



Fisheries & Aquatic Resources Program

Fish Lines

**La Crosse
FHC 2011 -
A Year in Review**

**Mayflies
Go MIA**

Fish Lines

Fisheries & Aquatic Resources Program - Midwest Region

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

The vision of the Service's Fisheries Program is working with partners to restore and maintain fish and other aquatic resources at self-sustaining levels and to support Federal mitigation programs for the benefit of the American public. Implementing this vision will help the Fisheries Program do more for aquatic resources and the people who value and depend on them through enhanced partnerships, scientific integrity, and a balanced approach to conservation.

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Results mixed to predict burrowing mayflies emergence at study sites along the Upper Mississippi River.

BY MARK STEINGRAEBER, LA CROSSE FWCO



-USFWS

The small circles on these fatmucket mussels are growth rings showing the initial size of these fatmuckets when they went into the Mobile Aquatic Rearing Station, which uses culture water from the Mississippi River.

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

fish lines

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ASSISTANT REGIONAL DIRECTOR
Todd Turner (acting)

To submit suggestions or comments, e-mail
david_radloff@fws.gov

U.S. Fish & Wildlife Service, Midwest Region
Fisheries & Aquatic Resources Program
1 Federal Drive, Ft. Snelling, MN 55111
Phone: 612/713-5111



-USFWS

Dustin Hart sets a trap net for the Wild Fish Health Survey of Pendill's Lake, the water supply for Pendill's Creek National Fish Hatchery.

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La Crosse FHC 2011 - A Year in Review

BY SARAH LEIS, LA CROSSE FHC

The fiscal year 2011 was another record breaking year for the La Crosse Fish Health Center (FHC). The Center received over 16,000 fish for disease surveillance, representing 275 cases. The fish were from National Fish Hatcheries, State Fish Hatcheries, Tribal Fish Hatcheries, Wild Fish Surveys, and other federal and private facilities.

In addition to routine pathogen surveillance, La Crosse FHC provided diagnostic services throughout the year to National Fish Hatcheries, State Fish Hatcheries, a University and various wild fish locations. Diagnostic services occur when FHC staff is contacted or knows about sick or dead fish at a location. La Crosse FHC staff then screens the fish

beyond routine inspection, to identify if a disease pathogen appears to be the cause of the problem. In total, 25 cases were delivered to La Crosse FHC that required additional resources and time.

This year was the year of bacterial infections. Of the diagnostics received, a majority of them appeared to be the result of various bacterial pathogens. Few of the diagnostic exams received were a result of



-USFWS

(Lt. to rt.) Dustin Hart, Curtis Slagle and Lucas Purnell take fish health samples during a Wild Fish Health Survey of Pool 8 of the Mississippi River.

The fish were either delivered to the La Crosse FHC to be screened for target pathogens, or FHC staff visited the facilities and wild fish locations to collect the fish tissue samples. Overall, the majority of the cases (86%) were free of fish pathogens. Only 44 cases (16%) were positive for a target virus or bacteria.

a virus or a parasite. Beyond routine and diagnostic services, the La Crosse FHC has provided parasite identification services to other fish health centers, fish hatcheries, students, and as part of drug efficacy studies. This year, parasites were identified from 11 states. Staff from La Crosse FHC enjoys identifying parasites and the diagnostic cases because it challenges us with new situations and requires us to continually advance our skills.

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

Mayflies Go MIA

BY MARK STEINGRAEBER, LA CROSSE FWCO

Results of year-long efforts to continue validating models that describe the thermal development of burrowing mayflies and predict their dates of peak emergence were mixed at study sites along the Upper Mississippi River (UMR) in 2011.



-WI DNR

Hexagenia limbata

In Pool 14 near the Quad Cities, the peak emergence of *Hexagenia bilineata* (*H. bilineata*) mayflies occurred July 1, just one day prior to the model-predicted date for this site. Meanwhile, unusually high river stages led to relatively cooler water temperatures throughout the summer in several upstream pools. Consequently, the peak emergence of *H. bilineata* mayflies was not expected until August 14 near Hastings, Minnesota (Pool 2) and August 24 near La Crosse, Wisconsin (Pool 8). But these and other dates came and went without noteworthy reports of a *bilineata* emergence from a network of keen observers. However, skies near La Crosse were inundated with functionally similar *Hexagenia limbata* mayflies that emerged night after night during mid-summer from the UMR and several nearby tributaries.

The relative absence of the dark-colored, *H. bilineata* mayflies at many locations in 2011 was likely a result of widespread hypoxic conditions (i.e., a period of extremely low dissolved oxygen levels) that persisted for several days during July and August 2010 near the sediment-water interface at back-water sites typically inhabited by these burrowing mayfly nymphs.

For example, many *H. bilineata* nymphs which hatched from eggs laid in 2010 (by adults that emerged *en-masse* from Pool 8 on July 5 of that year) likely perished later that summer in numerous back-water lakes with little hydraulic connectivity to the river, when dissolved oxygen concentrations here dipped below 1 mg/L for several consecutive days.

Although *H. limbata* nymphs that were here at this time likely perished as well, this yellow-colored species more commonly inhabits the lower reaches and mouths of tributaries where severe oxygen stress is less common.

Harsh weather during the winter of 2010-11 also led to the formation of unusually thick layers of ice and snow cover in some backwaters that may have caused hypoxic winterkill conditions as well.

Monitoring the annual strength of mayfly emergences is an efficient tool for assessing the ecological health of the Upper Mississippi River. Working with partners, model validation and mayfly emergence monitoring will continue for years to come.



-WI DNR

Many mayfly nymphs likely suffocated and died in duckweed-covered backwaters of the Upper Mississippi River during the summer of 2010.

The relative absence of the dark-colored, *H. bilineata* mayflies at many locations in 2011 was likely a result of widespread hypoxic conditions that persisted for several days during July and August, 2010 near the sediment-water interface at back-water sites typically inhabited by burrowing mayfly nymphs.

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

Partnership Yields Dedication, Growth

BY HEIDI KEULER, LA CROSSE FWCO

The Fishers & Farmers Partnership for the Upper Mississippi River basin supports landowner-led, voluntary conservation projects that add value to Midwest farms while restoring aquatic habitats and native fish populations. In March 2010, it was recognized as one of 17 Fish Habitat Partnerships in the National Fish Habitat Action Plan (NFHAP).

Fishers & Farmers held its annual Steering Committee meeting November 1-2 in Dubuque, Iowa. At the outset, Martin Konrad (Iowa Department of Natural Resources) and Roger Wolf (Iowa Soybean Association) stepped down as committee co-chairs. Both acted above and beyond the call of duty during the partnership formation and strategic planning processes. We appreciate the time and resources they contributed, and continue contributing, to the partnership.

Fishers & Farmers subsequently welcomed its two new Steering Committee co-chairs: Chris Vitello (Missouri Department of Conservation - Fisheries

Division Chief) and Steve Taylor (Missouri Agribusiness Association Executive Director). We

are excited to continue moving forward with these representatives from the natural resource and agricultural communities.

