gravidity peaks early in autumn) than when the species was listed in 1991. However, one of the most critical pieces of life history information that remains unknown and still poses a serious obstacle for recovery efforts is identification of the fish species that this mussel's parasitic larvae require as a host to successfully transform into free-living juveniles. Researchers at the University of Minnesota have annually conducted long-term (3 to 6-month) laboratory tests since autumn 2000 to determine a suitable host fish for the winged mapleleaf, but none has yet been identified.

The La Crosse FRO staff worked cooperatively with mussel experts at the U.S. Geological Survey's

Upper Midwest Environmental Sciences Center (UMESC) in La Crosse, Wisconsin to conduct additional laboratory fish host tests for the winged mapleleaf at this well equipped aquatic research facility during autumn 2002. This initiative was also supported by an interagency team of divers who searched the St. Croix River reach inhabited by winged mapleleaf to recover gravid females (i.e., containing larvae), and by fish culturists at the Genoa National Fish Hatchery and the UMESC who supplied five lots of healthy fish for testing. Just one gravid female winged mapleleaf was collected by divers during their 3-week autumn search period with inconclusive results. Continued interagency collaboration is recommended to resume fish host testing at the UMESC in 2003 under a study design similar to that used in 2002, provided that a larger number of viable glochidia are collected from more than one female mussel and additional fish culture practices are taken to limit the possible introduction of unwanted parasites and disease organisms into the test system.
Mark Steingraeber, La Crosse FRO

Endangered Mussels Arrive at Genoa National Fish Hatchery

Whether you notice the willows in bloom, observe the high flocks of geese winging north, or hear the spring peepers calling frantically from dusk 'til dawn, the crew at Genoa National Fish Hatchery know spring has finally sprung with the arrival of the year's first gravid mussel to the facility. This annual event is the midpoint of a yearlong process to help recover threatened and endangered freshwater unionids in the Upper Mississippi River system. Planning



Higgins' eye pearly mussel is an endangered species cultured at Genoa National Fish Hatchery for the arrivals began approximately 1 year prior with the spawning of wild and captive fish for the production of the thousands of host fish required to carry out the complicated life cycle of these organisms. Nine species of fish are currently being propagated at the hatchery in expectation of multiple restoration and recovery projects in four states in Region 3 in the coming year. Several species of state and federally listed species of mussels will be propagated on the facility during 2003, with special emphasis on recovery efforts for the federally endangered Higgins' eye Pearly Mussel. The recent arrival of 21 gravid female Higgins' eye's mark the beginning of the annual multi-agency effort to bolster threatened populations of this mussel in the upper Mississippi River, as well as reintroduce this mussel to areas of the watershed where it has been extirpated. These first mussels are the vanguard of scores of mussels scheduled to contribute larvae at the facilities mussel propagation unit during the spring and summer of 2003. It is hoped that the hundreds of thousands of juvenile mussels produced at the hatchery will help halt the drastic downward population trend in the regions

river systems brought about by habitat loss, invasive species, and water use practices.

Roger Gordon, Genoa NFH

Volunteer Brings Web Development Skills to Columbia FRO

When Columbia FRO put a request on the University of Missouri's jobs web page for a volunteer to put together our station's webpage we had no idea the response we'd receive. Numerous students majoring in fields such as computer programming, journalism, and business responded to the announcement. Many were willing to produce the website in exchange for adding to their portfolio. The selected candidate, Sandra Licklider, was a rare find. Sandy came to us with a degree in Technical Computing, the ability to program computers in several languages, and eight years of webpage experience. She'd recently left the corporate world and was looking to work with government and non-profit groups on their web development projects. Sandy will be working six hours per week in our office. We hope to have our new and improved webpage up by summer.

Joanne Grady, Columbia FRO

Assessment Models Updated for 1836 Treaty Waters of the Great Lakes

Each year the modeling subcommittee (MSC) of the Technical Fisheries Committee (TFC) is required to generate recommended safe harvest limits for the lake trout fisheries in the 1836 treaty waters of Lakes Superior, Michigan, and Huron by the 2000 Consent Decree. John Netto from the Green Bay Fisheries Office worked closely

with Jory Jonas and Shawn Sitar of the Michigan Department of Natural Resources to update the Statistical Catch at Age (SCAA) assessment models in the Michigan waters of Lakes Michigan and Superior. Each model is designed to represent a region in each lake consisting of one or more management units. Four separate assessment models are used in Lake Michigan and 3 in Lake Superior. Updating the models consists of compiling the necessary data, preprocessing certain input quantities, running the models, interpreting output, and performing model diagnostics.

