



Fishlines



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The Devil's Horn and the Baptism Pool



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Cool, Clear Water of the Ozarks



Adult Pallid Sturgeon Monitoring

Fish Tails

"[Fish Tails](#)" refers to articles that are submitted by field staff that do not appear as a feature in the current edition of Fish Lines. These articles provide examples of the diverse work that the Service's Midwest Fisheries Program and partners perform on behalf of our aquatic resources and for the benefit of the American public.

Field Notes

"[Field Notes](#)" is an online searchable database that showcases hundreds of employee-written summaries of field activities and accomplishments of the U.S. Fish and Wildlife Service from across the nation.



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The Devil's Horn and the Baptism Pool

BY JEFF FINLEY, COLUMBIA FWCO



Biologist Andy Roberts (Columbia Missouri ES) gives a thumbs up while surrounded by minnows during a mussel survey of Big Barren Creek Natural Area. Credit: Jeff Finley, USFWS

Were it not for the rope swing, stone campfire ring and fresh footprints in the sand, I would have thought I was the first person to ever see this place. Nestled deep in the Ozark Hills of rural Carter County, Missouri, off a sparsely populated patch-paved county road and a couple miles down a two-track gravel lane and past a rusty tin-roofed, sun-grayed wooden church house exists one of the prettiest places I've ever visited: Big Barren Creek Natural Area in Mark Twain National Forest.

Lilly pads dotted a postcard picturesque pool that teemed with schools of minnows. This large pool of clear water rests at the base of the Devil's Horn bluff.

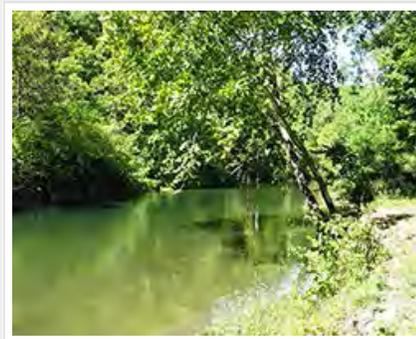
Local folks searching for relief from the summer heat can be found cooling themselves in the "swimmin' hole." There aren't many visitors to this remote spot, so they are eager to share stories about this unique place they take such pride in. We were told that on special Sundays the church congregation used to amble up the gravel road to witness a full-immersion baptism by coincidence in the pool below the Devil's Horn bluff. They pointed

out where wagons crossed when the area was settled, where the moonshiners set stills during prohibition, and they helped us discover the remains of a spring box once used to gather drinking water for a nearby home. A vine-covered chimney standing in solitude is all that remains. They enlightened us with recollections of big fish, fist fights, marriage proposals, and which families' children had stacked the rocks in a makeshift dam to deepen the pool. No matter the tale, they were all threaded with a deep respect and sense of pride in this special place.

Since being designated a Natural Area in 1989, this portion of Big Barren Creek has been under special management by the U.S. Forest Service. The dolomitic bluffs and fine-grained chert forests have remained relatively untouched for decades. The creek is a gaining portion of a losing stream; that is, numerous springs bubbling from the porous limestone fill several cool, clear, permanent pools of water joined by shallow silver riffles. Downstream of these bluff pools, Big Barren Creek goes barren and soaks into a dry and rocky creek bed. It is lost underground for several miles before it is reborn near Twin Springs and its confluence with the Current River.

Few fisheries workers have cataloged the species that dwell in these pools. Aside from a few seine net hauls from the years 1941, 1971, and 1994, only 20 species of fish were known to reside here. Our task was to look deeper and determine habitat quality and fish species composition of Big Barren Creek, and to identify species which may require special management considerations for Mark Twain National Forest. Our study revealed that 45 fish species inhabit these waters including several species of conservation concern and two which had never been known to live in this part of Missouri, the Ozark shiner and pugnose minnow.

But we learned about more than just fish. We discovered several Arkansas brokenray mussel shells in the shallows. These mussels are in the *Lampsilis* genus which is composed of several extremely rare and endangered species. To our knowledge a mussel survey of the area had never been completed and the discovery of the brokenrays subsequently prompted one. Freshwater mussels are not typically found in small headwater streams of the Ozarks, but we discovered at least eight different genera with as many as ten different species. The identity of two of those potential species is being examined. Finding such mussel diversity and densities of rare species seen nowhere else in the state was all the more proof that this is a very unique place. Even the colorful names of mussels--the Slippershell, Creeper, Rainbow, Purple Lilliput, Ouachita Kidneyshell--they speak to the same. Most of the mussels were found around the massive old spadderdock roots and in the gravel beds below riffles. The roots were as large



Rope swing at the Big Barren Creek Natural Area in Carter County Missouri. Credit: Jeff Finley, USFWS

as my forearms and dense risers to the lilly pads were reminiscent of diving through a miniature kelp forest in the Pacific Ocean.

