

U.S. Fish & Wildlife Service - Midwest Region

Fisheries & Aquatic Resources Program

fish lines



Mass Marking in the
Great Lakes

Big Darby Creek
Restoration

It's a Shark!

China Reciprocal
Conservation Exchange



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

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-USFWS/Karla Bartelt

A student from Wilson and Long Rapids Elementary Schools proudly displays her fish stamp t-shirt that she created during the Alpena Fish and Wildlife Conservation Office open house.

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Mass Marking in the Great Lakes

BY ASHLEY SPRATT, EXTERNAL AFFAIRS

The Great Lakes are one of our most valuable and treasured landscapes. They provide not only diverse habitats for freshwater fishes, but their coasts and tributaries also support a wide range of migratory birds and other wildlife, including threatened and endangered species that our agency works to protect.



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Fish and Wildlife Service biologist, Jim Webster, explains to Deputy Assistant Regional Director-Fisheries Todd Turner (middle) and Wisconsin Department of Natural Resources Fisheries Chief, Mike Staggs, how the automated mass marking equipment works to tag Chinook salmon at the Wild Rose State Fish Hatchery, WI.

Twenty-five to thirty million fish are stocked in the Great Lakes annually by tribal, state and federal fishery programs on the United States side alone. An additional 10 million are stocked by the Ontario Ministry of Natural Resources in Canada. However, there has never before been a multi jurisdictional-coordinated program across the Great Lakes basin for evaluating the performance of fish in the wild or their effects on the ecosystem.

The Fish and Wildlife Service (FWS) recently initiated a mass marking program to coded-wire tag and mark (fin clip) state and tribal hatchery-reared fish, in addition to those fish stocked by the FWS in the Great Lakes. This technique that has been success-

fully used in the Northwest for marking hatchery-reared Pacific salmon, and is known as “mass-marking” because the use of automated fish marking trailers make it possible for millions of fish to be rapidly tagged and marked each year. The mass-marking initiative began as the brain-child of the Council of Lake Committees, a group of policy makers for each of the Great Lakes, under the auspice of the Great Lakes Fisheries Commission. They saw what mass marking was doing for salmon management in the Pacific Northwest, and wanted to bring that same capability to the nation’s most valuable freshwater resource, not only for salmon but for native species like lake and brook trout.

In 2003, the Council of Lake Committee initiated an implementation task force, co-chaired by Marianne Daniels from the Ontario Ministry of Natural Resources and the Fish and Wildlife Service’s Chuck Bronte, to develop cost, equipment, and manpower estimates to

implement mass-marking in the Great Lakes, as well as the associated data recovery and analytical capabilities.

“The Service already implements a basin-wide sea lamprey control program and lake trout rehabilitation program, and was well-suited to lead the basin-wide mass marking initiative,” said Bronte, a biologist and data analyst from the Green Bay Fish and Wildlife Conservation Office.

The FWS’s Fisheries program already uses coded-wire tags to evaluate the performance of lake trout raised in federal fish hatcheries; however, the idea behind the mass marking initiative was to equip the

Service with capabilities to also tag State and Tribal hatchery fish. Coded-wire tags are small pieces of metal with numerical codes inserted into the nose of fish that, and when recovered, allow biologists to look at movements, post release survival, levels of wild production and other key factors that influence fisheries management.

“It’s important for managers to know how many wild fish are out there, gauge the impact of the stocked fish, and balance forage availability with the

number of salmon and trout that are out there,” said Bronte. “It’s also a way to manage non-native species that are naturalized and part of the system, and consider them in relation to native species management like lake trout and brook trout.”

The implementation task force visited each hatchery across the Great Lakes, to determine species and production schedules with the intention of mapping out equipment profiles.

The task force determined that the use of Northwest Marine Technology’s computer operated automated marking trailers would have the capability to mark 60,000 fish in an eight-hour day, amounting to an overall cost savings of 11 percent over manual methods. The automated trailer also provides better tag retention, more consistent tag placement, and easier tag recovery in the laboratory.

A Great Lakes Regional Marking Committee was established to oversee mass marking activities, and includes members from the States, Tribes, Province of Ontario and FWS. The Great Lakes Regional Marking Committee approved this year a project to mark



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Automated marking trailers have the capability to mark 60,000 fish in an eight-hour day, amounting to an overall cost savings of 11 percent over manual methods.

all federal lake trout in Region 3 (around 5 million fish) and assist with a validation study that examines natural reproduction by tagging 1.2 million Chinook salmon raised by Wisconsin and Michigan with oxytetracycline. The FWS also funded a salmon tagging study by New York Department of Environmental Conservation, which will evaluate the relative survival of pen-reared fish versus those grown out in the hatchery and released from trucks.

This spring the FWS, working with state hatchery personnel, tagged and marked 370,000 Chinook salmon from Wild Rose State Fish Hatchery (Wisconsin), and 750,000 Chinook salmon at Platte River State Fish Hatchery (Michigan). The goal for the mass marking program is to reach more than 20 different facilities across the Great Lakes basin.