The preliminary results from this year's assessments were presented at the MSC meeting March 10-12 in Roscommon, MI. At this meeting, the modelers present what changes they made to the models, describe any additional analyses, and present this year's preliminary results. The committee, which consists of state, tribal, and federal representatives, provides review on the methods used and determines what alternatives the committee deems are the best available approach for this year's assessment. Chuck Bronte and John Netto represented the Green Bay office at the meeting, and provided comments and suggestions regarding the modeling process for this year and needs for further research.

John Netto, Green Bay FRO

Spring Viremia of Carp, A New Threat

Members of the La Crosse Fish Health Center staff traveled to Guttenberg, Iowa on April 3rd to collect fish health samples for Spring Viremia of Carp (SVC) testing. Several staff from the

Iowa Department of Natural Resources (DNR) provided



-USFWS

Cory Puzach from the La Crosse Fish Health Center takes a brain sample from carp for Spring Viremia of Carp virus check

assistance with the collection of fish. SVC is a viral disease which was recently discovered in the United States but is commonly found in Europe, Asia, and the Middle East. SVC was isolated from a commercial Koi farm in North Carolina and also from wild carp population in Cedar Lake, Wisconsin in the spring of 2002. In the fall of 2002, Wisconsin DNR assisted by staff from the La Crosse Fish Health Center, Iowa DNR, Wisconsin Veterinary Diagnostic Laboratory, Minnesota DNR, La Crosse Fishery Resources Office and several private veterinarians from Wisconsin, collected over 100 blood samples from pool 10 of the Mississippi River. Serology results showed the presence of SVC antibodies which indicates fish had been exposed to the virus.

Cory Puzach, La Crosse FHC

Standard Operating Procedures for the Application of Lampricides Revised

The manual, *Standard operating procedures for application of lampricides in the Great Lakes Fishery Commission integrated management of sea lamprey (Petromyzon marinus) control program*, has undergone review

and revision by the Lampricide Control Task Force Standard Operating Procedures sub-group. This sub-group includes representatives of the U.S. Fish and Wildlife Service, Department of Fisheries and Oceans Canada, Great Lakes Fishery Commission, and U.S. Geological Survey. The manual describes the procedures that must be followed by all groups that apply lampricides for the control of sea lampreys in the U.S. and Canada. Notification of revision and copies of revised sections have been distributed to all recipients.

Terry Morse, Marquette Biological Station

Great Lakes Fish Stocking Database Updated and Online

The Green Bay Fishery Resources Office has updated the Great Lakes Fish Stocking Database through 2002. The database resides on a server provided by the Great Lakes Fishery Commission. The database can be viewed at <http://www.glfc.org/fishstocking/index.htm>.

The database is a continuation of a project designed to provide fishery managers, scientists and other interested parties with access to a centralized, comprehensive database of all fish stocked into the Great Lakes from artificial propagation. In 1997, the Commission's Council of Lake Committees requested the Green Bay FRO assume the responsibility of enhancing and maintaining the stocking database. All data are sent electronically from federal, state, provincial and tribal agencies to the Green Bay FRO and then reformatted and added to the database.

Jessica Richards, Green Bay FRO

Aquatic Habitat Conservation and Management

Dallas County to Replace Low Water Crossings to Benefit Threatened Niangua Darter

Columbia FRO has been working in partnership with Missouri Department of Conservation (MDC), Dallas County, Federal Emergency Management Agency, State Emergency Management Agency, and our Columbia Missouri Ecological Services Office to replace damaged low water crossings in Thomas and Greasy Creeks. The new crossing design provided by MDC engineers will allow fish such as the Threatened Niangua Darter to freely move up and downstream. Funds for the crossing replacements are coming from FEMA's 2002 Flood Disaster Declaration, the Service's Fish Passage Program, and MDC's Stream Stewardship Program. Construction is expected to occur this summer.

Joanne Grady, Columbia FRO



Niangua Darter

-USFWS

Replacement of low water crossings will benefit the threatened niangua darter by allowing this fish to freely move to preferred habitat within its historic range.