Meanwhile, the Steering Committee also welcomed two new members: Rich Sims (State Conservationist for the Natural Resource Conservation Service in Iowa) and Sara Strassman (American Rivers). Please help Fishers & Farmers welcome them both as we move forward with the NFHAP mission “to conserve the nation’s fish and aquatic communities through partnerships that foster fish habitat conservation and improve the quality of life.”

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

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

Alpena and Green Bay FWCOs partner with USGS on Lake Huron Forage Survey

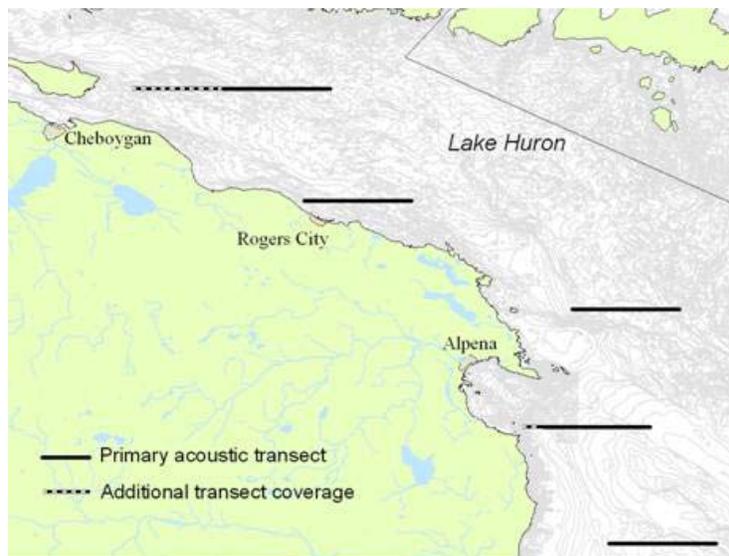
BY STEPHEN LENART, ALPENA FWCO

Staff from the Alpena and Green Bay Fish and Wildlife Conservation Offices (FWCO) and the crew of the vessel *M/V Spencer F. Baird* participated in the 2011 pelagic forage fish survey on Lake Huron during September, a new endeavor for the Alpena FWCO. The Lake Huron forage survey provides critical information to the management and research communities regarding the status of key prey fish stocks, including exotics, such as alewife and rainbow smelt, and native species, such as bloater chub and lake herring.

The U.S. Geological Survey (USGS) Great Lakes Science Center is the lead agency on the survey, which incorporates acoustic technology to estimate fish densities and trawling to determine species and size composition. The survey design included 25 primary acoustic transects, covering five distinct “strata” across the Lake Huron basin: Main Basin east, west, and south, Georgian Bay, and the North Channel. The acoustic transects are conducted at night, when target fish species are suspended in the water column, making them amenable to detection by acoustics.

The *Spencer F. Baird* was utilized to conduct five 20-kilometer primary acoustic transects, all in the

western main basin, during September 8-17. Additional coverage occurred at two transects (nearest the ports of Cheboygan and Alpena, Michigan). Nine mid-water trawls were conducted, with young-of-the-year rainbow smelt being the most numerous species captured.



Map of northwest Lake Huron depicting acoustic transect locations covered by the USFWS research vessel *Spencer F. Baird* during September 2011

Data collected by the Fish and Wildlife Service will be combined with those collected by USGS to calculate lake-wide biomass estimates for key forage species. This collaboration supports the Alpena FWCO's dedication to improve long-term relation-

ships with partner agencies, with a particular emphasis on coordinated fisheries management activities specified in the Lake Huron Fish Community Objectives.

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

Volunteering in Saratoga

BY KAY HIVELY, FRIENDS OF NEOSHO NFH

When the Saratoga National Fish Hatchery (NFH) sent out an appeal for help with their annual spawning, the call was heard in Neosho, Missouri. Dave Hendrix, manager of the Neosho NFH, contacted members of the hatchery's Friends group about volunteering in Wyoming. My husband Russell and I, along with Don and Denise Jessen, answered the call. Russell is president of the *Friends of the Neosho National Fish Hatchery* and Don serves on the board. Our purpose is to first support the local hatchery and then give any help we can to other hatcheries.

After contacting Saratoga NFH manager Lee Bender and setting a date, we packed our work clothing, our civilian clothes, our bedding, and some food and made the nearly 1,100 mile journey from Missouri to Wyoming. Bender allowed us to use an empty staff house and we were grateful for heat, lighting, kitchen facilities—and no motel bill.

We arrived on Monday, October 10th. We bought our food at the local grocery store, had dinner at the Hotel Wolf Restaurant and then settled in for the night. The following morning, we reported to work. And work we did. None of us had ever done hatchery work (we were three retired school teachers and one writer) but we did our best. We were joined by two other women—an employee and a volunteer with the Fish and Wildlife Service.

On Tuesday, our job was to help spawn about 100 brown trout. One of our Missouri team donned waders and spent the entire morning in a raceway, with water over his waist, coaxing eggs from female trout. Another member carried bucket after bucket of eggs to a neighboring building where the other two helped rinse the eggs and put them in an iodine solution for disinfection.

We were very happy that on our first day, we collected 549,648 brown trout eggs. But we soon learned that Tuesday was just a warm up. On Wednesday, we would be faced with doing, not 100 trout, but a staggering 300. And we thought we were tired Tuesday night.

Wednesday dawned and we faced 300 lake trout. Again, we worked “squeezing” eggs out of fish, cleaning and disinfecting them, and then placing them in PVC “jars.” They will be kept at Saratoga until they are shipped out to National Fish Hatcheries across the country. Our total for Wednesday was 2,263,389 lake trout eggs. We were told it was a great day, and rarely a crew gets that many eggs in one day. Our total for two days of volunteer work was 2,813,037.

Our trip to the Saratoga NFH, as well as our few visits into the City of Saratoga, were most enjoyable. Our only regret is that the Saratoga NFH doesn't have a Friends Group.” We hope that one day, the people in the area will see the value of the hatchery and its contribution to our country and reach out to help.

Ideally, a Friends group will form for the Saratoga NFH. Whether the Friends help with the spawning, with school group tours, or even with such things as helping clean and maintain the facility, the four people from Neosho will vouch—it is a good thing to do!



-USFWS

Volunteer Denise Jessen uses a turkey feather to remove bad eggs and debris from a bucket of fresh brown trout eggs. The use of a turkey feather for this work is traditional and the Missouri volunteers brought their own feathers.

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

Juvenile Lake Sturgeon Trawling Assessments on the St. Clair River

BY JUSTIN CHIOTTI, ALPENA FWCO

This fall, biologists Ashlee Horne, James Boase and Justin Chiotti from the Alpena Fish and Wildlife Conservation Office (FWCO), in cooperation with the Michigan Department of Natural Resources (DNR) and U.S. Geological Survey (USGS), conducted 59 bottom trawls in the lower St. Clair River. The survey was designed to assess the distribution and abundance of juvenile lake sturgeon in the river. Additionally, the survey will serve as pre-assessment data, monitoring the impacts of an artificial fish spawning reef that was constructed in the Middle Channel of the river during the fall of 2011.



-USFWS

A young-of-the-year lake sturgeon is captured during a fishery assessment on the lower St. Clair River.

