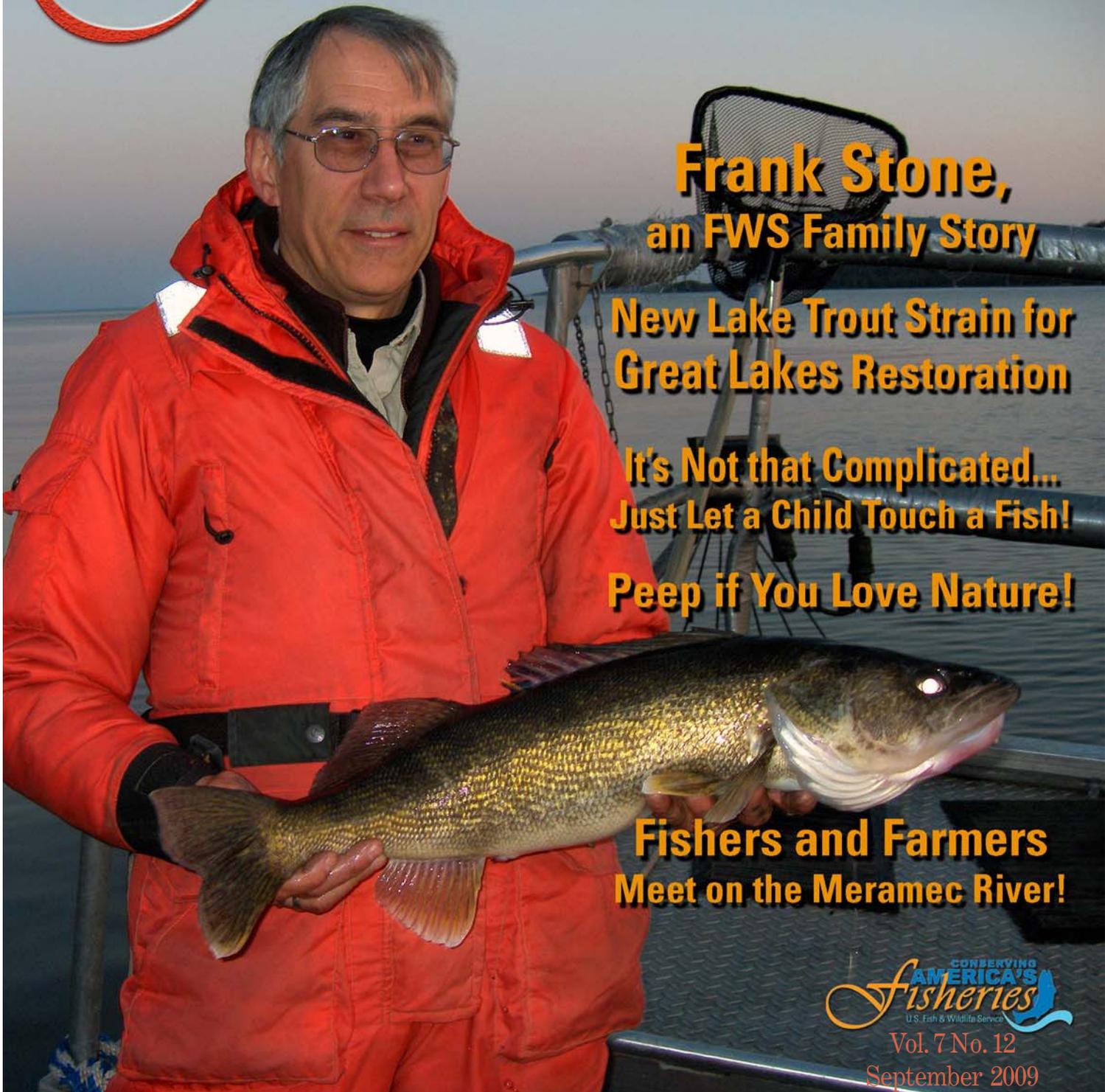




U.S. Fish & Wildlife Service - Midwest Region

Fisheries & Aquatic Resources Program

# *fish lines*



**Frank Stone,  
an FWS Family Story**

**New Lake Trout Strain for  
Great Lakes Restoration**

**It's Not that Complicated...  
Just Let a Child Touch a Fish!**

**Peep if You Love Nature!**

**Fishers and Farmers  
Meet on the Meramec River!**

CONSERVING  
*AMERICA'S*  
*fisheries*  
U.S. Fish & Wildlife Service

Vol. 7 No. 12

September 2009

# Fish Lines

## Fisheries & Aquatic Resources Program - Midwest Region

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

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

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-USFWS/BillMcCoy

Look closely to see an interior least tern chick and egg from Tern Island. The Carterville Fish and Wildlife Conservation Office has recommended a stocking plan to provide forage fish to the Tern Pool to encourage the interior least terns to stay away from a nearby selenium-laden lake (see article on pg. 12).

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

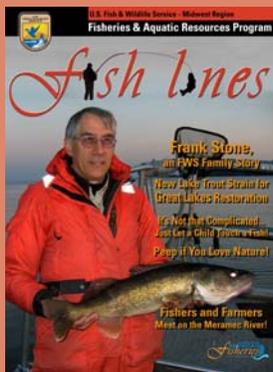
# Fish Lines

2009 Vol. 7 No. 12

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-USFWS

**Frank Stone retires from the Fish and Wildlife Service after a diverse and rewarding natural resource career.**

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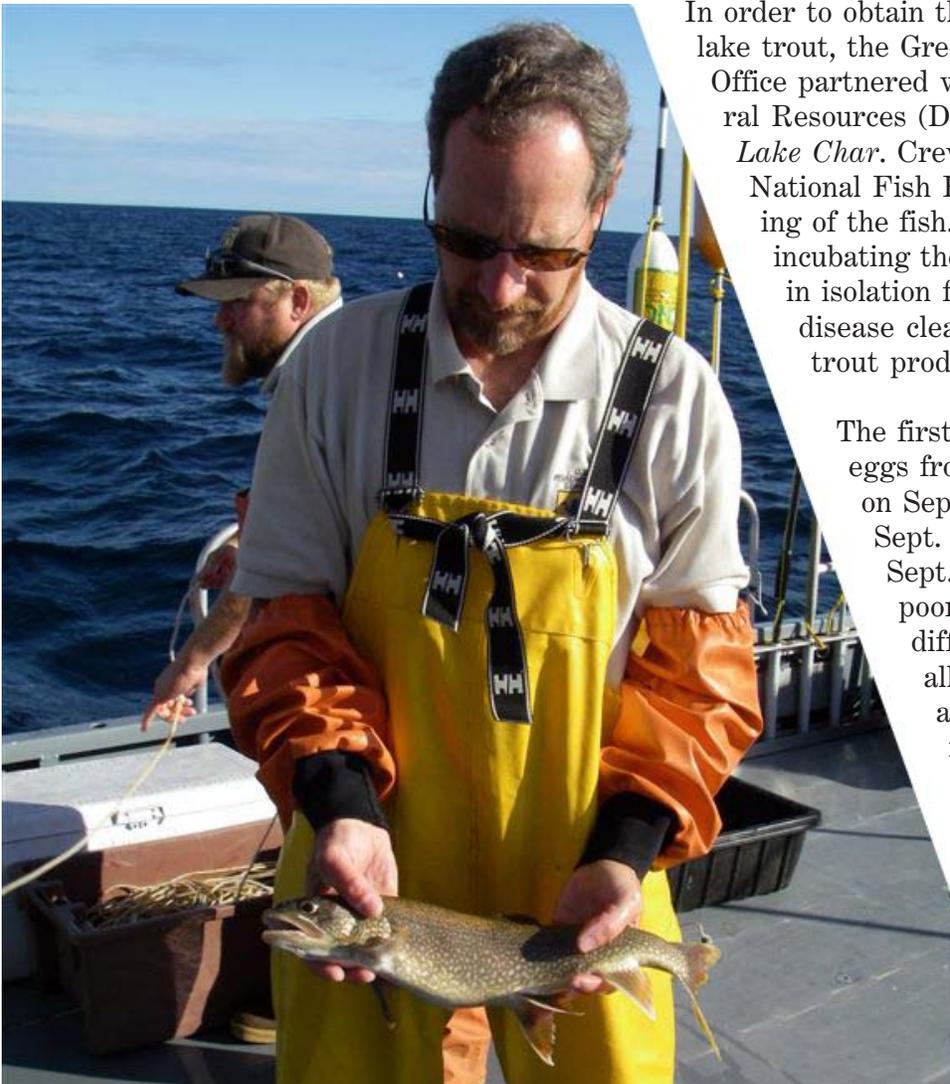
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# New Lake Trout Strain for Great Lakes Rehabilitation

BY JAMES LUOMA, GENOA NFH

The National Fish Hatchery System has for several decades been involved in rearing distinct strains of lake trout for rehabilitation efforts in the Great Lakes. Raising several different strains of lake trout requires the careful management of adult, or broodstock, populations used to produce production lots. To ensure the highest quality fish are available with the maximum amount of genetic variability, periodic influx of new genetic material is required into the brood populations. Maximizing genetic diversity can be accomplished by crossing different lines of the same strain or by obtaining gametes from wild sources and developing new lines. The Klondike Reef strain of lake trout was originally developed for stocking deep-water habitats of the Great Lakes. Klondike Reef is located about 57 kilometers northeast of Grand Marais, Mich. and is an underwater hill that ranges from 40 to 60 meters deep at the top, and from 90 to 250 meters deep at the bottom. Lake managers determined that a minimum of 33 pairs were required to start a new Klondike Reef line with more pairs providing a more genetically robust line.