SCUBA diving the deep clear pools reminded me of a tropical reef in the Atlantic, only without the taste of salt. The pinkish leaves at the bases of the spadderdock looked like fan coral--the brilliant orange and teal of the several species of sunfish, blood-red and iridescent blues found on various minnows and shiners were all similar to salty cousins in tropical waters. What's more, three different species of crayfish skittered about and peeking ever so warily from their rocky hideaways. Never in my 20 years of diving, have I experienced such a beautiful dive in fresh water.

Mussels, minnows and memories weren't the only thing we discovered on this project. While looking for mussels around the chunky rubbles littering the bedrock in a deep pool below a bluff, I found an old fishing lure wedged in a crevice between two large stones. The hooks had long rusted away. The rear propeller dissolved into a puff of rusty dust when I pulled it from its snag. One glass eye was missing but the balsa body still had its raspberry spots on a honeydew body, still vibrant after being shielded from the sun's fading rays. The best I can find, this old wooden Heddon Dowagiac Minnow was manufactured prior to 1920. My imagination prompted a sepia vision of an angler in woolen trousers and waxed mustache cursing as his cotton line when it snapped decades ago.

As much as I'd like to think I was the first to discover this pristine Ozark paradise, I am far from it--and I hope to not be the last. These special little places, adored by locals and occasionally visited by passers-through, are a fresh reminder of the wonders we are so blessed to experience and charged with protecting. I shall return some day, to enjoy the sights, the cool refreshing water, and perhaps even hear another story or two about the Baptism Pool below the Devil's Horn bluff.



U.S. Fish & Wildlife Service

Fisheries, Midwest Region

Conserving America's Fisheries

Fishers & Farmers Partnership Honored in 2013

BY HEIDI KEULER, LA CROSSE FWCO

This summer, the Fishers & Farmers Partnership for the Upper Mississippi River Basin received one of the 2013 Governor's Iowa Environmental Excellence Awards at the Wallace Building Auditorium in Des Moines, Iowa. Governor Terry E. Branstad and Lieutenant Governor Kim Reynolds presented Fishers & Farmers Partnership members, Martin Konrad, Chris Jones, and Heidi Keuler, with Special Recognition in Habitat Restoration. The Partnership, consisting of federal, state, and local agencies, as well as non-government organizations, received the award for their leadership and innovation in the Boone Watershed in central Iowa.

The prestigious annual Governor's Iowa Environmental Excellence Awards recognize Iowa businesses, organizations and citizens who have excelled in environmental sustainability, demonstrating leadership, innovation and a comprehensive environmental ethic in managing natural resources.

The Fishers and Farmers Partnership's vision is one in which landowners work together with conservationists and scientists to address the needs of their own farms, local streams, and the fishes of the basin. Lessons learned are shared with neighbors, participating organizations, and others outside of the project watershed. Fish populations and habitats are monitored at project sites and downstream. The Partnership helps landowners showcase successful practices to neighbors and others. With a focus on mutual respect, dialog is cultivated between agricultural and environmental organizations throughout the Upper Mississippi River Basin. This leads to better use of resources, less duplication of effort, and measurable progress toward common goals.



Environmental Excellence Award 2013. Credit: USFWS



Fishers & Farmers Partnership Receives 2013 Governor's Iowa Environmental Excellence Award- Chuck Gipp Director Iowa DNR, Martin Konrad Fisheries Bureau Iowa DNR, Kim Reynolds Lieutenant Governor of Iowa, Chris Jones Environment Program Iowa Soybean Association, Heidi Keuler Fishers & Farmers Coordinator USFWS, Terry E. Branstad Governor of Iowa. Credit: Iowa DNR

Fish Habitat Partnerships consist of state, federal, and tribal agencies, non-governmental organizations, corporations and private individuals. They are self-identified, self-organized, and self-directed communities of interest formed around geographic areas, keystone species, or system types. There are five that focus their efforts all or in part in the Midwest Region of the U.S. Fish and Wildlife Service. These include the Driftless Area Restoration Effort, Midwest Glacial Lakes Partnership, Great Lakes Basin Fish Habitat Partnership, Ohio River Basin Fish Habitat Partnership, and the Fishers and Farmers Partnership of the Upper Mississippi River. Fish Habitat Partnerships are the working units of the National Fish Habitat Partnership.