The St. Clair River contains one of the largest lake sturgeon populations in the Great Lakes; however, the early life history strategies of lake sturgeon in this system are not well understood. As a result, the Fish and Wildlife Service, USGS, and Michigan DNR are trying to gain a better understanding of larval and juvenile habitat use, distribution and abundance in this system. Sub-adult lake sturgeon (less than 700 millimeters) are frequently encountered during setline assessments conducted by the DNR while juvenile sturgeon (greater than 700 millimeters) are rarer. Young-of-year lake sturgeon have not been captured in the lower St. Clair River in previous surveys.

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

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.

Assessments began on September 26th and continued until October 24th. Effort was distributed between three different sampling locations: the North Channel downstream of a known lake sturgeon spawning site “Mazlinkas” (116 minutes of effort), the North Channel upstream of the lake sturgeon spawning site (126 minutes of effort), and in the Middle Channel downstream of the proposed artificial reef (96 minutes of effort).

A total of ten lake sturgeon were collected: six adults, two juveniles and two young-of-year. No juvenile lake sturgeon were captured in the Middle Channel. One juvenile lake sturgeon was captured near Decker’s Landing downstream of the lake sturgeon spawning site in the North Channel, while the other two juveniles and young-of-year were collected approximately 1.5 km upstream of the spawning site in the North Channel.

Other fish species captured included channel catfish, common carp, emerald shiner, log perch, northern hogsucker, rainbow smelt, rock bass, round goby, sand shiner, shorthead redhorse, smallmouth bass, spottail shiner, trout perch, white perch, white sucker and yellow perch.

This was the first time young-of-year lake sturgeon were captured in the St. Clair River. Using existing habitat data collected by the USGS, Fish and Wildlife Service and Michigan DNR, we can build upon previous work assessing juvenile habitat use in this system. Juvenile lake sturgeon telemetry assessments conducted in 2004-2006 by the partners previously mentioned and the University of Michigan have provided insight into juvenile habitat use in the lower St. Clair River; this work will soon be published in a special issue of the *Journal of Great Lakes Research* titled *Great Lakes Connecting Channels*. Future work will be aimed at assessing juvenile abundance and distribution throughout the entire St. Clair River.

Wild Fish Quarantine Facility Upgrade Nears Completion at Genoa NFH

BY DOUG ALOISI, GENOA NFH

The Genoa National Fish Hatchery (NFH) has operated a wild fish isolation facility to support the Fish and Wildlife Service's lake trout and coaster brook trout restoration programs since the late 1990's. The isolation program allows captive brood



-USFWS

Funding through the Great Lakes Restoration Initiative allowed the Genoa National Fish Hatchery to upgrade the current isolation facility to a quarantine building.

stocks to closely resemble their wild donor stocks through supplementing the genetics from the wild populations into captive broodstocks that are maintained in disease free facilities. With the recent

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

discovery of fish diseases that cross a wide variety of species, a decision was made to upgrade the current isolation facility to a quarantine building by disinfecting the effluent water. The effluent is discharged from the building into an on-site warm water fish culture pond.

Thanks to the Great Lakes Restoration Initiative of 2010 (GLRI), construction funding to support this project became available. The project directly supports lake trout restoration in the Great Lakes, a major goal in GLRI. Design engineers from HDR Engineering in Illinois were contracted to work with hatchery personnel to build plans for the quarantine upgrade, and a contract was awarded to local contractor Peter Nelson and Sons of La Crosse, Wisconsin, to complete the work.

Construction was initiated in late August with completion anticipated in January of 2012. As soon as the building and its systems are completed, this year's Klondike Reef strain of lake trout eggs (that were taken this fall and are currently being isolated in the station's alternate isolation building) will be moved into the upgraded facility.

Upgrading the facility to a quarantine station will better protect both the station and its receiving water from accidental introductions of pathogens from egg transfers from Great Lakes fish restoration programs.

Pathogen Screening of the Pendills Creek and Sullivan Creek NFH's Water Supplies

BY KEN PHILLIPS, LA CROSSE FHC

On September 15th, Ken Phillips teamed up with Pendills Creek/Sullivan Creek National Fish Hatchery (NFH) Complex biologist James Anderson to collect fish for fish health screening from the streams that provide water to Sullivan Creek NFH (Sullivan Creek) and Pendills Creek NFH (Videans Creek). Using backpack electrofishing equipment, a total of 21 brook trout from Sullivan Creek, and 14 brook trout, three steelhead trout, and 13 mottled sculpin were collected from Videans Creek. Tissue samples were collected from each fish on site and

transported back to the La Crosse Fish Health Center's laboratory facilities. Once in the laboratory, the tissue samples were screened for bacterial pathogens (*Aeromonas salmonicida*, *Renibacterium salmoninarum*, *Yersinia ruckeri*), viral pathogens (Infectious Hematopoietic Necrosis Virus, Infectious ancreatic Necrosis Virus, Viral Hemorrhagic Septicemia Virus), and parasitic (*Myxobolus cerebralis*) pathogens. Laboratory results for the tissue samples are pending.

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

Pendills Creek NFH Produces 200,000 Fall Fingerlings

BY CRYSTAL LEGAULT ANDERSEN, PENDILLS CREEK NFH

Pendills Creek National Fish Hatchery (NFH) raised 201,241 fall fingerling lake trout for stocking into Lake Huron during Fiscal Year 2011. The lake trout were of the Seneca Lake Wild strain, and when stocked, in total, weighed more than 6,000 pounds.

All of the fingerlings had coded-wire tags (CWT) inserted into their snouts and displayed adipose fin clips. The CWT code relates to information such as which hatchery reared the fish, the agency that stocked them, and their strain. The adipose fin clip alerts fishers and researchers that the fish contains a CWT. These fall fingerlings were one-of-a-kind in that they were destined to be stocked at Yankee Reef in Lake Huron and transported by the *M/V Spencer F. Baird*, not typical for most fall fingerling stockings.

Their long day of travel on October 5th started at 3:30 am with the lights being turned on in the raceway building, and all staff waiting to hear the outcome of the weather call from Captain Mike Perry. The weather call was a “go”, so staff started loading the fingerlings onto three large fish distribution trucks, one from Pendills Creek NFH, one from Iron River NFH, and one from Jordan River NFH. The trucks traveled over the Mackinac Bridge to Alpena, Michigan, where they met the *M/V Spencer F. Baird* crew, and transferred the lake trout from the trucks to the fish tanks on the deck of the vessel.

However, the infamous Great Lakes weather again reared its windy head, causing five foot waves. As a result, the lake trout had to be stocked earlier than planned – but were reported to be healthy upon their release, which is always good news.

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

Genoa NFH Mussel Babies come back from MARS

BY NATHAN ECKERT, GENOA NFH

During the last week of October, we conducted our final analysis of growth and survival of juvenile mussels in the Mobile Aquatic Rearing Station (MARS). The rearing trailer operated alongside the Mississippi River at Blackhawk Park near De Soto,

Wisconsin, for the last few months this summer. A variety of species at different ages were placed in the MARS trailer the last week of July.