-USFWS/RobElliott

**Rob Elliott checks a Klondike Reef strain of lake trout captured in Lake Superior. Wild fish will be spawned to develop a new year class of adult fish for the National Fish Hatchery System.**

In order to obtain the new line of Klondike Reef strain of lake trout, the Green Bay Fish and Wildlife Conservation Office partnered with the Michigan Department of Natural Resources (DNR) to set nets from the DNR vessel, *Lake Char*. Crews from the Genoa and Jordan River National Fish Hatcheries (NFH) assisted in the spawning of the fish. The Genoa NFH was also charged with incubating the eggs and holding the resulting progeny in isolation for approximately 18 months to allow for disease clearance and subsequent release to lake trout production facilities.

The first of three planned trips to gather wild eggs from the entire spawning run commenced on Sept. 14. The second trip commenced on Sept. 21, and the final trip was scheduled for Sept. 28 but was delayed until Oct. 14 due to poor weather conditions. Thirty-eight different family pairs were spawned overall. In order to minimize the possibility of any disease transmission from the wild fish into the hatchery system, all spawning was completed in sanitized equipment and utilized well-water. The eggs were also disinfected with iodine during the water hardening process. Eggs were also topically disinfected upon arrival at the Genoa NFH.

It takes a cooperative relationship between multiple agencies and offices to provide the expertise, equipment and personnel needed to undertake an effort of this magnitude.

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

# It's Not That Complicated... Just Let a Child Touch a Fish

BY WYATT DOYLE & TRACY HILL, COLUMBIA FWCO

**T**hey liked it so much last year they invited us back. I don't know who had more fun though... the kids or me. After you have squeezed a couple hundred-thousand fish in your career, they don't appear that interesting, but to these kids it was

of Missouri River fish (buffalo, gar, drum, carp and catfish) and headed down to the elementary school. Tracy tried to talk to the screaming group of kids, but whenever he picked up a fish it would splash the kids and the girls would run for cover behind their teacher in utter fear... did I mention the screaming? At this point, I was just taking pictures and trying to capture the amazement I was witnessing in each child's face.



-USFWS/Tracy Hill

**A very cautious student touches a sturgeon held by Wyatt Doyle of the Columbia Fish and Wildlife Conservation Office.**

the best show in town. Even an Xbox 360 would have had a hard time competing with our show. The group of 20 first to third grade kids were screaming, squirming, running and crying (yes crying) when the fish came out of the water.

Project Leader Tracy Hill and biologist Wyatt Doyle drew the short straw in staying late on a Friday to “show some fish to kids.” We rounded up the usual lot

You might have thought we were exhibiting the Loch Ness monster. I kept thinking to myself, “Come on people; it's just a fish; haven't you ever seen a fish?” Then I looked at the adults gathered around and noticed the same amazement in their faces and realized the only fish these city slickers had ever seen was tucked safely behind three inches of Plexiglas or better yet rolled in cornmeal. For me, it would be analogous to seeing a tiger versus petting a tiger. The only inhibition is the fear of the unknown and that day we broke down that fear; because by the end of the event, the screams were gone and replaced by requests to hold “the

big one” or “touch his teeth” and the children were quickly going tank to tank picking up, pawing and exploring each and every fish. Maybe conquering “nature-deficit disorder” is not so complicated after all. Just get a bunch of fish together and let a kid explore, as all kids will do and as we all did at one time, to become now positioned as the trustee of the next generation's appreciation for the outdoor world.

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

# PEEP if You Love Nature!

BY MELISSA CHEUNG, NEOSHO NFH

As a member of the Partnership for Environmental Education Programs, fondly referred to as PEEP, Neosho National Fish Hatchery (NFH) has been busy networking with seven other environmental sites in southwest Missouri and south-east Kansas. The alliance of local agencies has created a unique way to encourage children and families to go outdoors and visit local, state and federal lands.

It's called PEEP day, and it gives third, fourth and fifth graders a rare opportunity to learn about the nature that surrounds



-USFWS

Do you want kids to experience nature? Just let them PEEP into a container of aquatic critters.

rounds them. Depending on the weather, classes are conducted outside, and often involve live animals and interactive games or activities. Each facility hosting a PEEP day chooses four main subjects, and groups of 10-30 children rotate between the four subject stations. The three PEEP days thus far have taught the following subjects: Water Quality, Fish and Aquatic Macroinvertebrates, Tree Identification, Outdoor Ethics, Aquatic/Riparian Wildlife, Recycling, Plants and Their Adaptations, and Animal Families. While the hosting facility plans the agenda and teaching sites, all PEEP staff work together to organize the

curriculum for the day. Instructors come from diverse backgrounds including state game wardens, federal park rangers, biologists and outreach staff that specialize in a variety of programs.

To encourage further involvement outdoors, each student is given a PEEP passport to share with their family. Each pamphlet contains a map to the eight environmental sites within the PEEP alliance and activities to complete while visiting each location. Children follow PEEP's mascot, a spring peeper frog, through the pamphlet to complete all the pages including a *Certificate of Completion* at the end.

Each environmental site has one page in the pamphlet with their contact information and activities to complete. For example, if a child visits Neosho NFH with their PEEP passport, they need to complete the pages corresponding to Neosho NFH in order to receive a stamp at the bottom of the page. After travelling to other PEEP locations and completing at least six of the pages in the passport, they receive a Spring Peeper patch!

Thus far, Missouri Department of Conservation's Roaring River State Park and Wildcat Glades Conservation and Audubon Center have each hosted a PEEP day, one for MacDonal County schools and another for Newton County schools, respectively. National Park Service's George Washington Carver National Monument hosted their PEEP day last spring, and already began planning their second PEEP day for spring 2010.

You can visit our blog to view the PEEP passport at: [www.NeoshoNFH.blogspot.com](http://www.NeoshoNFH.blogspot.com)

Each PEEP day has received much positive feedback from local schools, parents and teachers. We are enthusiastic about the continued success of this program and look forward to contacting many more students. Ultimately, the partnership hopes this interaction with children plants a small seed of inspiration and care for the environment that grows in support and interest as they mature.

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

# Frank Stone, A FWS Family Story

BY ASHLEY SPRATT, EXTERNAL AFFAIRS

**F**runk Stone grew up surrounded by skyscrapers and pavement - a city boy born and raised in Los Angeles, Calif. But his father had a passion for the outdoors, and would take Frank camping, hunting and fishing. "I'm the prodigy of a family that just liked to get outside," he said. "I recall I got my first rifle for my seventh birthday - a 22-rifle single shot."

Frank accredits his interest in conservation to his family, but also to the generation in which he grew up on the West coast. A teenager in the 1960s, Frank was immersed in an unprecedented conservation movement. "It was a time when more and more kids were becoming attuned to natural resources," he said.



-KBIC/GeneMensch

Frank Stone retired from the Fish and Wildlife Service after a diverse and rewarding natural resource career.

After spending two years in the army in the early 1970s, Frank took the opportunity provided by the GI bill to enroll in Cal Poly State University to major in natural resources. He joined the California Division of Fish and Game part time during college, repairing "galvenatious guzzlers" - tanks used to collect rain water for storage in arid areas.

"The Western landscape provides a lot of good habitat for a variety of species, but the one thing the West lacks is water," he said. "I would travel from one guzzler to the next across the region, fixing the storage tanks so they remained in working order for galvenatious birds, like quail."

Frank earned his natural resources degree from Cal Poly in 1976. "Just prior to graduation, I sent out about 70 resumes, determined to have a job right out of college." Frank recalls the dismay he felt as the rejection slips rolled in. "I would paste the letters on the wall of my bedroom, I used them as a source of motivation to keep me going." For Frank, his persistence paid off.

He accepted a job offer with the Bureau of Land Management in Casper, Wyoming, working in the Big Horn Mountain Range for six months. Lucky for the Fish and Wildlife Service, the West Coast lured Frank back to California, where he entered the world of Fisheries. "I was always most interested in wildlife conservation, but I thought I would give Fisheries a try."

In the spring of 1977, Frank joined the Fish and Wildlife Service's (Service) Hagerman National Fish Hatchery (NFH) crew as a biologist, raising rainbow and cutthroat trout, but the hatchery was struck with a virus, and production came to a halt. So Frank transferred to Eagle Creek NFH to raise steelhead, Coho and Chinook salmon. During the same time, Frank also spent time working for the Vancouver Fishery Resources Office collecting fish for

genetic testing. “This was a time in fisheries conservation when electrophoresis and genetic identification was becoming popular in the scientific world.”