“Tribal treaty fisheries, inter-jurisdictional fisheries management, and native species restoration and conservation strategies rely on information on movements of fish among management jurisdictions,” said Bronte. “Mass marking will improve our knowledge of fish movements, survival, performance and other valuable information about Great Lakes trout and salmon, and will promote cooperative strategic fisheries management.”

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

Big Darby Creek Restoration

BY ROB SIMMONDS, CARTERVILLE FWCO

The Ohio Chapter of The Nature Conservancy (TNC) undertook an ambitious effort to return a section of Big Darby Creek to a more natural condition. Like many small farm-land streams in central Ohio, this portion of Big Darby Creek had been straightened to increase farmable acres, much of the watershed had been tilled to improve drainage and allow earlier planting of crops, and native vegetation had been replaced with crops. Then along comes TNC with a goal of attaining Exceptional Warmwater Habitat and Coldwater Habitat classifications by improving aquatic habitat and water quality for one of the Midwestern United State's highest biodiversity streams.



-USFWS/RobSimmonds

A Columbia Gas employee discusses progress on a gas pipeline relocation, at the site where the pipeline is exposed and a directional drill (left) is bored alongside.

TNC purchased the needed property and the Ohio Environmental Protection Agency (EPA) has a conservation easement on the property. Now, with funding from an EPA 319 grant and from Honda Motor Company, this creek will be reconstructed to achieve natural sinuosity as well as riffle/pool ratio. Fish and Wildlife Service funds were used to relocate a gas pipeline to a new location outside of the stream reconstruction site.

While original planning accounted for the pipeline, upon closer examination, it was determined that the original plan was not feasible and the pipeline would need to be deepened to allow the new stream to cross over it. The movement of this pipeline ended up being a key factor to this multi-million dollar stream acquisition and restoration project. Directional drilling was used to safely locate the pipe below the newly created stream channel and floodplain.



-USFWS/RobSimmonds

Project Manager Anthony Sasson of "The Nature Conservancy" overlooks a section of the Big Darby Creek floodplain, which is below the location where the stream crosses the pipeline.

This project was identified by the Ohio River Basin Fish Habitat Partnership (FHP) as a priority and was located in one of their Early Action Sites. The Ohio River Basin FHP was able to secure American Recovery and Reinvestment Act (ARRA) funding to help complete this project. In June 2010, directional drilling was used to deepen the pipeline, allowing for stream restoration to proceed in that area.

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

It's a Shark!

BY COLBY WRASSE, COLUMBIA FWCO

Actually it wasn't a shark, but that common exclamation from Hallsville's fourth grade class made for a great lead-in to my monologue on shovelnose sturgeon. I can understand how a fourth grader could mistake a shovelnose sturgeon for a shark; both come from ancient lineages of fishes, and they do share some similar characteristics, for

The event was Hallsville Aquatic Day, an annual event that has been celebrated for 25 years in this small Missouri town located just outside of Columbia. Aquatic Day gives the entire Hallsville fourth grade class the opportunity to learn about and experience local aquatic resources. Activities included: fishing for bass and bluegill in a well stocked pond, collecting aquatic invertebrates, a water rescue demonstration, fishy art projects, and singing creative songs about fish. The Columbia Fish and Wildlife Conservation Office

(FWCO), represented by Colby Wrasse and Cliff Wilson,

presented an interactive live fish display featuring a shovelnose sturgeon along with three species of catfish, freshwater drum and common carp for the kids to marvel at, touch and ask questions about. Having the fish as visual aids generated great interest from the students; it also provided us the opportunity to talk about broad ecological concepts such as habitat loss, invasive species and evolutionary adaptations. Each group of students had 20 minutes to spend with the fish, enough time for them to learn a little about these fish and hopefully spark an interest in the Missouri River and the fish that inhabit it.



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Cliff Wilson explains the external anatomy of a catfish to a group of students at Hallsville Aquatic Day 2010.

example: the whip like heterocercal caudal fin, the cartilaginous skeleton, and a face only a mother could love. I guess it's not surprising that kids are more familiar with sharks than sturgeon. After all, Hollywood hasn't made any blockbuster films starring sturgeon, nor are they regulars on Animal Planet. It's hard to get much press when you spend your time slinking along the bottom of a muddy river sucking up bugs. Still, it's a little sad that these kids knew so much about sharks living in oceans thousands of miles from Missouri, but knew so little about the sturgeon that practically swim through their backyards. But that's why we were in Hallsville, to teach kids about sturgeon and other Missouri River fish.

Cliff Wilson also amazed the children with his cat fishing prowess, landing a hefty channel catfish from the small pond, a fish that continued to grow as the news spread. Aquatic Day culminated with an afternoon fish fry – the very fish the kids caught earlier in the day. This was the sixth year Columbia FWCO has taken part in Aquatic Day. The event is a great way to reconnect children with nature, and now an entire class of fourth graders knows the difference between sharks and sturgeon.