Stream conditions were optimal for mussel growth (temperature above 70°F) until the end of September when temperatures began to decline steadily. We were successful in growing newly metamorphosed juvenile threeridge as well as several species of sub-adult mussels from the 2010 cohort. Survival was highest among sub-adult mussels, with each lot exceeding 90% over the course of the trial. Survival of newly metamorphosed juveniles was much lower, a typical occurrence in mussel culture. The larger mussels from 2010 grew very well, increasing the following amounts in roughly 60 days: plain pocketbook 165 % growth, fatmucket 217 % growth, hickorynut 236 % growth. These results indicate that conditions in the MARS trailer are suitable for culture of freshwater mussels.

Next season we will continue to culture sub-adult mussels in the MARS trailer as well as further experiment with newly metamorphosed juveniles.



-USFWS

These juvenile plain pocketbook mussels were cultured in the Mobile Aquatic Rearing Station (MARS).

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

New Jet Drive Helps Sturgeon Surveys

BY KEVIN MANN, GREEN BAY FWCO

In late July, biologists from the Green Bay Fish and Wildlife Conservation Office (FWCO) began their nighttime spotlight surveys for young-of-year (YOY) lake sturgeon in the Peshtigo River, Wisconsin. These surveys were aimed at documenting the numbers of fish we saw as well as their growth and locations in the river. The Peshtigo River has numerous shallow

areas which give biologists the best opportunity to locate and capture YOY lake sturgeon.

Unfortunately, areas where lake sturgeon are most frequently located are also areas where boats have the least amount of access. The lower unit of the outboard, which extends far below the bottom of the boat, restricts how far we are able to move into shallow areas. In addition, the Peshtigo River has woody debris and plenty of sand bars which can damage the outboard if struck when traveling through the river. In response to these limitations, this October the Green Bay FWCO invested in a jet drive lower unit for its sturgeon boat.

A jet drive uses an impeller inside the housing to suck water from the bottom of the unit and force it out the back for propulsion instead of using a prop. The new jet drive sits only inches below the hull of the boat making it much easier to drive into very shallow areas. The boat is no longer restricted to deeper water where finding sturgeon is more difficult. The jet drive also allows biologists to quickly drive through the river without fear of hitting a prop on logs, sand bars or other unseen perils. The addition of a jet drive has helped biologists improve their efficiency during YOY sturgeon spotlight surveys as well as increase their safety when traveling through the river at night.



-USFWS/KevinMann

A new jet drive will allow the Green Bay Fish and Wildlife Conservation Office's sturgeon boat to navigate shallow, debris-laden rivers.

For further info about the Green Bay FWCO: <http://www.fws.gov/midwest/Fisheries/library/StationFactSheets/greenbay.pdf>

Vaccination of Future Coaster Brook Trout Brood Stock Against Furunculosis

BY KEN PHILLIPS, LA CROSSE FHC

As part of the La Crosse Fish Health Center's (FHC) efforts to control furunculosis at the Iron River National Fish Hatchery (NFH), Sarah Leis and Ken Phillips vaccinated just over 500 coaster brook trout fingerlings against the deadly fish disease on September 8 at the Genoa NFH. Because the fish will be transferred to the Iron River NFH, it was impor-

tant to vaccinate the fish in advance of the transfer to allow them to develop immunity to *Aeromonas salmonicida*, the bacterium that causes furunculosis. The vaccination was done via intra-peritoneal injection with a vaccine created using the strain of *A. salmonicida* that was isolated from coaster brook trout at the Iron River NFH earlier this year.

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

Creating Connections with Nature - The Outdoor Classroom at Genoa NFH

BY JENNIFER BAILEY, GENOA NFH

Kids and nature go together in Genoa National Fish Hatchery's (NFH) Outdoor Classroom. In October, Genoa's Sense of Wonder Discovery Wetland connected over 100 children, 6 teachers, a Girl Scout troop leader, and 5 adults with nature, science, and fun! Fifth graders from La Crosse, Wisconsin (WI) spent a day in the beautiful fall weather, sampling invertebrates for the "Aquatic Species Long-term



-USFWS/JenniferBailey

A Girl Scout archer practices her skills in the Discovery Wetland at the Genoa National Fish Hatchery.

Monitoring Program" that was initiated by Genoa Outdoor Classroom staff, past 5th grade graduates, and their teacher, Susan Houlihan. Outdoor journals are an important element of the 5th grade Outdoor Classroom curriculum, and some gorgeous creations, poetry and observations resulted. A hatchery tour with hands-on introductions to lake sturgeon restoration efforts, coaster brook trout restoration, freshwater mussel life cycles and endangered species recovery programs completed this fall visit. Classmates will re-visit the Outdoor Classroom this winter and again next spring to experience life in the Wetland during different seasons.

Genoa NFH held its first outdoor archery event in the Sense of Wonder Discovery Wetland. Badgerland Junior Girl Scout Troop 4069 visited the hatchery for a second time. In 2010, the troop visited for a tour and introduction to fish and mussel restoration.

The troop also volunteered their services in the Children's Pollinator Garden performing weeding, planting some native species, and mulching for the winter months.

This year, the pollinator garden was already in great shape for winter, and the girls were interested in testing out an outdoor archery range. The troop had been introduced to archery by the National Archery in the Schools Program and had refined their target shooting skills at Girl Scout Camp Ehawee. They were ready for a new challenge. Archery instructors Jenny Bailey and Orey Eckes constructed an outdoor course in the Wetland with targets set at varying distances and angles, and ending with a 3-D target borrowed from a Girl Scout parent archer. Scouts, family members and staff enjoyed the activity immensely. Archery is a lifetime sport that can be enjoyed by all ages, doesn't require a lot of equipment, and can be a great way to spend time in the outdoors.

Lincoln Middle School is Genoa NFH's newest partner in introducing kids to the wonders of nature, learning in the Outdoor Classroom, and wetland prairie restoration. Lincoln's seventh grade teachers Tim Sprain and Adam Smith have been corresponding with Genoa NFH Outdoor Classroom staff to develop outdoor curriculum for seventh graders that would enhance the school's indoor curriculum and offer students real experience in prairie restoration. This program promises to be a successful partnership in connecting kids with real life science, and connecting native wet prairies with Mississippi River backwaters. Students surveyed plant species growing in the 25-acre Sense of Wonder Discovery Wetland in preparation for a native prairie seeding that will occur on 5 marked acres of the Wetland. The class will assist in restoration of the 25-acre prairie over several years by collecting and analyzing data to help monitor native and non-native species coverage, and

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.

making recommendations for restoration efforts as the project progresses. Students will return in winter for wildlife lessons on trapping, tracking, wetland mammal biology, and essential outdoor experience time in snow. Students will help with more native habitat restoration next spring with invasive species identification and garlic mustard removal.