In his early career, Frank gained experience from Kooski and Dworshak NFHs before packing his bags with his wife, Sherry, headed for the Midwest. Little did Frank know that he would spend the next 30 years conserving, protecting and managing fisheries careers in the Great Lakes/Big Rivers Region. He spent his first nine years in the Midwest Region at the Jordan River NFH in Michigan, a full-service lake trout rearing facility. There, Frank was part of the team that initiated offshore stocking of lake trout on spawning reefs. “We partnered with the Coast Guard - their ship allowed us to take specially built tanks full of fingerlings offshore to established spawning reefs in Lake Superior. “I’m convinced it was this stocking effort that led to the natural reproduction that is taking place now in Lake Superior. It greatly increased the survivability of these fish.”

In 1991, Frank moved eastward along Superior’s coast to become the Assistant Project Leader at the Ashland Fish and Wildlife Conservation Office (FWCO), where he worked with the Great Lakes Indian Fish and Wildlife Commission (GLIFWC) and tribal natural resources program across the region. At that time, the tribes were beginning to build up their natural resources programs with personnel and equipment, Frank helped them do just that. During spring and fall, GLIFWC partners with the Service to conduct walleye surveys, information that is then used by tribes and the Wisconsin Department of Natural Resources to set tribal harvest limits for spearing walleye.

“When you consider the trust responsibilities the Service has with these tribes and the diverse resources they manage, developing these partnerships is a natural fit for the Service.” Frank was also part of a team that established the Service’s Tribal Wildlife Grant (TWG) Program. “We started the program about eight years ago, with the intent of making funds available to help tribes build their program; not only to fund staff and supplies, but also on-the-ground habitat development work.” Through this program, \$250,000 in grant funding goes directly to tribal natural resources programs across the Region each year.

**NOTE: “Each” tribe that receives a TWG grant can receive \$250,000. Please contact Native American Liaison Tim Patronski for the total funds awarded through this program at ([Tim\\_Patronski@fws.gov](mailto:Tim_Patronski@fws.gov)).**

“In my nineteen years at Ashland FWCO and in working with the tribes, I saw their natural resources programs grow to what they are today. I’d like to think I had a hand in helping them get there.”

“The Pacific Northwest is where I fell in love with my wife Sherry, where I became a father, and where I started my career,” Frank said. Although Frank’s heart has returned to the Pacific Northwest (He currently is retired, living with his wife Sherry in northern southern Idaho) his career with the Fish and Wildlife Service has left a lasting impression on the natural resources of the Great Lakes and Midwest Region.

#### **Follow Frank’s Advice:**

##### **Seek motivation from within**

**“We can be motivated by people, places and events, but the real motivation that it takes to persevere is belief in yourself. I must thank all of my previous project leaders and opportunities they gave me. I’m a self motivated person and when people see that, they’ve given me the training and direction I needed. Seek motivation from within.”**

##### **Be geographically mobile**

**“Living and working in different locations builds your problem-solving ability. By being geographically mobile, you can see and learn from others how to accomplish similar tasks in different ways.”**

##### **Be open to different points of view**

**“Be ready to work with people of different backgrounds and different interests, and be understanding of the way other people approach problems. The right/best way is not always your way.”**

##### **Invent your own future**

**“Don’t be timid about trying something different to invent your own future. I’m a photography bug, so I’m usually the one behind the camera. Memories captured in pictures mean a lot, so don’t always be caught behind the camera, get out in front of it.”**

# Fishers and Farmers Meet on the Meramec River

BY PAM THIEL, LA CROSSE FWCO

The steering committee and staff of the Fishers and Farmers Partnership for the Upper Mississippi River basin met at Meramec State park in Missouri to further develop their strategic plan for the five-state watershed. The Fishers and Farmers Partnership is sanctioned through the National Fish Habitat Action Plan (NFHAP).

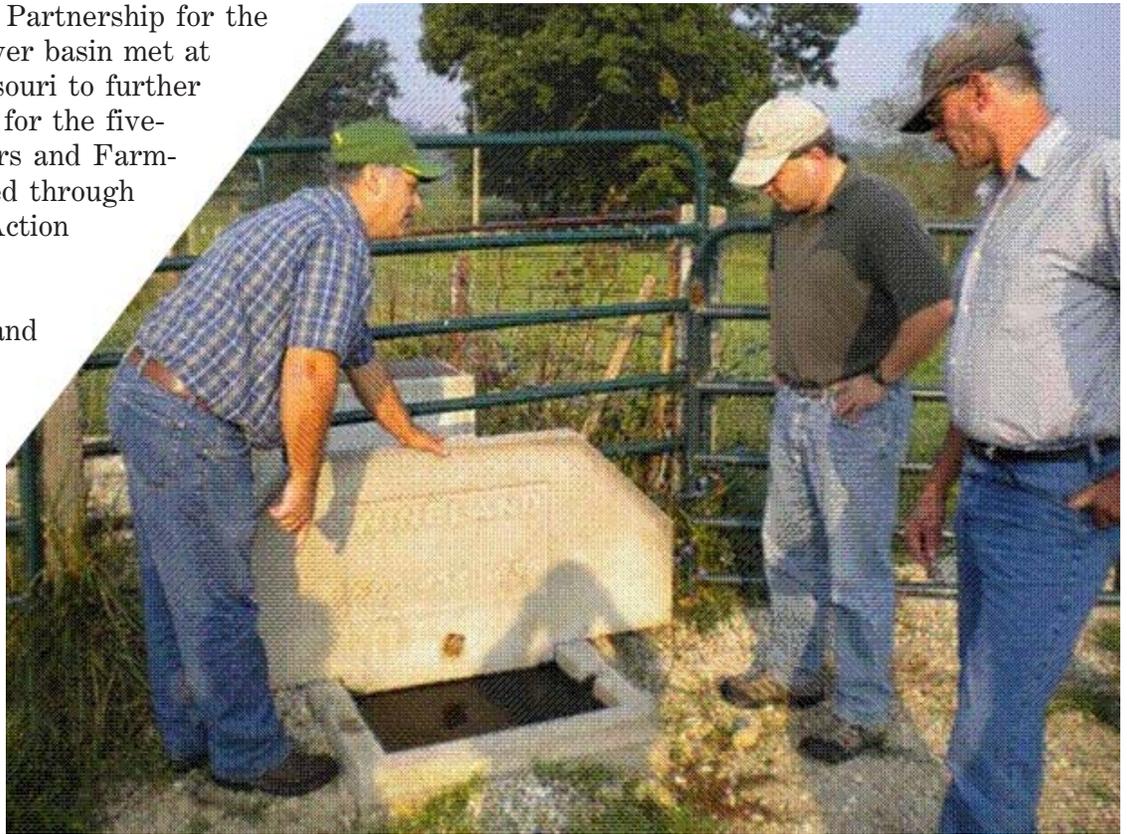
The mission of the Fishers and Farmers Partnership is to advance long-term strategies for stream health and sustainable agriculture. The Partnership works with land owners to add value to farms while restoring aquatic habitats, both on-site and downstream; thereby, providing healthy farms, healthy streams and healthy fish.

The Partnership is dedicated to valuing equally the role of conservationists and producers in providing solutions to improve rivers and streams in the basin. This is exemplified by the choice of co-chairs for the steering committee - Martin Konrad from the Iowa Department of Natural Resources and Roger Wolfe from the Iowa Soybean Association.

One of the highlights of the multi-day session was visiting a local livestock producer that received funds through a NFHAP demonstration project. He provided insights on how to gain the trust of farmers and how to work together effectively in areas of mutual interest.

This candidate Partnership is on target to submit its application for full Partnership status to the National Board in March, 2010.

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



-USFWS

**Meramec River farmer Dave Dunn shows Dave DeGeus (middle) of The Nature Conservancy and Scott Yess of the La Crosse Fish and Wildlife Conservation Office a livestock watering point that provides an alternative source of water, so his cattle can be fenced off the river.**



-USFWS

**Meramec River Valley**

## UMRCC Fall Fish, Wildlife and Recreation Tech Meetings

BY SCOTT YESS, LA CROSSE FWCO

The Fish, Wildlife and Recreation Tech Sections of the Upper Mississippi River Conservation Committee (UMRCC) held a joint meeting at White Water State Park in southeast Minnesota. The meetings were well attended and the accommodations were excellent. A special thanks to Kevin Stauffer, Scot Johnson, Tim Schlagenhaft, Dan Dieterman and the rest of the Minnesota Department of Natural Resources (DNR) staff members who assisted with hosting this meeting.



A highlight of the meeting included a presentation by Chuck Theiling of the U.S. Army Corps of Engineers (Corps) on *Geomorphic, Hydraulic and Land Cover Characteristics of the Upper Mississippi River System*. Tom Boland also presented the draft Fishery

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

## Friends Return in the Fall

BY SARAH BAUER, LA CROSSE FHC

*Friends of the Upper Mississippi Fisheries Services* (FUMFS) held their first fall meeting on September 17 at the new Eco Park near Myrick Marsh (La Crosse, Wis.). The group was given an exclusive, behind the scenes tour of displays and developing exhibits to be used in the new facility. The group discussed ideas for future meetings, programs

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

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.

Management Plan that the Fish Tech Section has been developing.

Comments were taken by the group and will be incorporated into the document. Key topics discussed by the Wildlife Tech Section were impacts to mussels from draw-downs and vegetation sampling. The Recreation Section continued their outreach effort on boating and camping impacts on the Upper Mississippi River. In addition, the Recreation Section presented recommendations on combining the Education Ad hoc with their Section.