The mission of the National Fish Habitat Partnership is to protect, restore and enhance the nation's fish and aquatic communities through partnerships that foster fish habitat conservation and improve the quality of life for the American people.

For more information visit our [NFHAP Website](#).



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Fisheries, Midwest Region

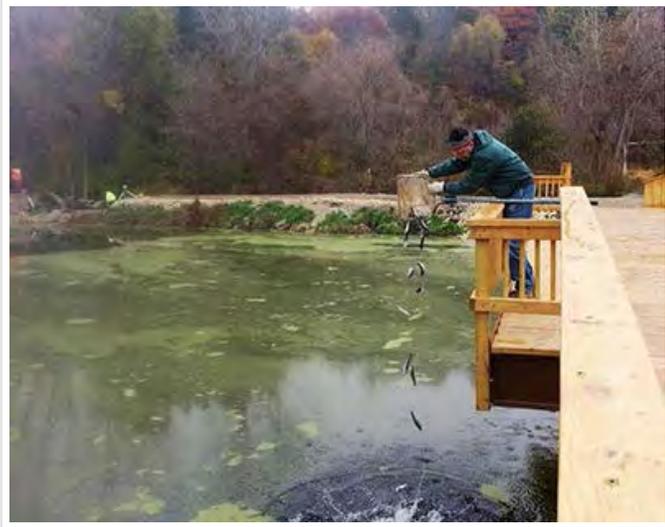
Conserving America's Fisheries

Partners Work to Increase Access to Outdoor Opportunities

BY DOUG ALOISI, GENOA NFH

Dave Erickson, member of the Friends of the Upper Mississippi, wanted to do something special to commemorate his son's life and love of the water. His son Chad loved to be around water, and constantly came home damp from his many excursions, according to his mother Barb. He used to particularly love an old overgrown pond behind a nursing home in the La Crosse suburb of Shelby. Chad was confined to a wheelchair after complications during open heart surgery and passed away too soon in 1995.

Dave and Barb were committed to preserve his memory in a meaningful way. Dave also works for the La Crosse Parks and Recreation Department, who owns most of the land around the overgrown pond his son loved to visit. Dave and his wife pledged \$60,000 from the Chad Erickson Memorial Fund Endowment for improvements to the pond and surrounding area. These improvements included dredging the pond, installing access trails around it with four accessible fishing piers, and adding an accessible bridge with fishing stations. The goal is to have fishing programs for Parks and Recreation Department programs held at the site, as well as provide fishing for people with limited access to the outdoors such as residents from the local nursing home.



Biologist Lloyd Lorenz releases rainbow trout into Chad Erickson Memorial Pond. Credit: USFWS



Dave and Barb Erickson standing next to the Chad Erickson Memorial Pond Credit: La Crosse Tribune

Dave approached the Genoa National Fish Hatchery (NFH) to inquire whether fish may be available for special fishing events. Genoa NFH occasionally has excess rainbow trout available from its ongoing programs, and supplying excess fish for this pond would also dovetail into the Service's mission to create opportunities for children and those with limited access to the outdoors. The hatchery recently stocked a few hundred trout into the pond to see if the fish would successfully survive over the winter. Local businesses and community groups are now pitching in as well to provide a picnic shelter, lighting and paving the access roads. The Friends of the Upper Mississippi recently provided fish cribs to increase fish habitat. Plans are to have a grand opening in the spring of next year and also scheduling a Chad Erickson Fishing Day next summer. The hatchery is extremely proud of its limited role in such a worthy project to benefit the community while commemorating Chad Erickson's memory.



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Conserving America's Fisheries

Cool, Clear Water of the Ozarks

BY JEFF FINLEY, COLUMBIA FWCO

While the State of Missouri boasts some of the most pristine streams in the Midwest, the majority of work completed by the Columbia Fish and Wildlife Conservation Office (FWCO) is on the turbid waters of the Big Muddy - the Missouri River. That is until recently. In 2012, the U.S. Forest Service's (USFS) Mark Twain National Forest (MTNF) and the Columbia FWCO began working collaboratively to identify inhabitants of select priority streams in the Ozark Hills on MTNF. In an effort to fill data gaps and provide management recommendations, several streams would need to be inventoried for fish and other aquatic life. This began with Big and Little Barren creeks in Carter and Ripley Counties of Southeast Missouri.