The *Friends of the Upper Mississippi Fishery Services* (FUMFS) is one the Outdoor Classroom's strongest partners in making outdoor connections possible for visitors to the hatchery. They have donated time, labor, boardwalk enhancements and travel awards to students visiting the Outdoor Classroom. Installation of the boardwalk was the first major effort enjoyed by the FUMFS. The boardwalk was funded by a Fish and Wildlife Service Visitor Services grant to encourage and increase public use on Fish and Wildlife Service lands. With the installation of the boardwalk, people of all ages and physical

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

capabilities are welcomed into the wetland, provided with information about what they might see there and how the wetland works. Two benches for resting, wildlife observation and enjoyment were dedicated by the FUMFS as an addition to the boardwalk at the Genoa NFH 2011 Kid's Fishing Day last May. The FUMFS have recently donated half of the transportation costs to Lincoln Middle School to make travel affordable for 76 kids during fall, winter and spring, and promise to provide partial transportation costs to as many more students in future years. What had been a wet, underutilized area infested with reed canary grass, and no fun at all, has become an important place for learning, experience, rejuvenation and a new functional habitat for native plant and animal species. Thanks to the Outdoor Classroom Partners for a valuable addition to conservation education and restoration programs at Genoa NFH.

Jordan River NFH Celebrates 2011 Fall Festival in the Valley!

BY ROGER GORDON, JORDAN RIVER NFH

Jordan River National Fish Hatchery (NFH) held its 3rd annual "Fall Festival in the Valley" on October 8th. This event, sponsored by the *Friends of the Jordan River NFH*, is a public outreach event highlighting the National Fish Hatchery System, Fish and Wildlife Service programs, and area cooperators. This year's event was held on a picture perfect fall Saturday in northern Michigan. With weather in the 70's, sunshine, and a full schedule of events and things to see, the public turnout was outstanding! Over 1,200 people made the festivities a part of their day, and a wonderful time was had by all. Things to do and see this year included a free pumpkin patch for the kid's, apple cider making demonstration with all the cider you could drink, chili pot, hayride tours, informational booths, live music and a wildlife walk. A big hit with the little ones this year were two shiny new fire trucks from the Star Township Volunteer Fire Department that were stationed at the event to bring attention to National Fire Prevention Week. A heartfelt thanks from the hatchery crew goes out to the Friends group, East Jordan Snowmobiler's, Inc., Star Township Fire Department, Mr. and Mrs. Chris

Weston, and all the volunteers that made this a first class public event. For more information about this or other events or programs carried out at the Jordan River NFH, contact hatchery manager Roger Gordon at 231/584-2461 or roger_gordon@fws.gov. Be sure to check us out on Facebook at <http://on.fb.me/i4jfdV>.



-USFWS

Over 1,200 visitors attended the 2011 Jordan River National Fish Hatchery "Fall Festival in the Valley."

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

Alpena FWCO Makes a Difference with Besser Elementary School

BY JOSEPH GERBYSHAK, ALPENA FWCO

Biologists Joseph Gerbyshak and Adam Kowalski of the Alpena Fish and Wildlife Conservation Office (FWCO) helped fourth grade students from Besser Elementary School improve Island Park for “Make a Difference Day.” The 10 acre island is popular among the public and provides a great vantage point for viewing a large variety of bird species that are using the surrounding sanctuary. Island Park is part of a 600 acre wildlife sanctuary complete with hiking trails and fishing platforms. Gerbyshak, Kowalski and an active community leader Roger Witherbee volunteered their time to help the students make an impact on the community by making the island a better place for wildlife park users.

Kowalski led the students throughout the island, explaining the different habitat types on the island. While learning about the various habitats, the students searched for litter and other discarded items. The students came equipped for picking up garbage with plastic gloves and bags, filling up numerous bags with trash and making the island more aesthetically pleasing for park goers, while keeping the sanctuary litter free for wildlife. Roger helped the students make a difference by improving the park’s trail system. A few students mulched trails, while others raked leaves and removed debris off trails. Gerbyshak educated the students about the wildlife that use the surrounding sanctuary and river system. Students

learned about food webs in the river and the benefits of keeping the river clean. They were able to engage in hands-on activities, such as searching for aquatic insects and pulling minnow traps.

The highlight for the students was learning about the upper level predators in the river system. Gerbyshak used live fish, including an adult bowfin, as visual aids for this portion of the activity. Most of the students had never seen a bowfin and were intrigued by this strange looking, prehistoric fish. The students were able to enjoy the nice fall weather and learn about the environment, while making the island a better place for the community for Make a Difference Day.



-USFWS/JosephGerbyshak

Besser Elementary School students search for aquatic insects on Island Park.

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

Jordan River NFH’s Baby Brookies Program Off to a “Wet” Start in FY 2012

BY ROGER GORDON, JORDAN RIVER NFH

Alba High School (Alba, Michigan) students and staff members recently visited the Jordan River National Fish Hatchery (NFH) to participate in the station’s “Baby Brookies” youth fishing program. As part of their ecology class curriculum, students assisted station staff in spawning captive coaster brook trout stock on the hatchery. Over 120 fish were spawned fulfilling all egg needs for the hatcheries FY 2012 youth fishing program. Area student participation is vital to the continuation of this popular program. Local students, scouts and volunteers raise over 5,000 trophy-sized brook trout on the hatchery for the children’s fishing programs.

In 2011, eight on- and off-site children’s fishing events were conducted with multiple cooperators providing fishing opportunities for thousands of youth within the State of Michigan. This program directly connects students, faculty, parents and concerned citizens within a program that provides ongoing recreational and educational opportunities to families and children of all ages.

For more information about this and other continuing outreach and restoration activities at Jordan River NFH, please contact hatchery manager Roger Gordon at 231/584-2461 or roger_gordon@fws.gov. Be sure to check us out on Facebook at <http://on.fb.me/i4jfdV>.

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

Genoa NFH Fulfills Tribal Stocking Objectives

BY JORGE BUENING, GENOA NFH

As fall pond harvest proceeded at the Genoa National Fish Hatchery (NFH), some of the fish collected were used to meet the Fish and Wildlife Service's tribal trust responsibilities by filling stocking requests on tribal lands. This fall, a total of eight Midwestern tribes received fish. These stockings are done in order to promote sustainable fisheries and provide fishing opportunities on tribal lands.

The Grand Portage Band of Chippewa Indians received 9,300 walleye and 3,000 black crappie, while the Red Lake Band received 4,400 lake sturgeon, 11,100 walleye, and 18,300 largemouth bass. The White Earth Nation received 23,100 walleye and 4,900 lake sturgeon. The Stockbridge-Munsee Community received 1,000 walleye and the Menominee Indian Reservation received bass, walleye and fathead minnows. Also, 600 bluegill were stocked in the waters of the Oneida Nation.

These stockings are examples of the longstanding conservation partnerships the Fish and Wildlife

Service has with Native Americans. We are not only helping to improve fishing in tribal waters but also we are sharing and exchanging ideas for the management of the resources.

Throughout the years we hope to continue to learn from each other in order to further natural resource conservation and promote good natural resource stewardship. As a Native American proverb aptly states, "Treat the Earth Well. We do not inherit the Earth from our ancestors; we borrow it from our Children."

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.

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

2011 Fishery Independent Lake Whitefish Survey in Northern Lake Huron

BY ADAM KOWALSKI, ALPENA FWCO

During July and August, staff from the Alpena Fish and Wildlife Conservation Office (FWCO) and volunteers conducted the annual fishery independent lake whitefish survey in 1836 Treaty waters of northern Lake Huron. The purpose of this survey is to collect fishery independent abundance and biological data on lake whitefish stocks in treaty waters for use in statistical catch-at-age population models that are updated annually to determine harvest regulations for tribal commercial fishers in 1836 Treaty waters.