The participants took advantage of an excellent field trip organized by the Minnesota DNR. Many members saw the Lock and Dam 4 Embankment Project and the Prairie Dune Restoration Site for the first time. The tour was led by Elliott Stefanik and Kurt Brownell from the Corps.

Action items to be addressed prior to the annual meeting are to:

- Find a new Mussel Ad hoc Chair
- Complete the Fishery Management Plan
- Complete the Fish Distribution Report
- Act on the recommendations from the Recreation Section
- Develop a retirement recognition standard
- Work with Tech Sections to identify Indicators

See the UMRCC web site at: [www.mississippi-river.com/umrcc](http://www.mississippi-river.com/umrcc) for complete meeting minutes concerning these topics and click on Tech Sections.

to offer, distribution of the kids' outdoor backpacks for local schools and libraries, and the possibility of holding joint meetings with the *Upper Mississippi River Wild Friends Group*. The meeting was informative, with new members and everyone looking forward to the meeting in October.

## Hatchery Stone to be Preserved

BY KAY HIVELY, NEOSHO NFH

Darian Douthit is a mason who spends his working days with rock, brick and cement. Most of that work means building something or occasionally tearing something down. But this summer, Douthit and his crew are tearing something down a bit different than the usual demolition job.

Douthit is in charge of removing some of the beautiful stonework that lines pond number 4 at the Neosho National Fish Hatchery (NFH). Some of this unique and beautiful work is being removed to provide parking spaces for the new hatchery visitor center. The historic flint stone, which was done in the 1930s, will be removed, cleaned and put back in the same pond after the parking lot is measured off.

Douthit, who has been a mason for 17 years, has nothing but praise for the work that put the stone in place.

“The work on this was excellent,” Douthit said. “It was quality work. I admire the men who did it.” Douthit said when his crew does demolition work they usually are able to tear out a wall like this with crowbars - not so at the hatchery. “We have to use power equipment to get these stone out. They put it in to stay.” The stonework was done in what is called a “grapevine” pattern which shows a wide bead of plaster around many of the stones.

Douthit was interested in the name of the man who did this work. When told it was a local contractor, Bob North, Douthit said his goal is to try and match Bob North’s work.

“It’s really excellent. We need more of this kind of work today,” Douthit said. Mr. North was well known for his work in and around Neosho. He was especially active during the Great Depression, when he did government public projects.

In 1928, Mr. North, along with Jess Leighty and Bob Jackson, built what we know today as the “feed building” on the grounds of the Neosho NFH. These men also rebuilt and repaired dams and walls at the hatchery and did work on the houses and fences.

Ten years later, in 1938, more work was scheduled to be done at the hatchery. This project was initiated by the Neosho Ad Club, a civic club with members from the business community. The club sought to acquire WPA (Works Progress Administration) funds to do extensive work at the hatchery. The WPA program was established by Congress to put millions of unemployed men to work doing public service jobs. Plans submitted by the Ad Club were approved by the

district WPA director who then submitted the plan to the national Director of Public Works.

In June of 1938, an allotment of \$18,000 was appropriated for work at the hatchery to build several structures and perform landscape work. Mr. North was appointed superintendent to supervise this work as well as WPA projects to build a city fire hall, and to do street and sidewalk work.



-Kay Hively

**Some of the beautiful stonework around Pond #4 at the Neosho National Fish Hatchery will be relocated to make room for the new visitor center parking lot. The stones were originally set by Bob North, a local contractor who oversaw Works Progress Administration projects in the 1930s.**

Later, a larger \$80,000 allotment was made for the fish hatchery, and Mr. North was again put in charge of the work. On this project, the local newspaper noted that Mr. North supervised over four miles of “...beautifully laid rock walls” which were “...built around the grounds and ponds, all of which have been rebuilt, cleaned, and many deepened.”

According to the newspaper, “One of the most attractive improvements is the re-building of the three small pools just east of the main hatchery building into three round, cloverleaf-design connecting pools.”

The newspaper also noted that “The extent of the work and the excellent manner in which it has been done is impossible to adequately describe...”

Today, Mr. Douthit and his crew are learning that, indeed, the work done on those “beautifully laid rock walls,” and supervised by Mr. Robert “Bob” North was truly done in an “excellent manner.”

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

## Patoka River NWR and the Interior Least Tern

BY SAM FINNEY, CARTERVILLE FWCO & BILL MCCOY,  
PATOKA RIVER NWR

The endangered interior least tern uses Indiana's Patoka National Wildlife Refuge (NWR) and Indiana's Cane Ridge Wildlife Management Area for nesting and rearing. On Cane Ridge Wildlife Management Area (WMA), there is a 59-acre Tern Pool with two 3-acre islands. The islands were specifically built to provide a safe nesting site for the interior least tern. Water was supplied to the pool from a 3,000-acre power plant lake. The goal of the nesting pool was to attract the least terns away from the power plant and onto Fish and Wildlife Service property to avoid conflict with power plant operations and increase production of the least terns. That effort was successful.

In 2008, data showed that the waters in the power plant lake were contaminated with selenium coming from leachate in the coal ash slurry waters. Based on the levels of selenium in the fish and invertebrates, water from the power plant lake was no

longer used to fill the Tern Pool. Duke Energy installed a 12,500-foot long, 12-inch pipe and pumped water from the Wabash River to the Tern Pool for the spring of 2009. The problem of selenium-laden water in the Tern Pool was solved, but the 3,000-acre lake with high levels of selenium in the forage fish was still available to foraging interior least terns.

Patoka NWR contacted the Carterville Fish and Wildlife Conservation Office (FWCO) to recommend a stocking plan to provide forage fish to the Tern Pool and other associated wetlands to encourage the interior least terns to stay away from the selenium-laden lake. Carterville FWCO provided, and Patoka NWR implemented, the recommendations to stock high densities of fathead minnows. This year's surveys showed that the terns were foraging much of the time on fish from the Tern Pool and associated wetlands away from any selenium contaminated areas. Monitoring and stocking will continue in future years.

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

## Pirates Abscond with Booty from Banks of the Missouri River

BY PATTY HERMAN & COLBY WRASSE, COLUMBIA FWCO

Like any other Missouri River Relief (MRR) cleanup event, Colby Wrasse and Patty Herman arrived to organized chaos at the Noren Access boat ramp in Jefferson City, Mo. Amidst the morning laughter and salutations, event organizers were strategizing to maximize volunteer efforts and to safely get 10 miles of river tidied up. Missouri River Relief is a passionate yet eclectic group of staff and volunteers dedicated to cleaning the shores of the Missouri River and its tributaries – so it isn't unusual to see some pretty weird stuff at these events; however, this morning we noticed that nearly everyone was wearing a pirate's eye patch. As Patty's curiosity was peaked, she couldn't resist asking, "So, what's with the eye patches?" Turns out that it was "International Talk Like a Pirate Day." For her question, she was promptly rewarded with an eye patch that she wore proudly during the event. Much to the annoyance of the groups that rode in Patty's boat, she proceeded to ask them all: "What's a pirate's favorite fish? A gaaaarrrr!"

It was an incredibly busy morning! Colby and Patty each shuttled five groups of volunteers to sites upstream and downstream of the boat ramp. An estimated 270 volunteers came out and picked up 5 ½ tons of trash from the river banks in front of the Missouri state capitol! One of the unique things about this group is that they catalogue all of the trash they collect, leading to a very detailed account of each year's effort. In addition to the 235 bags of trash, a 300 gallon diesel tank, a bowling ball (still in its bag) and pin, a purse and a 14' fiberglass boat were some of the highlights of "weird" trash collected. All of the trash was sorted and aluminum, glass and plastic were recycled thanks to Civic Recycling.

For eight years now, MRR has enhanced this great American river by removing tons of trash from its shorelines. Each year, MRR hosts approximately five local cleanup events at different sites along the river.

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

## Mussel Harvest takes place in Upper Mississippi River Basin

BY TONY BRADY, GENOA NFH

Fall in the Midwest is marked by cooling temperatures, changing colors of the leaves, and the low rumble of the combines in the fields. For Genoa National Fish Hatchery (NFH) and their partners, corn and soy beans aren't the only things harvested this time of year. Biologists from the Genoa NFH, U.S. Army Corps of Engineers, Minnesota Department of Natural Resources (DNR) and the Twin Cities Ecological Services Field Office plunge into the rivers of the Midwest harvesting cages that were "seeded" with juvenile mussels.



-USFWS

Handfuls of federally endangered Higgins' eye pearlymussels were produced in special mussel culture cages this year.

Cages are "seeded" by placing host fish, which have been inoculated with larval mussels, into the cages that are then placed into the river. The mussel larvae undergo a metamorphosis, then drop from the fish and settle onto the bottom of the cage where it starts growing from its microscopic size to as big as one half inch.

The majority of the cages harvested in 2009 were placed in the St. Croix River in 2008, thus giving the

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

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.

mussels two full growing seasons in the cages. A total of six mussel species were harvested from the St.

Croix cages, two of which are federally endangered and another is a candidate species. These cages produced 8,900 endangered Higgins eye pearlymussels, four endangered winged mapleleaf mussels, 904 snuffbox (candidate species), 1,800 fat mucket, several hundred muckets and two salamander mussels.