Rainbow darter is common to the Ozark streams in Missouri. Credit: Jeff Finley, USFWS

Big and Little Barren Creeks

The only known data on Big Barren Creek was from a few seine hauls conducted in 1941, 1974 and 1994 cataloging only 20 fish species and there was no known data from Little Barren Creek. After a reconnaissance of the area we set mini-fyke nets, seined and sampled using a backpack electrofisher. Our survey revealed 45 species in the area to include several fish species of conservation concern; the Ozark Shiner and Pugnose Minnow.



A cranky looking banded sculpin found in cool waters of the Ozarks. Credit: Jeff Finley, USFWS

While conducting our fish survey, we observed several fresh shells from Arkansas brokenray mussels. This prompted an additional SCUBA survey to catalog the mussel fauna of the Big Barren Creek Natural Area. This survey revealed eight species of mussels to include a robust population of several uncommon species including slippershell, Ouachita kidneyshell and Arkansas brokenray.

Upon completing the Barren Creeks survey we met with MTNF to present our findings and look ahead into future partnership opportunities. Kelly Whitsett, USFS Forest Hydrologist and Theresa Davidson, USFS Forest Wildlife & Fisheries Program Manager, provided us with a list of several other streams in need of inventory. We agreed to focus on several streams in the Willow Springs Area of the Ava/Cassville Ranger District in 2013. A reconnaissance trip once again revealed working in cool clear waters of tributary streams in the Ozarks.

Willow Springs

We sampled fish from five streams, Noblett, Spring, Little Indian, Middle Indian and Indian Creeks, all tributaries to the North Fork River of the White River basin in Southern Missouri and Northern Arkansas. Noblett Creek is interrupted by a small dam constructed by the Civil Conservation Corps in 1938-40 to create a bathing beach and recreational reservoir. Noblett Creek eventually flows into Spring Creek before joining the North Fork. Spring Creek flows almost entirely through remote and isolated areas of the MTNF boasting the most preserved watershed we sampled. Indian Creek, and its two major tributaries (Middle and Little), meanders through a patchwork of private and public lands before flowing into the North Fork River.

We've just completed entering the data and will begin drafting our report this winter. It is refreshing to work in cool clear water, trading gillnets, trot lines and trawls for backpack electrofishers, dip nets and waders and handling sculpins, darters, shiners and madtoms instead of sturgeon, buffalo, catfish and carp. We are excited about the work we've already completed and are anxious to work in cool clear waters of Mark Twain National Forest in the future.



Fisheries Technician Jordan Fox (L) and Fish Biologist Jeff Finley (R) identify crayfish on the banks of Noblett creek in Southern Missouri. Credit:Heather Garrison, USFWS



Carterville FWCO Back at it in the “Middle Miss”... Adult Pallid Sturgeon Monitoring

BY IAN KENNEDY, CARTERVILLE FWCO



Personnel from Carterville FWCO and U.S. Army Corp of Engineers getting ready to pull a trot line at Cottonwood Island. Credit: USFWS

The mighty Mississippi is constantly moving and changing even with the alterations humans have made to try to control it. Alterations to the river channel improve navigation but also have effects on the species that use these same areas. Even with channel alterations there are many different types of fish lurking beneath the Mississippi's turbulent muddy water and the one we are looking for is the endangered Pallid Sturgeon.

Work was conducted at three different locations: Chain of Rocks which is upstream of Saint Louis, Missouri, Kaskaskia River/Beaver Island which is upstream of Chester, Illinois, and Cottonwood Island which is next to Grand Tower, Illinois. All of these locations are positioned within the Middle Mississippi River, the area of the Mississippi between its confluence with Missouri near St Louis and its confluence with the Ohio River near Cairo, Illinois. The purpose of this project is to determine the status of the Pallid Sturgeon population in the Middle Mississippi River and to guide future management and restoration activities.