Workforce Management

Genoa National Fish Hatchery hires Mussel Propagation Biologist

Genoa National Fish Hatchery is pleased to welcome Tony Brady as their new Mussel Propagation Biologist. Tony joined the U.S. Fish and Wildlife Service in March of 2003. Tony comes to us from Tennessee Technological University where he obtained his Master's degree in 2000, and was employed as a Research Assistant for the Tennessee Cooperative Fishery Research Unit for two and one-half years. Tony's work in Tennessee centered on mussel propagation and culture research utilizing fish hatcheries makes him a great fit for Genoa and our Higgins' Eye Pearlymussel project. Genoa's success at producing Higgins' Eye Pearlymussels is opening the door for additional mussel projects. An experienced mussel biologist was needed to expand our ongoing mussel culture program. Seventy percent of the native freshwater mussels in North America are either already extinct or quickly being added to the endangered species list. Captive propagation and culture has long been cited as recovery tool for these declining populations. However, information on host fish requirements and juvenile habitat requirements is lacking for many species. Having an experienced biologist working daily at the Genoa National Fish Hatchery, will expedite the collection of this valuable information, and aid in the future recover of many endangered species.

Doug Aloisi, Genoa NFH

Career Pathway Night

Assistant Project Leader Tracy Hill participated in the Career Pathway Night sponsored by Alpena Community College and AMA Educational Service District. The purpose for the event was to introduce high school and early college students to careers that are available. Dr. Hill delivered a PowerPoint presentation to participants describing fishery career opportunities with the Fish and Wildlife Service. A variety of other careers were presented during the evening including conservation officer, environmental consultant, forester, geologist, and meteorologist just to name a few. The event was attended by approximately 65-70 students and parents from the surrounding area.

Tracy D. Hill, Alpena FRO



-USFWS

Annual Career Day for Northland College Students

Annual Career Day for Northland College Students

The Annual Career Day for Northland College Students was held Feb. 13, 2003 in Ashland WI. The Career Day participants included more than 50 Federal, State, and Tribal agencies and community businesses. Ashland

FRO participants, Gary Czypinski and Ted Koehler, provided 42 students with general information regarding the US Fish and Wildlife Service, and also solicited employment applications for summer positions that are needed at the Ashland FRO. Northland College specializes in environmental education, and Career Day is a great opportunity for science and natural resource students to network with professionals from a variety of environmental fields in positions that the students would like to explore.

Gary Czypinski, Ashland FRO

Volunteer Banquet a Huge Success

The FY 2002 Volunteer Banquet was held for the La Crosse District of the Upper Mississippi River National Wildlife & Fish Refuge and the La Crosse Fishery Resources Office. The event was held on March 14th, the 100th Birthday of the Refuge System, which added to this special event. Attendance was at a record level with approximately 90 people in attendance. Everyone enjoyed barbecued fish and chicken, and door prizes were also given out. Ann Blankenship provided the entertainment with an expertly produced slide show to music, which featured incredible natural resource photos. Fishery volunteers contributed over 1,300 hours to the La Crosse FRO; 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 would like to recognize Don Schroeder (Onalaska, WI) as the volunteer who contributed the most hours in 2002 with a total of 390 hours.

Scott Yess, La Crosse FRO

Geographic Information System (GIS) Workstation Established at Ashland FRO

In January, Jonathan Pyatskowitz and Frank Stone attended GIS training at NCTC. This course provides the springboard to implement GIS applications for fisheries programs at the Ashland FRO. A pilot project currently being developed will help make decisions at the Whittlesey Creek National Wildlife Refuge as it works to restore Coaster Brook Trout and habitat in the Whittlesey Creek watershed. GPS will be used to mark potential spawning habitat, erosion zones that have potential for restoration and stabilization, and other management actions that will favor coaster brook trout and habitat restoration work. These points will then be loaded into the GIS project. GIS compatible maps for the refuge have been acquired with the help of Mary Balogh from the regional office.

Jonathan Pyatskowitz, Ashland FRO

Career Day at Fairview High School

Alpena FRO Fish and Wildlife Biologist Heather Enterline participated in Fairview High School's bi-annual Career Day on March 12. Enterline spoke to approximately 30 students interested in natural resource professions about careers available through the U.S. Fish and

Wildlife Service. Students seemed very interested, and asked a number of good questions about fishery biology and law enforcement. Several students expressed an interest in the STEP and SCEP programs.