These are the first salamander mussels ever propagated in cages. As indicated by their name, the salamander mussel doesn't use a fish as a host, but instead uses a salamander called a mudpuppy. Genoa NFH has been rearing mudpuppies for several years now, growing them large enough to be used as the host species for this mussel.

Cages were also harvested from the Wisconsin River producing 50 mussels of two species, black sandshell and fat muckets. In Dubuque, Iowa, 16 additional cages in the Mississippi River were harvested and produced 550 fat mucket mussels. Mussels produced in the St. Croix were retained there for additional growth, except for the snuffbox which were reintroduced into the Mississippi River at the Twin Cities by the Minnesota DNR. The mussels from the Wisconsin River cages as well as those from the Dubuque cages were returned to cages in Dubuque to over winter and for additional growth next summer. These mussels will be used in research projects or introduced into new rivers to enhance existing mussel beds or to re-establish mussel beds that have been lost.

### Neosho National Fish Hatchery Fish Production

For Fiscal Year 2009 (October 2008 through September 2009), Neosho National Fish Hatchery's total number of fish stocked came to 354,338 weighing 100,120 pounds. Fish were stocked in Missouri, Nebraska, Iowa, South Dakota and Arkansas. There were 61 fish trips, including 3,291 total pallid sturgeons stocked - their lengths averaged between 11 and 15 inches.

## Columbia FWCO Samples at DeSoto NWR

BY AARON WALKER & BRIAN ELKINGTON, COLUMBIA FWCO

During the last week of September, Brian Elkington and Aaron Walker of the Columbia Fish and Wildlife Conservation Office (FWCO), along with staff from DeSoto National Wildlife Refuge (NWR), Boyer Chute NWR and Iowa Department of Natural Resources teamed up to sample DeSoto Lake in Missouri Valley, Iowa. We used both fyke and gill nets to sample the fishery and monitored the ongoing vegetation study that was initiated in the spring.

This sampling was completed as part of a long-term monitoring and management program started in the 1970s. The three day sampling effort consisted of 28 fyke net samples and five gill net samples. Bluegill and white bass were the most abundant species sampled but a surprisingly large number of black crappies were also caught. We collected scales from many of the fish, which will be examined at our lab for age and growth information. The collected data will be analyzed and incorporated into the annual DeSoto Lake Management Plan. Our team of interjurisdictional biologists can then make management decisions to help improve DeSoto Lake recreational fishing.

The lake, and refuge around it, draws large numbers of visitors each year, estimated at upwards of 26,000. Recreational fishing is an important part of DeSoto NWR.



-USFWS

Steve Van Riper of the DeSoto National Wildlife Refuge displays a nice catfish captured during a fishery assessment on DeSoto Lake.

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

## Sturgeon Swim South for the Winter

BY MELISSA CHEUNG, NEOSHO NFH

Neosho National Fish Hatchery (NFH) received pallid sturgeon from Gavin's Point NFH this September. These fish were spawned at Neosho NFH, reared at Gavin's Point NFH in warm, nutrient-rich water, and returned to Neosho as nine-inch fish. The pallid sturgeons, and those Neosho received earlier from Blind Pony State Fish Hatchery, were brought to the hatchery to over-winter. The heated spring water and moderate well-water temperatures will allow the fish to eat and grow continuously. We hope to be able to hold them until they reach at least 15 inches.



-USFWS

These pallid sturgeons were transferred to the Neosho National Fish Hatchery (NFH) from the Gavins Point NFH (South Dakota) where they will be grown to about 15 inches prior to stocking into Missouri River waters.

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

## Wild Fish Health Survey on the Mississippi River

BY COREY PUZACH, LA CROSSE FHC

The La Crosse Fish Health Center (FHC) and the La Crosse Fish and Wildlife Conservation Office (FWCO) staff conducted the annual Wild Fish Health Survey of Pools 3 and 4 of the Upper Mississippi River in August. The Wild Fish Health Survey is a national program that screens fish for target fish pathogens. The FHC has participated in the program since it began in 1997 and has since been conducting annual surveys of the Mississippi River. Yearly screenings of fish are important to identify any



-USFWS

**La Crosse Fish Health Center and Fish and Wildlife Conservation Office staff return with fish captured by electrofishing in the Upper Mississippi River. The fish were sampled as part of the Wild Fish Health Survey.**

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

### **Aquatic Invasive Species**

Aquatic invasive species are one of the most significant threats to fish and wildlife and their habitats. Local and regional economies are severely affected with control costs exceeding \$123 billion annually. The Fisheries Program has focused its efforts on preventing introductions of new aquatic invasive species, detecting and monitoring new and established invasives, controlling established invasives, providing coordination and technical assistance to organizations that respond to invasive species problems, and developing comprehensive, integrated plans to fight aquatic invasive species.

new or emerging invasive pathogens and monitor for the spread of existing pathogens.

Fish were electroshocked by staff of the La Crosse FWCO and brought to the Minnesota Department of Natural Resources headquarters in Lake City, Minn. for Pool 4 and the marina operated by the Prairie Island Indian Community near Red Wing, Minn. for Pool 3.

The La Crosse FHC staff conducted health sampling at both locations. It was a productive survey, with over 200 fish representing ten species sampled from Pool 3 and 157 fish representing nine species sampled from Pool 4 of the Mississippi River. All fish tested were negative for target viral and bacterial pathogens.

## River Camp Done Right

BY COLBY WRASSE, COLUMBIA FWCO

I have spent many nights camped along the banks of a river or lake. The setup for this type of camping is usually pretty simple – a tent, sleeping bag and campfire. What most people refer to as “roughing it.” When I was asked to assist with Missouri River Relief’s River Camp, I was expecting a similarly primitive camp. After all, the site was a large island sandbar on the Missouri River. Without plumbing or electricity and accessible only by boat, I was expecting to “rough it.” Was I ever wrong!



-USFWS/ColbyWrasse

**Missouri River Relief’s 2009 River Camp celebrates the season’s efforts by volunteers to ensure that the Missouri River remains a national treasure.**

All Missouri River Relief asked of us was to shuttle people from the boat ramp to the sandbar camp and then back to the boat ramp. Wyatt Doyle and Colby Wrasse from the Columbia Fish and Wildlife Conservation Office (FWCO) assisted with shuttling people and were rewarded with dinner. But this was not your typical hot dog and can of beans camp dinner. The meal included salad, fresh fruit, potatoes, several desert choices and catfish cooked by a local legend named Soda Pop.

River Camp is an annual event hosted by Missouri River Relief. The camp serves many purposes including: celebrating the year’s accomplishments, honoring citizens who make the Missouri River Valley a better place, reconnecting people with nature, educating those who will listen and, most of all, taking some time to relax and just enjoy life on the “Big Muddy.”

I left that night in awe of these people’s dedication and love of the Missouri River. Missouri River Relief’s message continues to spread as more and more people are becoming interested and involved with the Missouri River. Whether through one of its many river clean-ups or its educational campaign, Missouri River Relief and its devoted volunteers are constantly striving to make the Missouri River a better place. Columbia FWCO looks forward to continue work with this committed group.

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

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

When I first arrived at River Camp, I was struck by the size. The sandbar, which is approximately a mile long, was nearly covered from end-to-end with tents and other temporary structures. The camp included portable toilets, a sound system, live musical entertainment, a functional kitchen and dining area (complete with table cloths, candlelight and fancy silverware). I’m still not sure how they pulled this off - dedication, a little imagination and many helping hands.

## Great Day for a Hatchery Open House!

BY CHRIS OLDS, LA CROSSE FHC

Perfect weather, lots of kids, and a fun atmosphere is what you would have found at the Iron River National Fish Hatchery's Open House on Saturday, September 12. La Crosse Fish Health Center's (FHC) student employee Chris Olds took the Saturday afternoon to explain to families what the FHC tests for at a fish hatchery like Iron River and why it is necessary. Chris answered numerous questions about wild fish health surveys and the most popular topic, Viral Hemorrhagic Septicemia (VHS) and its current distribution around the Midwest Region. Not only did Chris have posters to display what the La Crosse FHC does, but also had on hand the highly sought after "GO Green" Frisbees and water bottles, which more than 300 kids gladly took home!

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



-USFWS/NikolasGrueneis

Visitors at Iron River National Fish Hatchery's open house investigate the La Crosse Fish Health Center display.

## Let's Go Fishing!

BY JENNY WALKER BAILEY, GENOA NFH

Residents of the Norseland Nursing Home, Westby, Wis. were the first anglers to try their luck at the Dairyland Power Accessible Fishing Pier recently installed at Genoa National Fish Hatchery (NFH). The fish were biting! The fishermen caught their limit using fathead minnows supplied by hatchery staff and had a great afternoon in the late summer sunshine. One angler reeled in his first fish ever, a 17-inch rainbow trout, and then caught another and another.

Hatchery staff and nursing home assistants helped with stringing, baiting and taking pictures while the fishermen fished. It was a great day, enjoyed by all. The fishing dock was donated in July by Dairyland Power to increase accessibility to Genoa's fishing pond and create fishing opportunities for people who may not otherwise have access to fishing areas. The entrance ramp leading from the parking area and driveway makes access to the fishing dock easy to navigate even for those with reduced mobility. Fishing is a fun way to enjoy the outdoors, and the fishing dock opens up new opportunities for wildlife viewing as well.