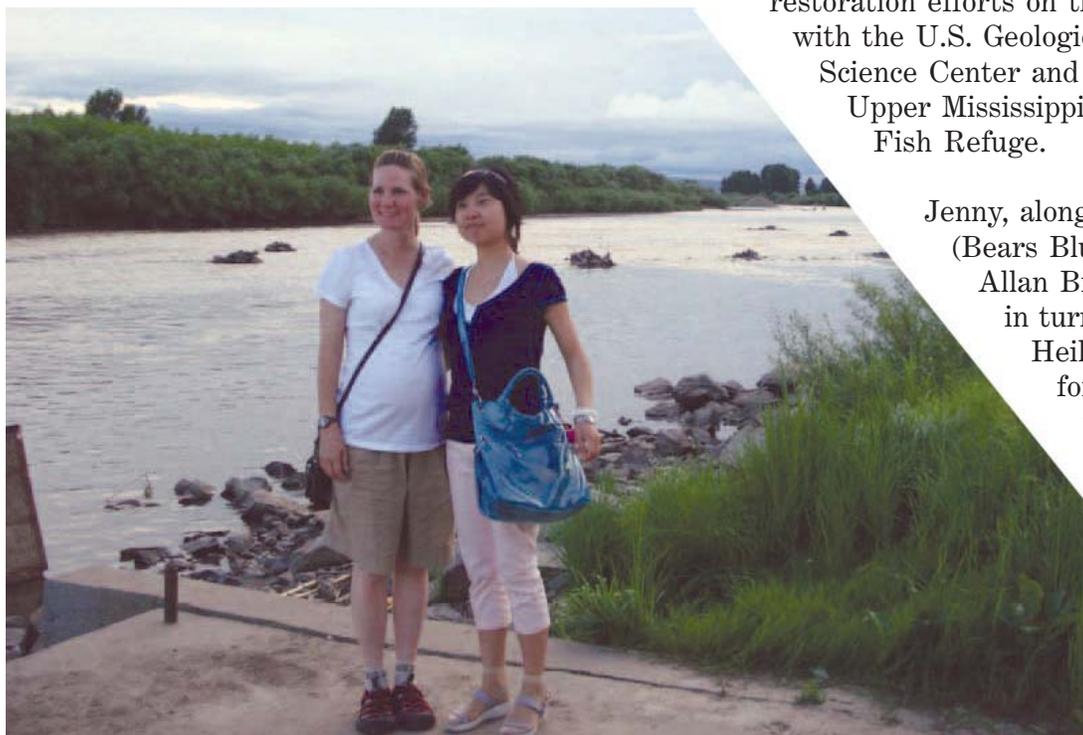
For further info about the Columbia FWCO: <http://www.fws.gov/midwest/columbiafisheries/>

China Reciprocal Conservation Exchange

BY DOUG ALOISI, GENOA NFH

Jenny Bailey of our Genoa National Fish Hatchery (NFH) staff traveled to China this summer as part of a science exchange between the Peoples Republic of China's Ministry of Agriculture and the Fish and Wildlife Service's Fisheries division. The visit was a reciprocal visit of a trip coordinated by the International Affairs Office of the Fish and Wildlife Service and hosted by the Genoa NFH this spring when three visiting scientists from China were sta-

The city of La Crosse, Wisconsin, was also an ideal location for the Chinese to be stationed due to the diversity of conservation efforts ongoing in one location. They assessed lake sturgeon restoration efforts on the Menominee Indian Reservation with the La Crosse Fish and Wildlife Conservation Office, sampled fish for the National Wild Fish Health Survey with the La Crosse Fish Health Center and learned about long term resource monitoring and habitat restoration efforts on the Upper Mississippi River with the U.S. Geological Survey Upper Midwest Science Center and the La Crosse District of the Upper Mississippi River National Wildlife and Fish Refuge.



-USFWS

Genoa National Fish Hatchery biologist Jenny Bailey poses with interpreter Jia Jen on the banks of the Suifenhe River, China.

tioned at the hatchery. The Chinese scientists stationed at Genoa were active participants in many different conservation programs ongoing in the spring of the year such as broodstock netting and egg collections of walleye, perch, northern pike and sauger. They also participated in fry stockings, lake sturgeon propagation for restoration efforts throughout the Midwest, and host fish infestation of threatened and endangered mussels.

Jenny, along with biologists James Henne (Bears Bluff NFH, South Carolina) and Allan Brown (Welaka NFH, Florida) in turn traveled to China's Heilongjiang Province, which forms the northern boundary with Russia. Conservation challenges that the Fish and Wildlife Service exchange group will learn about involve the conservation of chum salmon and the far eastern dace, an anadromous species of dace that can grow to over two feet in length.

The group then traveled to the Xingkai Lake to observe propagation efforts of the gouache paint, a large commercially important minnow species. Jenny and her colleagues then traveled to Beijing to finish off their trip and view ongoing sturgeon restoration efforts at the Chinese Academy of Fisheries Science. It is hoped that through these efforts to share conservation methods, that progress can be made on both sides of the world to restore some of our most threatened and endangered aquatic species.