During the survey, 24 variable mesh gill nets (two to six inch) were set at randomly selected sites in Michigan lake whitefish management units WFH 04 (Hammond Bay to Presque Isle) and WFH 05 (Presque Isle to Alpena). All whitefish and lake trout collected were measured, weighed, sexed, assessed for maturity and visceral fat content, and checked for sea lamprey wounds, fin clips and tags. Scales and otoliths were collected for age determination and whole stomachs were removed for diet analysis. Non-target species were worked up in a similar manner.

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

Water Sampling on the Salmon-Trout River

BY TED KOEHLER, ASHLAND FWCO

The Salmon-Trout River Water Sampling Project collected chemical and physical parameters at springs that emerge in four sub-basins in the headwaters of the east and main branch of the Salmon Trout River. The Salmon Trout River is located in the upper peninsula of Michigan near the city of Marquette. This work was led by the Great Lakes Indian Fish and Wildlife Commission (GLIFWC) and partially funded



-USFWS/Anna Varian

A coaster brook trout from an Upper Peninsula of Michigan stream is captured on film.

through the Fish and Wildlife Service's Coastal Program – Great Lakes. The Fish and Wildlife Service and its partners have multiple habitat restoration and monitoring projects in the watershed because of its importance to coaster brook trout.

The Salmon Trout River supports the last naturally occurring population of coaster brook trout on the south shore of Lake Superior. The Keweenaw Bay Indian Community (KBIC), a GLIFWC member tribe, has particular concern about the long term survival of these trout and is involved in restoration efforts. The Salmon Trout River population of coaster brook trout is threatened by activities in the watershed that mobilize sediments and chemicals. These include erosion at road crossings and mobilization of elements through ground disturbing activities. In particular, this river flows over bedrock in the Yellow Dog Plains that has been identified as containing sulfide mineral ores that, if disturbed, can generate acid and release heavy metals. These sulfide mineral ores are proposed for development, with most disturbance occurring at the proposed mine plant site. Water sampling by GLIFWC, Yellow Dog Watershed Preserve and KBIC has aided in estimating potential impacts to water quality from a proposed mine. It has also helped with trout habitat characterization, protection and watershed planning efforts by the Superior Watershed Partnership and other groups.

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

Native American Fish and Wildlife Society; Great Lakes Region Annual Meeting

BY KEN PHILLIPS, LA CROSSE FHC

Ken Phillips attended the annual meeting of Native American Fish and Wildlife Society - Great Lakes Region in Keshena, Wisconsin, on September 14th. Ken was invited to provide an update of Viral Hemorrhagic Septicemia virus (VHSV) in the Great Lakes, a deadly fish virus that was first reported in the Great Lakes in 2005, and has been responsible for fish kills throughout the region.

The meeting, hosted by the Menominee Indian Tribe of Wisconsin Conservation Department, was

attended by tribal natural resource biologists and conservation officers from the Great Lakes region and provided an opportunity to share information regarding current issues in fish and wildlife biology. The Native American Fish and Wildlife Society is a non-profit organization with the mission to “Assist Native American and Alaska Native Tribes with the conservation, protection, and enhancement of their fish and wildlife resources.”

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

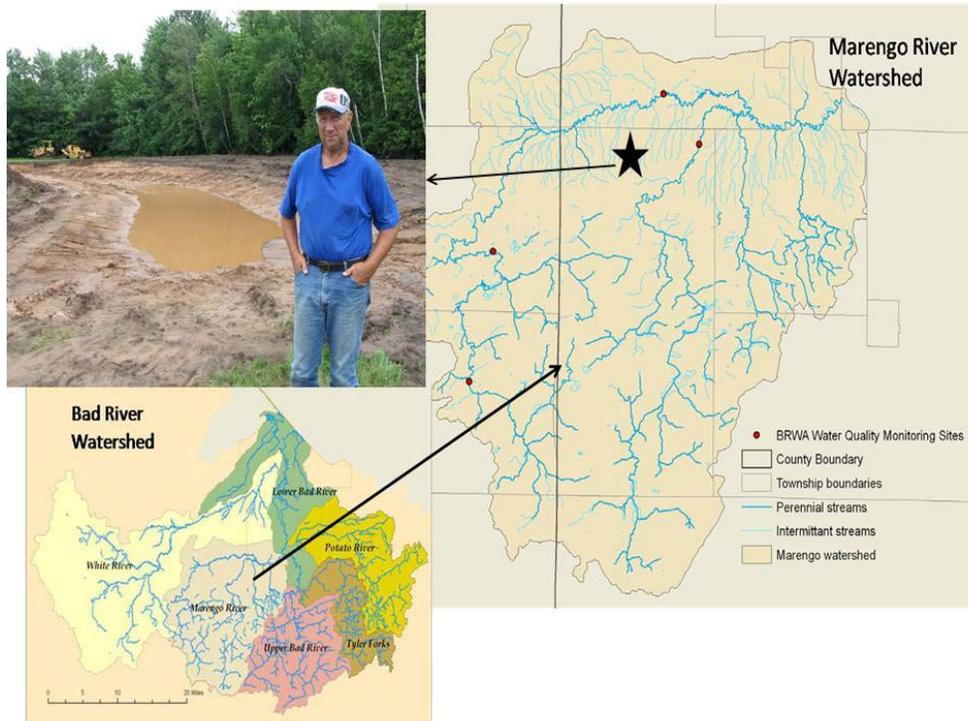
Implementing the Marengo River Watershed Action Plan

BY TED KOEHLER, ASHLAND FWCO

The Ashland Fish and Wildlife Conservation Office (FWCO) is a partner with many other organizations including the Bad River Watershed Association (BRWA), Ashland County and the Bad River Band of Lake Superior Chippewa, in implementing the Marengo River Watershed Action Plan. Thanks to technical expertise and funding from the Ashland

that I just don't see on my property like I used to," said Charlie Ylitalo on a recent visit to his land. "Whether these wetlands will help to bring them back, I don't know, but I'm happy to take these areas of my farm that are not productive anyway and give them back to nature."

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.



-BRWA/MattHudson

Charlie Ylitalo stands next to one of three restored wetlands on his property during construction in August, 2011. The Ylitalo Farm is located in the Marengo River watershed.

County Land and Water Conservation Department, Fish and Wildlife Service and Ducks Unlimited, a project to implement this local plan was recently completed in August. Working in partnership, we were able to provide funding through the Partners for Fish and Wildlife Program as well as technical expertise to restore 3 acres of wetlands and enhance 17 acres of upland migratory bird nesting habitat on the Ylitalo Farm in Ashland County, Wisconsin.

The project also accomplishes goals set forth in the Partners for Fish and Wildlife Program Strategic Plan. The project is just one example of what landowners can do to help out local rivers while meeting their own goals for their property, as well as national level targets. "There's a lot of birds and other animals

clean water."

That partnership model will get another funding boost in the near future. The Bad River Watershed Association just learned that it, along with Ashland and Bayfield County Land and Water Conservation Departments and Northland College, have just received a grant from the U.S. Environmental Protection Agency to find more interested landowners and implement projects like the one at Ylitalo's in the Marengo and Fish Creek watersheds. This provides an exciting opportunity for landowners in these watersheds who want to do something to help their land and rivers as well as the local and migratory fish and wildlife that call these places home.