The fishing pond is currently stocked with rainbow trout, but a stocking plan is being developed to supply yellow perch, bluegill, largemouth and smallmouth bass, black crappie and walleye for sanctioned fishing

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

events as well. Eight rainbow trout were cleaned by hatchery staff and sent home with the happy anglers, to share with their friends. This was a great first event for the Dairyland Fishing Pier, and promises to provide many more opportunities for people and fishing to come together. Genoa NFH also hosts an array of wildlife and birds throughout all seasons.



-USFWS

A fisherman proudly displays his catch at the Dairyland Power Accessible Fishing Pier at the Genoa National Fish Hatchery.

## Brook Trout Alive and Well in Trout Creek

BY DOUG ALOISI, GENOA NFH

Good news coming from the fall fishery assessments on Trout Creek of the Oneida Indian Reservation! Assessment results indicate good growth and survival of the brook trout fingerlings stocked from the Genoa National Fish Hatchery (NFH) as 2.25 inch fingerlings this spring. The fish have grown to 3-4 inches in length this summer, which provides encouragement that the watershed is capable of sustaining brook trout again.



-USFWS

**This brook trout was collected during the fall fishery assessment on Trout Creek, indicating a successful reintroduction of brook trout to this stream on the Oneida Indian Reservation.**

NFH, Oneida tribe and Wisconsin DNR is a text book example of how conservation agencies can work together to advance conservation efforts well into the future.

Brook trout are an excellent biological indicator of watershed health, and the presence of live trout and the use of other watershed quality indices will be used as tools to ensure that Trout Creek will have its name-sake residents for generations to come.

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

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.

The Trout Creek watershed had many of its aquatic species reduced or eliminated due to degrading water quality caused by inadequate manure storage facilities in the upper watershed. Through action initiated by the Oneida tribe and the Wisconsin Department of Natural Resources (DNR), point source pollution was reduced and habitat rehabilitation efforts were established. Brook trout were reintroduced according to the Oneida Department of Natural Resources Trout Creek watershed management plan, and the first of three year classes of brook trout were placed into Trout Creek this spring.

A strain of wild brook trout from nearby Ash Creek, Wis. was stocked to increase the chances that survival would be high. Brook trout eggs were carefully screened for fish pathogens by the La Crosse Fish Health Center and isolated from other fish populations at the Genoa NFH to reduce the risk of disease. Human activity was also minimized during rearing at the hatchery, to maintain startle responses of the fish and preserve predator avoidance behavior after the fish were stocked.

This cooperative effort between the Green Bay National Fish and Wildlife Conservation Office, Genoa

## Partners Join in Science Anniversary Celebration

BY MARK STEINGRAEBER, LA CROSSE FWCO & SARAH BAUER, LA CROSSE FHC

The U.S. Geological Survey (USGS) Upper Midwest Environmental Sciences Center (UMESC) was founded in 1959 as a Department of the Interior research laboratory dedicated to the development of chemical agents for the control of common carp. Originally named the Fish Control Laboratory (FCL), it was part of the Fish and Wildlife Service's Bureau of Sport Fisheries. The FCL tested and screened thousands of pesticides for possible use in federal and state fishery management projects.



Over the next 50 years, the scope of work for scientists at this federal research facility was progressively broadened to include development of standard procedures to assess the toxicity of aquatic pesticides; registration of therapeutic drugs and anesthetics used in aquaculture and fishery management; chemical and biological measures to control a growing number of invasive aquatic nuisance species; large river ecology; effects of commercial navigation and environmental contaminants on fish and wildlife

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

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

resources; and monitoring the health and status of the Upper Mississippi River ecosystem.

A part of the U.S. Geological Survey's Biological Resources Division since 1996, the UMESC marked its 50 year anniversary this fall with a public open house held on September 12. Many of UMESC partners attended the event including the La Crosse Fish and Wildlife Conservation Office (FWCO), La Crosse Fish Health Center (FHC), Genoa National Fish Hatchery (NFH), Wisconsin Department of Natural Resources (DNR), Minnesota DNR, U.S. Army Corps of Engineers, University of Wisconsin-La Crosse and Viterbo University. Partners were invited to participate in this celebration highlighting local, regional, national and international efforts to conserve and protect natural resources for the use and enjoyment of future generations.

The La Crosse Fish and Wildlife Conservation Office (FWCO) promoted actions to prevent the release of pet fish and the disposal of unwanted medications into regional waters. The La Crosse Fish Health Center displayed how they work with USGS to research drug treatments to treat and prevent different diseases and parasites of hatchery fish. The highlighted studies on display included the Viral Hemorrhagic Septicemia Virus egg disinfection study, *Gyrodactylus salmonis* hydrogen peroxide study, and *Streptococcus iniae* study in tilapia fish. The Genoa NFH presented information on freshwater mussel resources and efforts to restore Midwestern mussel populations.

Nearly 1,500 visitors came to this educational and entertaining day-long event to celebrate the cooperative use of science by Department of the Interior agencies and their partners in making a better world. To learn more about the past, present and future direction of science at the UMESC, visit: <http://www.umesc.usgs.gov/50.html>.

## Fishers and Farmers Assessment Report

BY MARK STEINGRAEBER, LA CROSSE FWCO

The National Fish Habitat Action Plan (NFHAP) is an initiative to protect, restore and enhance the nation's fish and aquatic communities through cooperative, locally-driven, private and public partnership efforts that foster fish habitat conservation and improve the quality of life for the American people. The Fishers and Farmers Partnership for the Upper Mississippi River basin is one of eleven regional candidate programs under consideration for full partnership status in the NFHAP. The geographic focus of this partnership is on lotic drainages and agricultural landscapes in the Upper Mississippi River basin (UMRB) that were glaciated during the last continental ice age. This 490,000 square kilometer landscape, containing much of America's most productive agricultural land, is drained by more than 49,000 kilometers of streams. It includes large portions of



-USFWS

**Agricultural landscapes and lotic drainages are focal points for anticipated Fishers and Farmers Partnership program actions to conserve fish and aquatic communities in the Upper Mississippi River basin.**

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

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.

Illinois, Iowa, Minnesota, Missouri and Wisconsin, small portions of Indiana, Michigan and South Dakota, and covers all or parts of 357 counties.

To receive formal recognition as a NFHAP partnership program and compete for annual federal funding, candidate programs like Fishers and Farmers must draft a strategic plan detailing how fish habitat conservation goals will be accomplished. As part of the strategic planning process, program partners called for an objective assessment of the current needs and opportunities to protect, restore and enhance fish and aquatic communities in the UMRB while simultaneously improving agricultural production through cost effective actions that promote more efficient and sustainable land use practices.

A 13 member team of regional conservation professionals, co-chaired by Scott Yess and Mark Steingraeber of the La Crosse Fish and Wildlife Conservation Office (FWCO), conducted this assessment over a nine month period using the most recent scientific data available for the UMRB. Based largely on geographic information system analyses of these data, an initial report was completed in August and submitted to members of the Fishers and Farmers Steering Committee for consideration in preparing the Strategic Plan. The 30 page document titled *Fishers and Farmers Partnership Program for the Upper Mississippi River Basin: Assessment Team Report*, is now available on request by emailing [mark\\_steingraeber@fws.gov](mailto:mark_steingraeber@fws.gov) and will soon be available on line at: <http://fishersandfarmers.org/documents.html>. The Fishers and Farmers Steering Committee is scheduled to submit its formal application for full partnership recognition to NFHAP representatives before the end of the year.



## National Fish Habitat Action Plan

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Web [www.fishhabitat.org](http://www.fishhabitat.org)

October 19, 2009

Ohio River Basin Fish Habitat Partnership  
c/o Rob Simmonds  
U.S. Fish and Wildlife Service  
Carterville National Fish and Wildlife Conservation Office  
9053 Route 148, Suite A  
Marion, IL 62959

Dear Mr. Simmonds:

Congratulations! The National Fish Habitat Board (Board) approved the Ohio River Basin Fish Habitat Partnership's (ORBFHP) application to become a fully recognized Fish Habitat Partnership under the National Fish Habitat Action Plan at its October 2009 meeting.

The ORBFHP focuses on conservation of fish and mussel habitat on the mainstem and tributaries of one of America's largest rivers. The Basin covers parts of 11 States and is home to more than 350 species of fish and 120 species of mussels. The ORBFHP's efforts will enhance both species diversity and angling opportunities to benefit the people of the Ohio River Basin.

The Board's recognition of ORBFHP as a Fish Habitat Partnership marks the beginning of a new long-term relationship. Our work together has just begun. In that spirit, the Board provides the following observations and recommendations regarding your role as a Fish Habitat Partnership.

The ORBFHP should continue to coordinate with the Science and Data Committee to ensure that your habitat assessments are compatible with the National Fish Habitat Assessment and that your data system is compatible with the National Data System that is in development.

The ORBFHP should initiate and maintain communication as appropriate with other recognized and candidate Fish Habitat Partnerships whose interests and focus areas may overlap those of ORBFHP. The ORBFHP's decision to exclude the Tennessee-Cumberland Basin from its geographic boundary represents an innovative and pragmatic compromise to minimize overlap with the Southeast Aquatic Resources Partnership. We also applaud the ORBFHP's collaboration with other Fish Habitat Partnerships in the Midwest to share technical and administrative resources.