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

Fisheries and Habitat Conservation Director Tours La Crosse Area Fisheries Offices

BY DOUG ALOISI, GENOA NFH

Assistant Director Bryan Arroyo of the Fisheries and Habitat Conservation Division of the Fish and Wildlife Service toured the Genoa National Fish Hatchery (NFH), La Crosse Fish and Wildlife Conservation Office (FWCO) and La Crosse Fish Health Center (FHC) this June. On the Fisheries side alone,



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Assistant Director of Fisheries and Habitat Conservation Bryan Arroyo peruses a freshwater mussel raised at the Genoa National Fish Hatchery.

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

Education Day on the Flooded Big Muddy!

BY ANDY PLAUCK, COLUMBIA FWCO

When planning an event on a large river, it is good to have an alternative “high water” plan. A local partner of ours, the Missouri River Communities Network (MRCN), has discovered this for the second year in a row. Last year’s event was delayed due to early summer flooding on the Missouri River or “Big Muddy.” But a few weeks later, we were able to give presentations for local paddlers as they took a sandbar break from the “Big Canoe Float.” This year, the organizers raised the ante and made the event into a canoe race with the natural resources presenters at the finish line festival. As luck would have it, the river continued to rise as the event neared and a change of plans was in order. With only a few days to shuffle plans, the race was postponed but the “Floody Muddy” educational day was born.

To start the event off, the MRCN representative gave a brief presentation about rain barrels, rain

Bryan currently directs the national operations on over 70 federal fish hatcheries, 65 fish and wildlife conservation offices, 7 fish technology centers and 9 fish health centers. As good fortune would have it, he was able to see many of the different activities that the Fisheries program is involved in by travelling to our very own Upper Mississippi River region of Wisconsin. Hatchery activities ongoing in the month of June that were highlighted on the tour were lake sturgeon larval culture, endangered mussel recovery efforts, and environmental education projects such as the accessible wetlands boardwalk and outdoor classroom, and the handicapped accessible fishing dock. Bryan then traveled to La Crosse, Wisconsin, to tour the FHC and FWCO. Highlights included a tour of the lab where fish health diagnostics from across the Midwest Region are analyzed, and cooperative fish and habitat conservation activities that are being coordinated such as those found in the Driftless Area Fish Habitat Action Plan.

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.

gardens and the importance of lessening urban runoff. Columbia FWCO biologist Andy Plauck was on hand to talk about the fish of the Missouri River with an emphasis on the endangered pallid sturgeon. Live fish are always a great presentation aide, and this event was no exception. Tim Haller from the Big Muddy National Fish and Wildlife Refuge presented information about the refuge and how the refuge lands help buffer the flooding when the river spills onto the adjacent floodplain. Steve Schnarr from Missouri River Relief presented the organization’s “trash totals” from Big Muddy clean-ups and interesting items found in the river.

This event was a great opportunity for the organization and agencies involved to inform stakeholders of the work being conducted on and around the river. Hopefully everyone in attendance took home a better understanding of the Missouri River Ecosystem.

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

2nd International Catfish Symposium

BY TRACY HILL, COLUMBIA FWCO

Project Leader Tracy Hill attended the 2nd International Catfish Symposium in St. Louis, Missouri, in June. The symposium's goal was to provide a forum for the exchange of information on the latest developments and knowledge advances in the biology, ecology, management and conservation of worldwide catfish populations and their habitats. Hill was coauthor on a presentation titled, "Implications of river restoration for nursery habitat of blue and channel catfish".

Scientists throughout the world provided new information which has been collected since 1998, when the first Catfish Symposium was held in Davenport, Iowa. Approximately 300 individuals from state, federal, university and non-governmental organizations participated in the symposium. Fish and Wildlife Service involvement in this symposium provided an opportunity to ensure that species conservation and management is an integral component of management actions.

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

"Greening": A Foot Warming Event!

BY SHAWN SANDERS, IRON RIVER NFH

Much of the government "Greening" has focused on ways to conserve energy and recycling of wastes created during project efforts. Iron River National Fish Hatchery (NFH) has replaced a number of ballasts with high-efficiency units, purchased LED lighting for office space, and increased roof insulation in the effort to conserve. Another aspect, often overlooked, is to focus on purchasing recycled and renewable products.

Most carpet fibers (Nylon, Polyester and Olefin) are made from petroleum oil. That is why Iron River NFH installed CORN carpet into two station quarters. That is correct, a product which uses fibers created using corn by-products. Carpeting made from

corn limits the impact on the earth's natural resources. Environmental benefits include reduced CO2 emissions. Other benefits include: 1.) Renewable Resource - fibers are made from corn thus it can be grown annually and not deplete oil reserves, 2.) Biodegradable - the fibers will not fill the landfills years later, a special product can be sprayed onto the fibers and it will decompose in a short time, 3.) Exceptional Durability - this fiber is said to wear better than nylon under heavy use, 4.) Extraordinary Softness - inherently soft fiber that doesn't compromise quality to gain the soft feel.