Heather Enterline, Alpena FRO

Fish Culturists Receive Fish Health Training

The La Crosse Fish Health Center presented in cooperation with the National Conservation Training Center a one week training course, "Introduction to Fish Health Management, in Onalaska, Wisconsin. Seventeen attendees from all areas of the fisheries community were present including four tribal fish culturists, two private culturists, as well as federal and state culturists from five states. This has proven to be very popular and gives the student practical lab experience in diagnostics, virology, parasitology, drug therapy, microscope use, information on shipping samples to a lab and proper lab safety and technique. To date the La Crosse Fish Health Center staff have either hosted or presented this course at alternate locations 34 times to over 600 students in fish health management.

Becky Lasee, La Crosse FHC

Ludington Makes Jordan River NFH "Defensive"

Tim Sullivan, National Safety Council certified Defensive Driving Course (DDC) instructor and Service employee of the Ludington Biological Station, was summoned to the Jordan River National Fish Hatchery to provide the entire staff Defensive Driver training. The eight-hour National Safety Council course included class



-GLFC

Service employee, Tim Sullivan, explains what Defensive Driving means

interaction and discussion, videos, and written scenario activities. Personnel in attendance included permanent and temporary staff, volunteers, and the captain and chief engineer from the fish distribution vessel M/V Togue. A written final exam was administered upon class conclusion and all employees received a passing grade. In the past, Tim has conducted DDC training for other Service and USGS offices as well as annually training permanent and temporary staff of the sea lamprey control program in Ludington.

Dennis Lavis, Ludington Biological Station

Andrew Starostka takes on Collateral Duty Safety Officer Duties

Andy Starostka accepted the appointment to Collateral Duty Safety Officer in mid March. Andy is currently reviewing our station safety plan and arranging Defensive Driving training for the staff. He will be going to the week long OSHA safety training later this summer.

Andy Starostka, Columbia FRO



Great Lakes - Big Rivers Regional Fisheries Offices

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

Illinois

Carterville Fishery Resources Office
9053 Route 148, Suite A
Marion, Illinois 62959
Charles Surprenant (*chuck_surprenant@fws.gov*)
618/997-6869

Large Rivers Fisheries Coordination Office
4469 48th Ave. Ct.
Rock Island, IL 61201
Jerry Rasmussen (*jerry_rasmussen@fws.gov*)
309/793-5811

Michigan

Alpena Fishery Resources Office
Federal Building; 145 Water Street
Alpena, MI 49707
Jerry McClain (*jerry_mcclain@fws.gov*)
989/356-3052

Great Lakes Coordination Office
2100 Commonwealth Blvd.
Ann Arbor, MI 48105
Dale Burkett (*dale@fws.gov*)
734/662-3209

Jordan River National Fish Hatchery
6623 Turner Road
Elmira, MI 49730
Rick Westerhof (*rick_westerhof@fws.gov*)
231/584-2461

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

Marquette Biological Station
1924 Industrial Parkway
Marquette, MI 49855
Gary Klar (*gerald_klar@fws.gov*)
906/226-6571

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

Missouri

Columbia Fishery Resources Office
608 East Cherry
Columbia, MO 65201
Jim Milligan (*jim_milligan@fws.gov*)
573/876-1909

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

Wisconsin

Ashland Fishery Resources Office
2800 Lake Shore Drive East
Ashland, WI 54806
Mark Dryer (*mark_dryer@fws.gov*)
715/682-6185

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

Green Bay Fishery Resources Office
2661 Scott Tower Drive
New Franklin, WI 54229
Mark Holey (*mark_holey@fws.gov*)
920/866-1717

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

LaCrosse Fish Health Center
555 Lester Avenue
Onalaska, WI 54650
Richard Nelson (*rick_nelson@fws.gov*)
608/783-8441

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



Fish Lines

Region 3, Great Lakes/Big Rivers

March 2003 Vol. 1 No. 1

U.S. Fish & Wildlife Service

Region 3

Division of Fisheries

1 Federal Drive

Ft. Snelling, MN 55111

Phone: 612/713-5111

Front Cover: USFWS photo; Rob Elliot (USFWS Green Bay FRO), Tom Meronek (Wisconsin DNR), and Greg Bunker (Stockbridge Munsee Indian Community) examine an adult lake sturgeon

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

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

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