Sampling started on November 6, 2013 and is still underway. Personnel from the Carterville Fish and Wildlife Conservation Office along with personnel from the Missouri Department of Conservation and the U.S. Army Corp of Engineers worked together to achieve a fast paced effort to collect Pallid Sturgeon. Some days the weather was sunny and nice and other days it was cold and rainy with howling winds. Despite the different types of weather our teams steadily put Channel Catfish, Blue Catfish, Shovelnose Sturgeon, and Pallid Sturgeon in the boat! We even boated four Lake Sturgeons while sampling at Chain of Rocks, which was very exciting! A total of six Pallid Sturgeons have been boated, processed, and released in healthy condition. Each Pallid Sturgeon that is collected is weighed, measured, implanted with a personal floy and PIT tag, scanned for coded wire tags in their rostrum (nose), tissue samples are taken, and a small portion of their pectoral fin spine is removed for aging.



Lead biologist Donovan Henry counting anal fin rays during data collection on a Pallid Sturgeon. Credit: USFWS

A twenty foot side console Jon boat with twin outboards is used to maneuver the river and ten trot lines are deployed each day in specific habitats to catch Pallid Sturgeon. In front of each trot line there are two marked float lines running to the surface and 100 feet of cord attached to a large sand anchor to keep the line secured to the river substrate. Each trot line is 61 meters long with 40 leaders attached to the main line.

Each hook on the 40 leaders

is baited with a half of an earth worm “night crawler”. There are five weights

spaced along the trot line to keep the line on the river substrate. At the end of the main line a rock bag is attached along with two marked floats.



Lead field technician Brad Rogers with a Lake Sturgeon. Credit: USFWS

This work is fast paced, finger freezing, face blistering, and tedious. However, it is well worth braving the long days and cold conditions to gain more insight and contribute to future plans to help the Pallid Sturgeon of the Middle Mississippi River.



The Spencer F. Baird's Role in Efforts to Rehabilitate Lake Trout in the Upper Great Lakes

BY SCOTT KOPROSKI, ALPENA FWCO

Populations of Lake trout, the primary native predator species in the Great Lakes, were decimated during the early to middle part of the 20th century. Two factors contributed to this decline: over-exploitation and predation by invasive sea lampreys, though sea lamprey predation was the driving force that led to the population collapse. The sea lamprey control program began in the mid-1950s with the establishment of the Great Lakes Fishery Commission (GLFC). The governments of Canada and the United States negotiated an agreement at the Convention on Great Lakes Fisheries (1955) which authorized the GLFC to facilitate binational management of sea lamprey predation in an effort to rehabilitate important native Great Lakes fish stocks such as lake trout.

With a sea lamprey control program in place, the managing agencies began to utilize fish culture practices (hatchery rearing) as a tool to build weakened stocks of lake trout. The U.S. Fish and Wildlife Service (Service) assumed a leadership role in this rehabilitation effort. Stocking began in the 1950's and has continued to this day in an effort to rehabilitate lake trout stocks in the upper Great Lakes. Prior to 1989, lake trout were either shore stocked or, when possible, stocked off shore from commercial car ferries. Beginning in 1989, the Service began stocking federally reared lake trout at offshore reefs in the upper Great Lakes using the M.V. Togue (Togue).



In the fall of 2013, the M.V. Baird went to the shipyard for a 5-year haul out inspection. While in dry-dock, the vessel was re-painted. Credit: USFWS



Service personnel deploying gill nets during the gill net assessment. Credit: USFWS

The M.V. Spencer F. Baird (Baird), a state-of-the-art stocking and assessment vessel owned by the U.S. government and operated by the Service's Midwest Region Fisheries Program, was commissioned in 2006 to replace the aging Togue. Unlike the Togue, the Baird is equipped with state-of-the-art fish health technologies designed to minimize stressors on lake trout during transit to prescribed offshore reefs.

The Baird has ten above-deck fish tanks capable of holding 1,000 gallons of water each. Depending on the size of the yearling lake trout, the Baird is capable of hauling up to 190,000 fish per trip. With the tanks being situated above deck, the Baird uses gravity to release fish at the stocking location, which minimizes stress relative to pumping. The Baird also possesses the ability to chill over 3,000 gallons of water down to 48 F°, allowing the water temperature in the tanks to be adjusted so that thermal shock is minimized. Finally, the Baird was outfitted with an onboard oxygen concentrator system, allowing the vessel to meet the oxygen requirements of the fish while in transit. All of these factors allow Service personnel to deliver healthier fish at

the offshore reefs, resulting in better survival of the reared lake trout.