Next time you are shopping for new household carpet, check out the potential of using Corn Carpet!

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

MRAPS Public Scoping Meeting

BY TRACY HILL, COLUMBIA FWCO

Project Leader Tracy Hill of the Columbia Fish and Wildlife Conservation Office (FWCO) traveled to Jefferson City, Missouri, on June 1st to attend the public meeting for the Missouri River Authorized Purposes Study (MRAPS). The meeting was one of 30 open-house meetings being held in the Missouri River basin by the U.S. Army Corps of Engineers (Corps) to gather public comments on the congressionally authorized study to review the project purposes established by the Flood Control Act of 1944. The study will analyze the eight authorized purposes for the Missouri River system in view of current Missouri River basin values and priorities, to determine if

changes to the purposes and existing Federal water resource infrastructure may be warranted.

As defined by the Flood Control Act of 1944, the eight authorized purposes for the Missouri River system are Flood Control, Navigation, Irrigation, Hydropower, Water Supply, Water Quality, Recreation, and Fish and Wildlife. Approximately 150 individuals from special interest groups, non-governmental organizations and state and federal agencies attended the meeting. June wrapped up four weeks of public meetings in most of the upper Missouri River basin states, with five weeks of meetings remaining. The Corps will also hold 11 meetings with Tribal governments.

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

Mingo NWR Sampling a Success!

BY BRIAN ELKINGTON, COLUMBIA FWCO

This year, staff from the Columbia Fish and Wildlife Conservation Office (FWCO) participated in an annual fish community survey at Mingo National Wildlife Refuge (NWR). The study is linked to the reintroduction of alligator gar at the refuge. The crew consisted of Brian Elkington and Brandon Baumhoer. With help from the Missouri Department of Conservation and Mingo NWR, we successfully sampled fish communities in Battleship Slough and outlying marsh areas of the refuge. This was a great opportunity for



-USFWS/BrianElkington

Mingo National Wildlife Refuge, Missouri Department of Conservation and Columbia Fish and Wildlife Conservation Office staff work together to collect data after pulling a series of nets.

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

2010 Great Lakes Lake Sturgeon Website

BY ANJANETTE BOWEN, ALPENA FWCO

During early June, the Great Lakes Lake Sturgeon website (<http://www.fws.gov/midwest/sturgeon>) was updated to include new information and partners. The site was established in 1999 to provide a forum for lake sturgeon restoration and management activities throughout the Great Lakes basin. It contains information from numerous agencies working on lake sturgeon management, research, conservation and restoration.

Updates to the site included the addition of 11 new researchers from seven new partner offices and one university. A total of 72 researchers currently con-

tribute to the site from 50 agency offices and 13 universities. Thirty new citations, reports, updates and images were also added.

our staff to experience a unique aquatic ecosystem a world away from the Missouri River issues that are dealt with on a daily basis. Many

species of fish that our office rarely deals with were documented, including bowfin and chain pickerel.

For the last five summers, fish have been sampled on the refuge in an array of habitats using multiple collection methods. These studies were conducted in order to gain perspective on the entire fish community present on the refuge. This information can now be used as a basis of comparison, when future studies beg the question, "What affect are alligator gar having on the ecosystem?"

These events mark the beginning of what will hopefully be a more productive and healthy marsh, and offers the promise of greater fishing opportunities on the refuge in the future. With perseverance and hard work, this species has a chance at a coming back in the marshes and streams of southeast Missouri.

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.

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

Chicago Waterways Monitored for Asian Carp

BY SCOTT YESS, LA CROSSE FWCO

Flying carp were the target during a week of efforts by electrofishing crews from the La Crosse and Columbia Fish and Wildlife Conservation Offices (FWCO) and the Great Lakes Indian Fish and Wildlife Commission. The three crews combed the waters from Obrien Lock and Dam to Lake Michigan searching for invasive Asian carp. Although many other species were collected, no Asian Carp were captured during the three days of shocking.

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.



-USFWS/ScottYess

La Crosse Fish and Wildlife Conservation Office staff display fish caught during a mid-summer rapid response effort to capture Asian carps in the Chicago Area Waterway System near Lake Michigan. Jenna Merry (left) holds a freshwater drum while Jordan Brillowski (right) displays a gizzard shad. No Asian carps were detected.

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

Butterflies Abound!

BY CAREY EDWARDS, IRON RIVER NFH

It seems like the new buzz word these days is “pollinator” and rightly so. They are an integral part of the world’s life cycle. Efforts to cultivate areas where pollinators can reproduce, feed and grow are in effect across the country. At the Iron River National Fish Hatchery (NFH), where it is commonplace to find 1.65 million fish feeding and growing, a second pollinator garden is growing. One of the Fish and Wildlife Service’s six high priorities is “Children in Nature” and biologist Carey Edwards spearheaded the unique idea to combine both pollinators (butterflies) and children into one project on a small piece of the 1,200 acres of hatchery land.



-USFWS

The butterfly garden at the Iron River National Fish Hatchery proves successful with a new caterpillar resident.