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

## Congressional Staffers Tour Aquatic Habitat Restoration Site

BY RYAN AYLESWORTH, EXTERNAL AFFAIRS & BRIAN ELKINGTON, COLUMBIA FWCO

The Fish and Wildlife Service, in coordination with the Missouri Department of Conservation (MDC) and appropriate private landowners, invited congressional staff from Senators Bond (R-MO) and McCaskill (D-MO) and Congressman Luetkemeyer (R-MO-9) offices to take part in a tour of an aquatic habitat restoration project on private farmland in the Lower Bourbeuse watershed in Franklin and Crawford Counties (eastern Missouri). The event took place on September 30.

Prior to restoration activities, heavy agricultural pressure had contributed to severe erosion of stream banks and high sediment loads to the stream, which negatively impacted habitat and water quality, as well as local fish populations. During the site visit, congressional staff learned how efforts to improve land management practices in recent years have led to improvements in water quality and reductions in stream bank erosion, which in turn have helped to maintain habitat for fish, amphibians and reptiles, and aquatic invertebrates.

Efforts to improve aquatic habitat in the Meramec - Lower Bourbeuse Watershed basin are unique, as landowners drive the restoration programs. There is a lengthy history of landowner cooperation and leadership in conservation activities within the watershed, which includes Little Bourbeuse, Brush Creek, Lick Creek and Boone Creek sub-watersheds. The landowners were proactively approached by the Fish and Wildlife Service and MDC just prior to the scaleshell mussel being listed under the Endangered Species Act. Collectively, the agencies and the landowners developed a plan to ensure healthy streams and healthy farms. There has been a waiting list of landowners with a clear desire to participate in watershed improvement efforts since 2001, with significant water quality and habitat improvements taking shape in the watershed over the past eight years.

The partnership restoration project falls under the umbrella of the Southeast Aquatic Resources Partnership (SARP) and is a direct application of the National Fish Habitat Action Plan (NFHAP). The NFHAP is a national investment strategy to maximize the impact of conservation dollars on the ground.

Under the NFHAP, federal, state, tribal and privately raised funds are leveraged through regional partnerships to address the nation's biggest fish habitat challenges.

Senator Bond has co-sponsored the National Fish Habitat Conservation Act of 2009 (S. 1214) in the United States Senate, and this legislation aims to conserve the Nation's fish and aquatic communities through partnerships that foster fish habitat conservation and will act as organic legislation for the NFHAP program.



(Above) Congressional staffers met with officials from the Fish and Wildlife Service and Missouri Department of Conservation to tour the Brush Creek site (below). The site is a recently completed partner-based aquatic restoration project on private farmland in eastern Missouri that reduced the erosion and sedimentation impacts associated with cattle crossings.



-USFWS photos

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

## New and Improved Missouri River Cross Training

BY PATTY HERMAN & ANDREW PLAUCK, COLUMBIA FWCO

Members of the Pallid Sturgeon Population Assessment and Monitoring project decided to implement a new cross training strategy for 2009. Experiences from years past have been frustrating at times for both the attendees and organizers. Due to the large size of the group, it has often been difficult to get and keep everyone's attention on the gear deployment demonstrations. This year, instead of a huge group of people getting together and standing on a sandbar somewhere in the Missouri River basin to watch others fish, it was decided that the trainings needed to be a little more intimate. Members of each team would meet with another agency and spend the day working side-by-side to learn the nuances of deploying gear in a specific segment of the Missouri River.



-USFWS/PattyHerman

**Darby Niswonger of the Missouri Department of Conservation is thrilled to capture her first chestnut lamprey during a cross training exercise with crews from the Columbia Fish and Wildlife Conservation Office.**

Andy Plauck and Patty Herman got the chance to spend the day with a crew from the Missouri Department of Conservation – Chillicothe (MDC). We trammel netted and set mini-fyke nets on a bend in Segment 10 near Miami, Mo., about 40 miles upstream of our sampling reach. The weather was perfect and we had a great time working together and catching up. We discussed the finer points of getting trammel nets off of snags and setting mini-fykes from the boat vs. hand deployment. We also chatted about trot line efforts for the fall and wild pallid sturgeon captures.

A few weeks later, Darby Niswonger (crew leader from MDC) came down to the Columbia Fish and Wildlife Conservation Office (FWCO) to trammel net and pull mini-fykes from a couple of bends near

Hermann, Missouri. Darby was incredibly enthusiastic and a great addition to our two crews on the water that day.

She was especially excited to capture her first chestnut lamprey! She also identified a pallid sturgeon while drifting trammel nets with the other crew. Though it was a long, hard and muddy day, Darby's enthusiasm and participation never waned. In the 10 hours we spent together, all aspects of the program were analyzed, argued and joked about.

While MDC crews sample a very similar river to our own, we also wanted an opportunity to cross train with crews from several states from the upper Missouri River. Dane Shuman, a Fish and Wildlife biologist who works on the Missouri River between the two lowermost reservoirs (commonly called the Fort Randall reach) came down for a day of trawling. Dane's first observation was size difference between the river where he works and ours in the lower portion of the river. He was also amused at the silver carp flying out of the water and the young-of-year sturgeon during our first trawl run. Sturgeon do not successfully spawn in this reach of river since their eggs fall out into a reservoir with many predators. We shared a few war stories about trawling on the "Big Muddy" and talked about different ways to rig trawls and retrieve snagged nets. Overall, the information shared was a great experience for everyone. We hope to get up and sample with some of the other crews next to see more of the river and learn from our peers in other states.

Though we all work from the same playbook (the Missouri River Standard Operating Procedure and PSA protocol), each crew deploys and retrieves gear in a slightly different manner; as an artifact of the extremely variable conditions found throughout the basin. These smaller cross training exchanges have proven to be a great improvement from years past. These events give crews a chance to get to know one another better, discuss equipment and boat modifications and even to debate current sampling methods for monitoring federally endangered pallid sturgeon.

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

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

## La Crosse FHC Trains Visiting Biologist

BY ERIC LEIS AND SARAH BAUER, LA CROSSE FHC

During the week of September 15<sup>th</sup>, the La Crosse Fish Health Center (FHC) hosted Ken Peters, a visiting biologist from the Bozeman FHC (Montana). Bozeman's staff has been working on an ongoing study to identify fish health pathogens from Devils Lake, North Dakota. The survey includes screening fish for bacteria, viruses and parasites.

In the past, Bozeman FHC sent their parasites to the La Crosse FHC for staining, mounting and identification. This year, Ken Peters came to the La Crosse FHC to learn how to stain and mount the parasites. Eric Leis, Ryan Katona and Sarah Bauer assisted Ken with staining and parasite mounting techniques. Becky Lasee, Eric Leis and Ken Peters examined the parasites from the fish for identification. The parasites will be identified to species over the next couple of months.

Parasite identification can be a tedious process which involves use of dichotomous keys, measuring

various organs and structures of the parasites and recognizing specific morphologies.



-USFWS/Sarah Bauer

**Becky Lasee of the La Crosse Fish Health Center (FHC) helps Ken Peters of the Bozeman FHC identify parasites from the Devil's Lake (North Dakota) study.**

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

## Carterville Biologists Spawn New Lives

BY CARTERVILLE FWCO STAFF

There must be something in the water in southern Illinois. Like fish in the spring, biologists John Zeigler, Sam Finney, Nate Caswell and Matt Mangan all have new babies to care for. The fish still realize that the four biologists are there though; looking after them as they are their newborns. John's son Nathan William was born December 28, 2008; Sam's son

Marshall was born March 25 2009; Matt's daughter Ella Elizabeth was born June 25; and Nate's daughter Corrine Audrey was just born on August 11. All four babies and their mothers are healthy and doing well.

Sam Finney, assistant project leader of the Carterville Fish and Wildlife Conservation Office (FWCO), arrived in Region 3 in November of 2008. When meeting the new staff he learned that biologist John Zeigler was expecting a new baby and announced that he and wife Heidi were expecting also. Others in the office remarked that Matt Mangan, a biologist with Ecological Services down the road was also expecting a daughter. Not wanting to miss out on the fun and excitement, a few weeks later biologist Nate Caswell of the Carterville FWCO announced that he and wife Anna were also expecting.

It is a good time for the biologists in southern Illinois; all four are enjoying their new lives (literally and figuratively). As an added bonus, Shelley Simmonds, administrative assistant for both Carterville FWCO and Ecological Services is enjoying holding and spoiling all the new babies with new clothes and toys. If she would just change a diaper once in a while, the biologists would be very happy!