Although the primary mission of the Baird is to stock lake trout, during construction the vessel was also outfitted with state of the art fishery assessment technologies. The vessel is equipped for retrieval/deployment of gill nets, bottom trawls, and mid-water trawls. Additionally, the vessel is able to evaluate pelagic prey fish populations using sophisticated hydro-acoustic equipment. Since being commissioned in 2006, the Baird has been used annually to evaluate spawning lake trout and, beginning in 2010, the vessel has participate in annual prey fish assessments on Lake Michigan and Huron.

The Baird is now an integral part of the Service's Strategic Habitat Conservation (SHC) approach of managing lake trout on a landscape level. This vessel allows the Midwest Region Fisheries Program to actively

participate in all of the elements of the SHC feedback loop, which include Biological Planning, Conservation Design, Conservation Delivery, and Monitoring and Research.



Stocking lake trout from the M.V. Baird.
Credit: USFWS



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Fish Tails

Articles submitted by field staff that do not appear as a feature within Fish Lines. These articles provide examples of the diverse work that is performed on behalf of aquatic resources.

Place Based Education: Island Park & Wildlife Sanctuary

BY JOSEPH GERBYSHAK, ALPENA FWCO

For Make a Difference Day on October 21st, Alpena Fish and Wildlife Conservation Office (FWCO) biologists Joseph Gerbyshak and Adam Kowalski, National Oceanic and Atmospheric Administration staff and community members assisted with an educational field trip for fourth graders from Besser Elementary School.

The field trip was on Island Park & Wildlife Sanctuary (Island Park), a 17-acre island on the Thunder Bay River in Alpena, Michigan. Island Park is a great location to learn about the environment and provided an opportunity for the students to clean up the park in the spirit of Make a Difference Day. The students rotated through educational stations setup around the island.

Kowalski lead an activity that consisted of visiting different habitat types on the island and talked about the various types of trees, vegetation, and animals that they might encounter in each type of habitat. Some of the habitats visited were a cedar swamp, jack pine stand, grassland area, and poplar stand. The students then moved on to another station where they improved the park by clearing debris off the trails and adding a fresh layer of bark. At another station the students found a quiet spot in the woods and recorded all the wildlife they observed in a journal. They enjoy the quiet time and were amazed by the amount of nature that came to life around them.

As part of Michigan Clean Water Corps (MiCorps) monitoring program, another station consisted of collecting and documenting water chemistry parameters of the Thunder Bay River. This data will be entered in a statewide database and will be used to track the water quality of the river over time. Gerbyshak lead a station that evaluated the water quality of the river by the macroinvertebrates found living in the near shore habitat of the river. The students searched for macroinvertebrates in kick net samples and were surprised by the amount of organisms living in the leaf litter. Once the macroinvertebrates were identified, the students recorded the organisms found for MiCorps water quality monitoring.

Make a Difference Day was enjoyed by the students as they learned about the environment, made Island Park a better place for wildlife and park users, and monitored water quality parameters all while basking in the sunny fall weather.

Short of breath? No Need for Alarm!

BY AARON VON ESCHEN, GENOA NFH

The Coldwater North building at Genoa National Fish Hatchery in Wisconsin has undergone a renovation to improve fish culture and fish holding capabilities. Ground level rearing tanks in the building were pushed up from the gravel floor due historic rain event in which an unusually heavy rain caused ground water levels to increase so rapidly and to the point that the tanks floated up from the ground in which they were set. In an effort to prevent such a disaster from taking place again, hatchery staff decided to redo the plumbing and set the tanks above ground level. Even though this procedure had its own set of challenges by eliminating the use of gravity water flow, it was deemed the best solution. A pump was installed in the head box to provide a constant pressurized water supply to the tanks, and each tank received its very own oxygen flow meter to be sure each tank is receiving the proper amount of oxygen. This update also brings the tanks up to a higher level to assist hatchery staff working in and around the tanks while fish culture practices are taking place. These tanks are very important to Genoa and unique in the fact that fish are not raised in them, but smaller circular tanks are placed on top of them for fish as fry to begin their life cycle.