The Iron River Elementary School is located in a small town eight miles south of the hatchery. Fifth grade teacher and avid gardener Jay Burfield was contacted about participating once again in a day-long gardening project that has turned into an annual event. Mr. Burfield was excited about doing the project again, and a date was set for the students to travel to the hatchery. The project was up and running.

A site adjoining last year’s butterfly garden was prepared. The venture produced an enormous team effort. Staff from the Iron River NFH outlined the garden with downed timber, lined it with landscaping fabric, filled in the garden with four inches of sand for drainage and topped the garden with eight inches of

topsoil. Plants and bushes were ordered from Hausser’s Superior View Farm, a local greenhouse and nursery. Rounding out the list of over 600 plants were day lily, tall phlox, coreopsis, gaillardia and bee balm. In an effort to put more ownership

into the project, the students would not only help plant the garden but they would also make their own stepping stone, as well as create an adjoining path with last year’s garden that will allow hatchery visitors to view their hard work up close and personal. Carey hopes that students will come back repeatedly to view the garden and show family and friends the unique stones they made. Stepping stone molds, cement and decorating accessories were purchased to have on hand for the much awaited day.

On June 3rd, the students arrived by 9:30 a.m. for the first step in the gardening process. Hatchery staff mixed cement and filled stepping stone molds for all 28 students and of course, Mr. Burfield. Students smoothed out their mixture to “set up” before they could decorate them. Half the class donned gardening gloves and tools while the other half took a hatchery tour and short nature walk. Some students had plenty of experience in the garden while others were not as confident and instruction was given on how deep to dig the holes and how far apart to place the plants. Most students agreed that a day in the garden beat a day in the classroom anytime. After lunch the second group took over, repeating the same process and the garden was complete.

The two groups met up to decorate their stepping stones. Glass beads, mammal tracks, butterfly and leaf stamps were on hand to make a one of a kind creation. Students enjoyed light refreshments before cleaning up the work area and catching the bus back to school at the end of the day.

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.

The last segment in the process was to let the molds cure, place them into the garden and mulch around the plants. After a week of curing, the stones were placed into the garden and a thick layer of wood mulch was placed around the plants to keep weeds to a minimum. Within weeks, the plants were flowering and butterflies were everywhere! With a little bit of elbow

grease and a lot of teamwork, a very successful and rewarding project was accomplished. The students were able to learn about gardening and butterflies as well as gaining awareness of fish hatchery processes. Stay tuned for next year's addition to the Iron River NFH's butterfly garden with the new fifth grade class.

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

2010 Michigan "No Child Left Inside" Summit

BY TIM SMIGIELSKI, REGIONAL OFFICE

The second annual Michigan No Child Left Inside (MNCLI) Summit was held Wednesday June 23rd on the campus of the University of Michigan at Dearborn. Over 120 people were in attendance. The MNCLI coalition is a diverse group that is active in connecting children with nature. The coalition is committed to promoting activities and policies that will help reconnect children and families with nature through outdoor play, exploration, recreation and education.

This year's summit was sponsored in part by the Fish and Wildlife Service along with the Michigan Association of Environmental and Outdoor Educators (MAEOE), Michigan Department of Natural Resources and Environment, Kalamazoo Nature Center and the National Wildlife Federation. Brother Yusaf Burgess was the keynote speaker. Brother Burgess presented on "Transforming Urban Youth Through the Power of Nature." Brother Burgess was very inspiring. He is a great role model and the "Super Man" of urban youth programs in New York State. Wildlife Biologist Tameka Dandridge with Ecological



Services in East Lansing, Michigan, is a Fish and Wildlife Service representative on the coalition. Tameka worked with the other sponsors to organize this year's Summit and promoted the Fish and Wildlife Service's "Connecting People with Nature", "Let's Go Outside" and "Youth in the Great Outdoors initiatives." The regional Youth in the Great Outdoors display was popular, with much interest in the Fish and Wildlife Service's career opportunities and experience programs. Biologist Tim Smigielski of the Midwest Regional Fisheries program, presented at the Summit. Tim gave an overview of successful youth programs, partnerships and activities that the Fish and Wildlife Service has been involved with in Michigan. He introduced those in attendance to the recently developed U.S. Department of Interior Office of Youth in Natural Resources. Tim also provided details on the Youth in the Great Outdoors initiative. There was much interest in all of the programs, activities and initiatives.

Many other states have similar coalitions and committees. For more information on these, go to: www.childrenandnature.org.

For further info about the Regional Fisheries Program: <http://www.fws.gov/midwest/Fisheries/>

Something Fishy is Going on at Ashland Middle School!

BY CAREY EDWARDS, IRON RIVER NFH

For the past nine years, raising trout and salmon in the classroom has been common place in the north woods of Wisconsin. It started at the Superior Middle School and spread to two other area schools. What better way would there be to teach students about the life history of trout and salmon than to have them raise fish in the classroom? All it takes is a 30 gallon

aquarium, chiller unit and trout or salmon eggs. Kathy Sill, a middle school math teacher in Ashland, Wisconsin, approached staff at the Iron River National Fish Hatchery (NFH) in 2008 to find out if she could initiate a project in her classroom. She hoped to present her students with a fun and educational way to apply math in everyday life. Two local sportsman's groups

donated the chiller and aquarium and the Ashland Middle School was up and running.