-USFWS

**Southern Illinois Fish and Wildlife Service biologists expand the Service family; (Lt. to Rt.) Nate Caswell and Corrine, John Zeigler and Nathan, Matt Mangan and Ella, Sam Finney and Marshall.**

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

# Congressional Actions

S. 1214 (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]

H.R. 2565 (ih) 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 House]

H.R. 146 (enr) To designate certain land as components of the National Wilderness Preservation System, to authorize certain programs and activities in the Department of the Interior and the Department of Agriculture, and for other purposes. [Enrolled bill]

S. 22 (es) To designate certain land as components of the National Wilderness Preservation System, to authorize certain programs and activities in the Department of the Interior and the Department of Agriculture, and for other purposes. [Engrossed in Senate]

S. 22 (pcs) To designate certain land as components of the National Wilderness Preservation System, to authorize certain programs and activities in the Department of the Interior and the Department of Agriculture, and for other purposes. [Placed on Calendar Senate]

H.R. 3086 (ih) To coordinate authorities within the Department of the Interior and within the Federal Government to enhance the United States' ability to conserve global wildlife and biological diversity, and for other purposes. [Introduced in House]

H.R. 2192 (ih) To establish an integrated Federal program to protect, restore, and conserve the Nation's natural resources in response to the threats of climate change and ocean acidification. [Introduced in House]

S. 1933 (is) To establish an integrated Federal program that protects, restores, and conserves natural resources by responding to the threats and effects of climate change, and for other purposes. [Introduced in Senate]

H.R. 2454 (ih) To create clean energy jobs, achieve energy independence, reduce global warming pollution and transition to a clean energy economy. "Calendar year Required annual percentage [Introduced in House]

H.R. 2998 (ih) To create clean energy jobs, achieve energy independence, reduce global warming pollution and transition to a clean energy economy. "Calendar year Required annual percentage [Introduced in House]

H.R. 2996 (rs) Making appropriations for the Department of the Interior, environment, and related agencies for the fiscal year ending September 30, 2010, and for other purposes. [Reported in Senate]

H.R. 2454 (rh) To create clean energy jobs, achieve energy independence, reduce global warming pollution and transition to a clean energy economy. "Calendar year Required annual percentage [Reported in House]

H.R. 2454 (eh) To create clean energy jobs, achieve energy independence, reduce global warming pollution and transition to a clean energy economy. "Calendar year Required annual percentage Calendar year Required annual percentage [Engrossed in House]

H.R. 2454 (pcs) To create clean energy jobs, achieve energy independence, reduce global warming pollution and transition to a clean energy economy. "Calendar year Required annual percentage Calendar year Required annual percentage [Placed on Calendar Senate]

H.R. 2996 (pp) Making appropriations for the Department of the Interior, environment, and related agencies for the fiscal year ending September 30, 2010, and for other purposes. [Public Print]

H.R. 2188 (rfs) To authorize the Secretary of the Interior, through the United States [Referred in Senate]

H.R. 1080 (ih) To strengthen enforcement mechanisms to stop illegal, unreported, and unregulated fishing, and for other purposes. [Introduced in House]

H.R. 1080 (eh) To strengthen enforcement mechanisms to stop illegal, unreported, and unregulated fishing, and for other purposes. [Engrossed in House]

H.R. 1080 (rfs) To strengthen enforcement mechanisms to stop illegal, unreported, and unregulated fishing, and for other purposes. [Referred in Senate]

H.R. 1080 (rh) To strengthen enforcement mechanisms to stop illegal, unreported, and unregulated fishing, and for other purposes. [Reported in House]

H.R. 2055 (ih) To establish a Salmon Stronghold Partnership program to protect wild Pacific salmon, and for other purposes. [Introduced in House]

H.R. 2807 (ih) To sustain fish, plants, and wildlife on America's public lands. [Introduced in House]

S. 817 (is) To establish a Salmon Stronghold Partnership program to conserve wild Pacific salmon, and for other purposes. [Introduced in Senate]

H.R. 3198 (ih) To authorize the Secretary of the Interior to provide international wildlife management and conservation programs through the Wildlife Without Borders Program in the United States Fish and Wildlife Service, and for other purposes. [Introduced in House]

S. 570 (pcs) To stimulate the economy and create jobs at no cost to the taxpayers, [Placed on Calendar Senate]

H.R. 1431 (ih) To stimulate the economy and create jobs at no cost to the taxpayers, [Introduced in House]

H.R. 1105 (ih) Making omnibus appropriations for the fiscal year ending September 30, 2009, 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

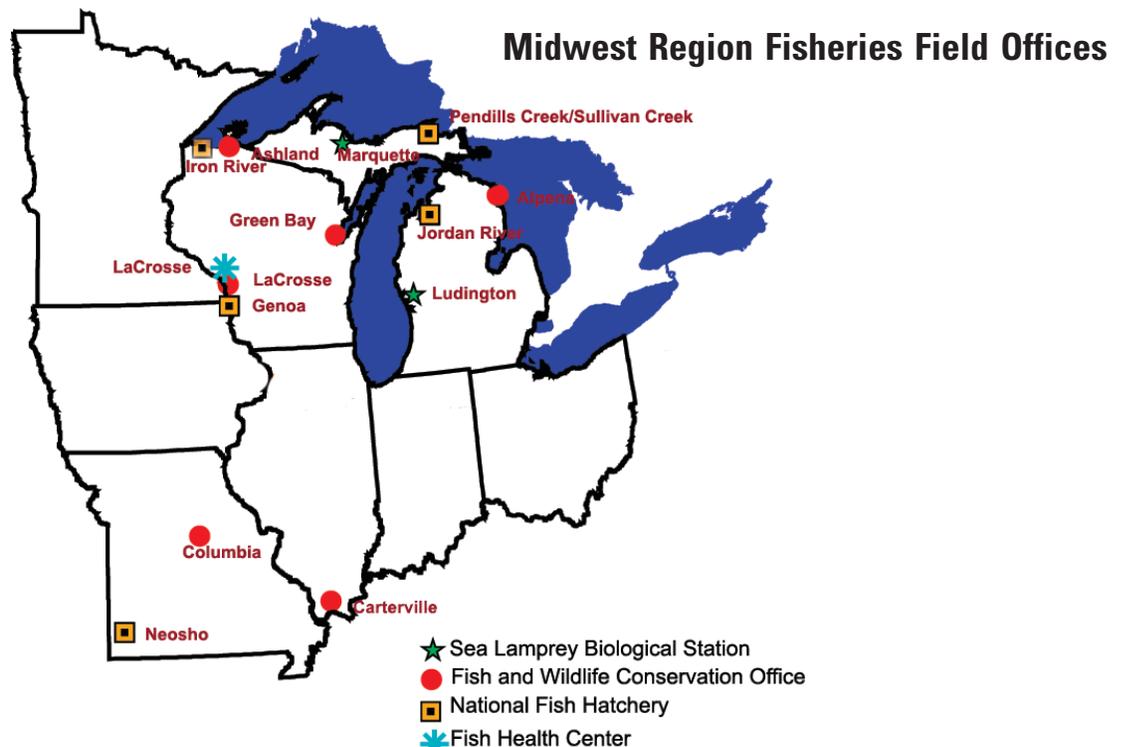
technical expertise to other Service programs addressing contaminants, endangered species, federal project review and hydro-power operation and relicensing; evaluate and manage fisheries on Service lands; and, provide technical support to 38 Native American tribal governments and treaty authorities.

## 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

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# Fish Tails

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

## **Partnerships and Accountability**

- [Meeting of the River Minds](#)
  - Colby Wrasse, Columbia FWCO

## **Aquatic Species Conservation and Management**

- Inspection Complete at Jordan River National Fish Hatchery
  - Eric Leis, La Crosse FHC

## **Aquatic Invasive Species**

## **Public Use**

- Current Events in Fish Production
  - Melissa Cheung, Neosho NFH

## **Cooperation with Native Americans**

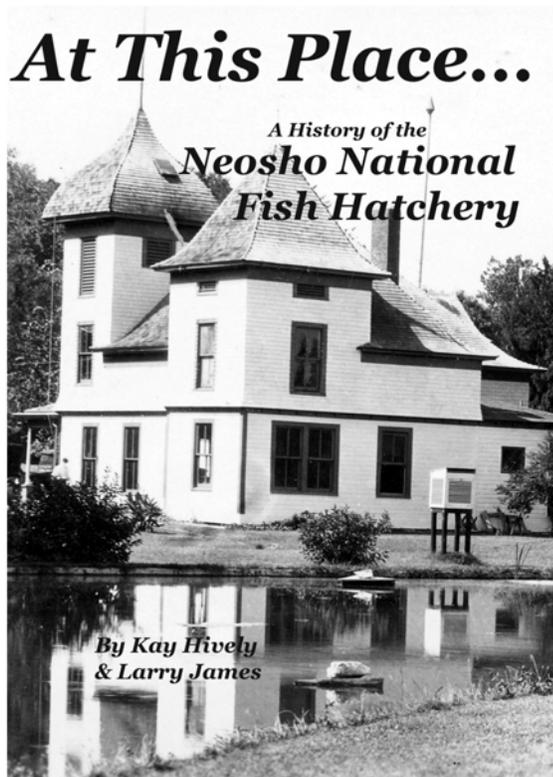
## **Leadership in Science and Technology**

## **Aquatic Habitat Conservation and Management**

- Klondike Dam Project Moves Forward
  - Brian Elkington, Columbia FWCO

## **Workforce Management**

- [Good Bye and Good Luck Kyle Krajniak](#)
  - Scott Koproski, Alpena FWCO
- Welcome back!
  - Joanne Grady, Columbia FWCO



## *At this Place... A History of the Neosho National Fish Hatchery*

For information about this historic account of the  
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