Along with a new pump to supply water, the hatchery staff went a step further to ensure the safe keeping of the fish and installed a Point 4 oxygen alarm monitoring system. This system is not new to the hatchery however as the station has this type of alarm monitoring system in other buildings on station. The purpose of this system is to monitor the oxygen provided to the fish to ensure that the well water receives adequate dissolved oxygen levels to meet fish needs. This system also alerts hatchery personnel in case of emergencies such as oxygen system failures, or inadequate water flow. The monitoring system

will then place a call to the hatchery informing personal of the emergency, if after hours the system will then call the closest staff member. This allows the hatchery to monitor its fish rearing systems and be sure they are working properly no matter day or night. The monitoring system in the coldwater north building will also go as far to measure in water dissolved oxygen levels, a feature such as this allows hatchery personnel to be sure fish are getting the oxygenated water they need. Another safeguard of this system is that if water flows or oxygen effluent levels become too low to maintain fish health, an emergency oxygen supply will kick on automatically to maintain life and protect fish survival. Preventative measures such as these are taken in order to prevent and avoid emergencies and disasters that could hinder the culture of the fish that the station rears.



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Midwest Region Fisheries Divisions

National Fish Hatcheries

The Region's National Fish Hatcheries (NFH) focus on native species recovery and restoration. Primary species include: lake trout, endangered pallid sturgeon, and endangered, threatened, and native mussels. Other major programs include coaster brook trout and lake sturgeon restoration, fulfilling tribal trust responsibilities for native aquatic species, and cost reimbursed rainbow trout production for recreational fishing. Hatcheries also provide technical assistance to other agencies, provide fish and eggs for research, and develop and maintain brood stocks of various species and strains.

Fish and Wildlife Conservation Offices

Fish and Wildlife Conservation Offices (FWCO) conduct assessments of fish populations to guide management decisions, play a key role in targeting and implementing native fish and habitat restoration programs; perform key monitoring and control activities related to aquatic invasive species; survey and evaluate aquatic habitats to identify restoration/rehabilitation opportunities; work with private land owners, states, local governments and watershed organizations to complete aquatic habitat restoration projects under the Service's National Fish Passage Program, National Fish Habitat Partnerships, 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. The Whitney Genetics Lab serves as a leading edge genetics laboratory and conducts environmental DNA (eDNA) sample processing for early detection of invasive species.



Midwest Region Fisheries Contacts

Todd Turner, Assistant Regional Director, Fisheries
todd_turner@fws.gov

Alpena Fish & Wildlife Conservation Office

480 West Fletcher St.
 Alpena, MI 49707
 Scott Koproski (scott_koproski@fws.gov)
 989/356-3052
 Area of Responsibility (MI, OH)

Ashland Fish & Wildlife Conservation Office

2800 Lake Shore Drive East
 Ashland, WI 54806
 Mark Brouder (mark_brouder@fws.gov)
 715/682-6185
 Area of Responsibility (MI, MN, WI)

Cartersville Fish & Wildlife Conservation Office

9053 Route 148, Suite A
 Marion, Illinois 62959
 Rob Simmonds (rob_simmonds@fws.gov)
 618/997-6869
 Area of Responsibility (IL, IN, OH)

Columbia Fish & Wildlife Conservation Office

101 Park Deville Drive; Suite A
 Columbia, MO 65203
 Tracy Hill (tracy_hill@fws.gov)
 573/234-2132
 Area of Responsibility (IA, MO)

Genoa National Fish Hatchery

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

Green Bay Fish & Wildlife Conservation Office

2661 Scott Tower Drive
 New Franken, WI 54229
 Mark Holey (mark_holey@fws.gov)
 920/866-1717
 Area of Responsibility (IN, MI, WI)

Iron River National Fish Hatchery

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

Jordan River National Fish Hatchery

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

LaCrosse Fish Health Center

555 Lester Avenue
 Onalaska, WI 54650
 Acting Terry Ott (terrance_ott@fws.gov)
 608/783-8441

LaCrosse Fish & Wildlife Conservation Office

555 Lester Avenue
 Onalaska, WI 54650
 Acting Scott Yess(scott_yess@fws.gov)
 608/783-8432
 Area of Responsibility (IA, IL, MO, MN, WI)

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
 Kasia Mullett (katherine_mullett@fws.gov)
 906/226-1235

Neosho National Fish Hatchery

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

Pendills Creek National Fish Hatchery

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

Sullivan Creek National Fish Hatchery

21200 West Hatchery Road
 Brimley, MI 49715
 Curt Friez (curt_friez@fws.gov)
 906/437-5231