In the fall of 2009, Iron River NFH agreed to provide lake trout eggs for the program with the stipulation that the fish would be humanly euthanized at the end of the project - This is due to stringent regulations and permitting in the transportation of fish due to disease concerns.

The 65 students, representing three classes, welcomed 500 eggs into the aquarium in mid-October. They monitored water temperature daily and made sure the conditions were perfect for the developing fish. Excitement abounded when the eggs hatched, followed by surprise and disappointment that the newly hatched fry sought shelter in the gravel. After over 30 days of waiting, the eager students began feeding the fish as they swam-up. Math teacher Kathy Sill stated that they only lost seven eggs during the

incubation period and approximately one dozen fish during the duration of the project.

As part of the program, the hatchery agreed to come to the classroom and continue the learning process with a presentation and hands-on lab to all three classes. Biologist Carey Edwards brought the hatchery to life with a presentation, and students were able to simulate egg enumeration in the same manner that occurs at the hatchery. This involved displacing water with "eggs" (BB's), recording data and calculating eggs/ml. Students were also presented with additional math problems that mimic day to day calculations occurring at the fish hatchery. This helped to strike home how important and frequently used math is in everyday life.

This program is rewarding for all involved. The school, sportsman's clubs and hatchery are looking forward to this fall, when the next group of students gets to learn about the life history of lake trout.

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



The Evening News

Kid's Fishing Day Details

PHOTOS COURTESY OF JAIME MASTERSON OF PENDILLS CREEK

Pendills Creek NFH held its Second Annual Kid's Fishing Day Event Saturday June 19. This year the event was for children ages 15 and under with a maximum of 160 kids. 300 rainbow trout were shipped up from Genoa National Fish Hatchery (NFH) in Wisconsin and 75 lake trout were brought over from Sullivan Creek NFH for the derby. Children were allowed to catch two fish with the bigger of two entered in the derby. A total of 227 rainbows were caught, with the largest going to 4-year-old Asher Croad with a 2-pound rainbow. Cash prizes were awarded to the three largest fish caught of \$75, \$50 and \$25. Prizes were given to the top 20 fish in two age classes, 1 to 8 and 9 to 15 years old. Top prizes included a bike, pool parties at local hotels, Soo Locks Boat Tours, tackle boxes, fishing poles, gift certificates and many more, all of which were donated by 102 local sponsors. A variety of activities including games, contests and facepainting were also enjoyed by the young anglers. All participants received lunch and snacks, a goodie bag and a chance to see Smokey the Bear, Lucy the Lake Trout and the Cloverland Energy Bee. Random drawings were also held throughout the day for kids and adults. The event is the result of many months of preparation, support from the Friends of Pendills Group and the many volunteers who took the time to make the day possible.

Norseland Nursing Residents enjoy a Day of Fishing

BY CHRIS OLDS, GENOA NFH

Residents from the Norseland Nursing Home (Westby, Wisc.) enjoyed a day of fishing at the Genoa National Fish Hatchery (NFH) on their new



-USFWS

Youth Conservation Corps student Paige Oldham is ready to assist residents of the Norseland Nursing Home during their fishing trip at the Genoa National Fish Hatchery fishing pond.

handicapped accessible fishing dock. Three residents caught their limit of rainbow trout in no time with the help from Youth Conservation Corps student Paige Oldham and Student Career Experience Program student Chris Olds. “Buck”, one of Norseland’s residents, caught his very first fish ever this same time last year and was excited to return again to hook into four more large rainbow trout. After a successful afternoon of fishing they resided to the shade for a picnic overlooking the hatchery grounds.

The 1.5 acre hatchery pond was stocked with rainbow trout and dedicated to the Fish and Wildlife Service’s “People and Nature Initiative” by providing fishing and outdoor opportunities for youth and people with limited accessibility. In 2009, Dairyland Power Cooperative donated an accessible fishing dock through an annual resource grant process. Over \$12,000 was donated to the hatchery through a process that first became available when the Fish Hatchery Volunteer Act was passed by Congress in 2007. Wisconsin Representative Ron Kind of the 3rd district was instrumental in sponsoring this legislation and securing its approval to allow donations from private sources to be used to better public fishery facilities such as the nation’s 70 federal fish hatcheries.

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

June was “Connecting People with Nature” Month!

BY BRIAN ELKINGTON, COLUMBIA FWCO

Throughout the month of June, Columbia Fish and Wildlife Conservation Office (FWCO) employees were busy meeting with people, young and old alike, to tell them about nature. Although this is an activity we are always engaged in, this month we participated in numerous events around the theme of connecting our local community with nature. Some of these events included DeSoto Refuge Fest, eXtreme Wilderness 2010, Family Funfest, Hallsville Aquatic Day and the Floody Muddy Educational Day. Each event created unique opportunities to interact with our local community, but more importantly it helped to connect all ages of participants with nature. As a FWCO, we

often take our fish sampling gear and boats along with us to these events, but in the end, live fish always steal the show. It is an amazing experience to see a young child’s eyes light up as they hold a fish for the first time or to answer questions from interested and inquisitive adults.