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

St. Joseph River Watershed Road Stream Crossings and Dams Workshop

BY RICK WESTERHOF, GREEN BAY FWCO

A “Reducing the Impacts of Road Stream Crossing & Dams in the St. Joseph River Watershed” workshop was held on October 14th at the Christiana Creek Country Club in Elkhart, Indiana. The workshop began with presentations in the morning and a field site tour in the afternoon. The workshop participants were welcomed by Matt Meersman who is President of the *Friends of the St. Joseph River Association* (FOTSJRA). Presentation topics included: stream morphology and impacts by dams and

Michigan Department of Environmental Quality (DEQ); road stream crossing design considerations to minimize impacts to fish passage, habitat and water quality by Chris Freiburger of the Michigan DNR; design, implementation and maintenance challenges for road commissions by Craig Atwood of the Allegan County Road Commission; erosion control best practices by Holly Vickers; and federal, state and other funding options for your project by Marcy Colclough of the Southwest Michigan Planning Commission (SMPC) and Rick Westerhof of the Green Bay Fish and Wildlife Conservation Office (FWCO).

The field site tour included several local dam and road stream crossing projects on Christiana Creek and the St. Joseph River, either in progress or potential projects identified in the St. Joseph River Watershed Barrier Inventory Report. Adverse impacts, permits needed and design options were discussed by the group at each site using information from the morning presentations.

Approximately 30 people attended and participated in the workshop with state, federal, tribal, local and non-governmental organizations represented from Michigan and Indiana. The workshop was funded by the National Fish Passage Program through the St. Joseph River watershed in Michigan - Fish Migration Barrier Inventory Project with the Potawatomi Resource Conservation & Development Council (RC&DC). The final report for the project should be completed by next spring. Members of the St. Joseph River Barrier Committee include the Potawatomi RC&DC; FOTSJRA; Indiana DEM; Calhoun County Conservation District; Fishbeck, Thompson, Carr & Huber, Inc.; City of Elkhart; SES; Michigan DNR; Indiana DNR; SMPC; and Green Bay FWCO.



-USFWS

“Reducing the Impacts of Road Stream Crossing & Dams in the St. Joseph River Watershed” workshop participants discuss habitat and fish passage impacts, bankfull, and potential designs for Christiana Creek on a golf course property.

road stream crossing by Chris Freiburger of the Michigan Department of Natural Resources (DNR); the draft St. Joseph River fish passage barrier inventory report by Aaron Snell of Streamside Ecological Services (SES); laws and policies related to road stream crossings in Indiana and Michigan by Aaron McMahan of the Indiana Department of Environmental Management (DEM) and Holly Vickers of the

For further info about the Green Bay FWCO: <http://www.fws.gov/midwest/Fisheries/library/StationFactSheets/greenbay.pdf>

Congressional Actions

S. 1201 (is) To conserve fish and aquatic communities in the United States through partnerships that foster fish habitat conservation, to improve the quality of life for the people of the United States, and for other purposes. [Introduced in Senate]

S. 52 (is) To establish uniform administrative and enforcement procedures and penalties for the enforcement of the High Seas Driftnet Fishing Moratorium Protection Act and similar statutes, and for other purposes. [Introduced in Senate]

H.R. 2373 (ih) To establish a regulatory system and research program for sustainable offshore aquaculture in the United States exclusive economic zone, and for other purposes. [Introduced in House]

S. 1401 (is) To conserve wild Pacific salmon, and for other purposes. [Introduced in Senate]

S. 1494 (is) To reauthorize and amend the National Fish and Wildlife Foundation Establishment Act. [Introduced in Senate]

H.R. 1160 (rh) To require the Secretary of the Interior to convey the McKinney Lake National Fish Hatchery to the State of North Carolina, and for other purposes. [Reported in House]

H.R. 2325 (ih) To direct the Secretary of the Interior to establish a program to build on and help coordinate funding for restoration and protection efforts of the 4-State Delaware River Basin region, and for other purposes. [Introduced in House]

H.R. 2351 (ih) To direct the Secretary of the Interior to continue stocking fish in certain lakes in the North Cascades National Park, Ross Lake National Recreation Area, and Lake Chelan National Recreation Area. [Introduced in House]

H.R. 1160 (eh) To require the Secretary of the Interior to convey the McKinney Lake National Fish Hatchery to the State of North Carolina, and for other purposes. [Engrossed in House]

S. 651 (is) To require the Secretary of the Interior to convey the McKinney Lake National Fish Hatchery to the State of North Carolina, and for other purposes. [Introduced in Senate]

H.R. 1160 (ih) To require the Secretary of the Interior to convey the McKinney Lake National Fish Hatchery to the State of North Carolina, and for other purposes. [Introduced in House]

S. 1266 (is) To direct the Secretary of the Interior to establish a program to build on and help coordinate funding for restoration and protection efforts of the 4-State Delaware River Basin region, and for other purposes. [Introduced in Senate]

H.R. 2834 (ih) To recognize the heritage of recreational fishing, hunting, and shooting on Federal public lands and ensure continued opportunities for these activities. [Introduced in House]

H.R. 1837 (ih) To address certain water-related concerns on the San Joaquin River, and for other purposes. [Introduced in House]

H.Con.Res. 15 (ih) Expressing the sense of the Congress that the United States Fish and Wildlife Service should incorporate consideration of global warming and sea-level rise into the comprehensive conservation plans for coastal national wildlife refuges, and for other purposes. [Introduced in House]

H.R. 1160 (rfs) To require the Secretary of the Interior to convey the McKinney Lake National Fish Hatchery to the State of North Carolina, and for other purposes. [Referred in Senate]

S. 1183 (is) To establish a national mercury monitoring program, and for other purposes. [Introduced in Senate]

S. 1224 (is) To amend Public Law 106-392 to maintain annual base funding for the Upper Colorado and San Juan fish recovery programs through fiscal year 2023. [Introduced in Senate]

S. 632 (is) To amend the Magnuson-Stevens Fishery Conservation and Management Act to extend the authorized period for rebuilding of certain overfished fisheries, and for other purposes. [Introduced in Senate]

H.R. 521 (ih) To amend the Federal Food, Drug, and Cosmetic Act to prevent the approval of genetically engineered fish. [Introduced in House]

S. 230 (is) To amend the Federal Food, Drug, and Cosmetic Act to prevent the approval of genetically-engineered fish. [Introduced in Senate]

S. 1657 (is) To amend the provisions of law relating to sport fish restoration and recreational boating safety, and for other purposes. [Introduced in Senate]

H.R. 520 (ih) To amend the Federal Food, Drug, and Cosmetic Act to require labeling of genetically engineered fish. [Introduced in House]

H.R. 3069 (ih) To amend the Marine Mammal Protection Act of 1972 to reduce predation on endangered Columbia River salmon and other nonlisted species, and for other purposes. [Introduced in House]

H.R. 1646 (ih) To amend the Magnuson-Stevens Fishery Conservation and Management Act to preserve jobs and coastal communities through transparency and accountability in fishery management, and for other purposes. [Introduced in House]

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

Midwest Region Fisheries Divisions

National Fish Hatcheries

The Region's National Fish Hatcheries primarily focus on native fish restoration/rehabilitation by stocking fish and eggs, such as pallid and lake sturgeon and by developing and maintaining brood stocks of selected fish strains, such as lake trout and brook trout.

Hatcheries also provide technical assistance to other agencies, provide fish and eggs for research, stock rainbow trout in fulfillment of federal mitigation obligations and assist with recovery of native mussels and other native aquatic species.

Fish and Wildlife Conservation Offices

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

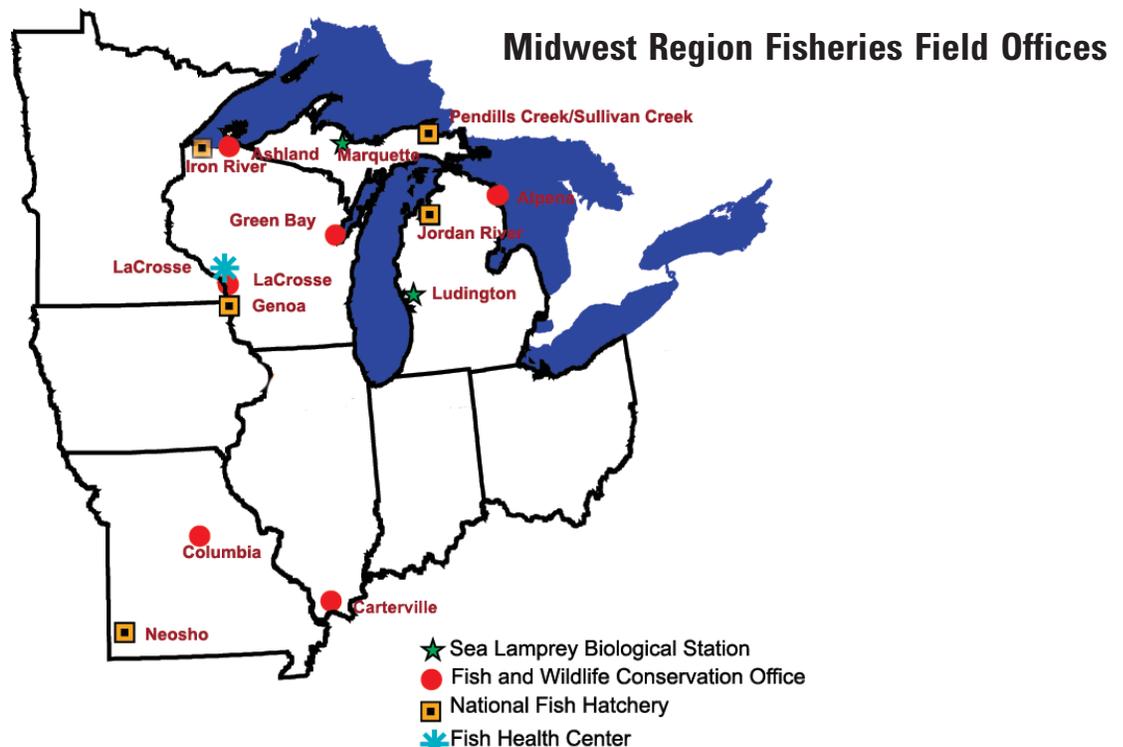
technical expertise to other Service programs addressing contaminants, endangered species, federal project review and hydro-power operation and relicensing; evaluate and manage fisheries on Service lands; and, provide technical support to 38 Native American tribal governments and treaty authorities.

Sea Lamprey Biological Stations

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

Fish Health Center

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



Midwest Region Fisheries Contacts

Todd Turner (todd_turner@fws.gov)

Michigan

Alpena Fish and Wildlife Conservation Office
480 West Fletcher St.
Alpena, MI 49707
Scott Koproski (scott_koproski@fws.gov)
989/356-3052
Area of Responsibility (Michigan, Ohio)

Jordan River National Fish Hatchery
6623 Turner Road
Elmira, MI 49730
Roger Gordon (roger_gordon@fws.gov)
231/584-2461

Ludington Biological Station
229 South Jebavy Drive
Ludington, MI 49431
Jeff Slade (jeff_slade@fws.gov)
231/845-6205

Marquette Biological Station
3090 Wright Street
Marquette, MI 49855-9649
Katherine Mullett (katherine_mullett@fws.gov)
906/226-1235

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

Missouri

Columbia Fish and Wildlife Conservation Office
101 Park Deville Drive; Suite A
Columbia, MO 65203
Tracy Hill (tracy_hill@fws.gov)
573/234-2132
Area of Responsibility (Iowa, Missouri)

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

Illinois

Carterville Fish and Wildlife Conservation Office
9053 Route 148, Suite A
Marion, Illinois 62959
Rob Simmonds (rob_simmonds@fws.gov)
618/997-6869
Area of Responsibility (Illinois, Indiana, Ohio)

Wisconsin

Ashland Fish and Wildlife Conservation Office
2800 Lake Shore Drive East
Ashland, WI 54806
Mark Brouder (mark_brouder@fws.gov)
715/682-6185
Area of Responsibility (Michigan, Minnesota, Wisconsin)

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

Green Bay Fish and Wildlife Conservation Office
2661 Scott Tower Drive
New Franken, WI 54229
Mark Holey (mark_holey@fws.gov)
920/866-1717
Area of Responsibility (Michigan, Wisconsin)

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
Becky Lasee (becky_lasee@fws.gov)
608/783-8441

LaCrosse Fish and Wildlife Conservation Office
555 Lester Avenue
Onalaska, WI 54650
Pamella Thiel (pam_thiel@fws.gov)
608/783-8431
Area of Responsibility (Illinois, Iowa, Minnesota, Wisconsin)

Fish Tails

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

Partnerships and Accountability

Aquatic Species Conservation and Management

Aquatic Invasive Species

Public Use

- [Spring Arbor University Students Canoe and Learn About the Jordan River](#)
 - Rick Westerhof, Green Bay FWCO and Dan and Alice Grimes, Cedar Bend Farm

- [River Days Kids Fishing Fest on the Detroit River](#)
 - Justin Chiotti, Alpena FWCO

Cooperation with Native Americans

- [Genoa Largemouth Bass find a New Home](#)
 - Jennifer Bailey, Genoa NFH

Leadership in Science and Technology

Aquatic Habitat Conservation and Management

Workforce Management

- [Welcome \(BACK\) Aboard!](#)
 - Mark Steingraeber, LaCrosse FWCO



River Days Kids Fishing Fest on the Detroit River

On June 11th, the Detroit Riverfront Conservancy held its inaugural “River Days Kids Fishing Fest” along the Detroit River. The event was held at the Marina at Milliken State Park and Harbor and was designed to give families, parents, and children an opportunity to enjoy fishing along the Detroit Riverfront while learning about environmental stewardship and sustainability. June 11th was designated by the State of Michigan as free fishing weekend, so adults as well as children could enjoy this free event. Approximately 300 children, parents, and grandparents participated.