Hopefully, through our efforts and “Connecting People with Nature” month, we have been able to spread the word about the incredible natural environment that waits just outside the door. Maybe, next time when they’re looking for something to do, they will choose to go fishing, hiking or paddling and enjoy what the natural world has to offer.

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

Menominee Tribe Celebrates Success of Lake Sturgeon Management Efforts

BY ANN RUNSTROM, LA CROSSE FWCO

Menominee Department of Conservation and the La Crosse Fish and Wildlife Conservation Office (FWCO) hosted a lake sturgeon celebration day Saturday, Sept 26, 2009 on the shores of Legend Lake near Keshena, Wisconsin, on the Menominee Indian Reservation. The main purpose of the event was to conduct outreach to Tribal members on sturgeon management efforts and the significant sturgeon population now present in the lake, and to encourage Tribal members to try their hand in harvesting a sturgeon.



-USFWS/PamThiel

Young and old enjoyed seeing lake sturgeon up-close-and-personal at the Menominee Tribe's sturgeon celebration in Keshena, Wisc.

The Fish and Wildlife Service has worked closely with the Tribe and the Wisconsin Department of Natural Resources since 1992 to establish a harvestable population of lake sturgeon. Management

efforts, such as stocking 60,000 lake sturgeon, have been successful and the lake is now home to over 1,000 sturgeon. There are now numerous lake sturgeon present that exceed 50 inches and 35 pounds.

The lake has been open to sturgeon harvest for two years, but no fish have been harvested as there has been very little effort. The day's event was held to increase awareness of the quality fish present in the lake. Menominee Historical Preservation Office, Green Bay FWCO, Menominee Department of Environmental Services, Menominee County Fire Department, Legend Lake Property Owners Association and Menominee County Extension Office all assisted in making the day a huge success.

Four large sturgeon on display in a 2,000 gallon fire department water tank were the main attraction. Young and old alike appreciated the chance to get up-close-and-personal with these giants of the lake. There were fish painting and casting events for children, samples of smoked and grilled sturgeon, sturgeon cleaning demonstration, boat rides and free door prizes provided by Menominee Conservation. Information was provided on invasive species, sturgeon management and regulations, fishing techniques, sturgeon cleaning and cooking and Menominee history. The event was well attended and will likely become an annual occasion.

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

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

Mixed-stock Genetic Analysis of Lake Sturgeon in Green Bay and the Menominee River of Lake Michigan

BY ROBERT ELLIOTT, GREEN BAY FWCO

Sturgeon researchers from around Lake Michigan contributed to a preliminary look at the genetic origins and distribution of lake sturgeon populations from the open waters of Green Bay and from the Menominee River during non-spawning times. Results from this research were recently published in the “North American Journal of Fisheries Management.” Understanding habitat use by lake sturgeon during non-spawning periods and associated rates and sources of mortality is important for making informed management decisions that further restoration efforts of this important native species in the Great Lakes.



-USFWS/RobElliott

Genetic samples collected from lake sturgeon in the lower Menominee River and from other Green Bay waters were used to determine the distribution of fish originating from different spawning populations and their vulnerability to a harvest fishery in the lower Menominee River.

Using microsatellite loci and mixed-stock analyses, researchers Kristin Bott and Dr. Kim Scribner from Michigan State University worked with biologist Rob Elliott from the Green Bay Fish and Wildlife Conservation Office (FWCO), Mike Donofrio and Greg Kornely from the Wisconsin Department of Natural Resources, Ed Baker from the Michigan Department of Natural Resources and Environment, and Nancy Auer from Michigan Tech University to collect and analyze adult lake sturgeon from various locations of Green Bay where they are commonly found during non-spawning times. The purpose of this research was to estimate the proportion of these lake sturgeon

from the near shore and off shore waters of

Green Bay and from the Menominee River during a regulated hook-and-line fishery that originated from different spawning populations found around Lake Michigan.

Results of this research indicated that of 214 adult lake sturgeon examined from the open waters of Green Bay, 31.5% (CI: 22.6–40.6) originated from the lower Fox River or Lake Winnebago (located upstream of the Fox River), 27.0% (CI: 19.5–34.7) originated from the Peshtigo or Oconto rivers (rivers in close proximity having similar genetic characteristics), and 39.7% (CI: 29.8–50.0) originated from the Menominee River. There also was an indication that a very small percentage (CI: 0–4.9%) may have originated from eastern Lake Michigan populations that spawn in tributary rivers to the Lower Peninsula of Michigan. For adult fish caught and harvested from the Menominee River during the limited fall hook and line fishery, a large majority originated from the Menominee River as expected (81%: 79.9–89.3%); however, approximately 19% (CI: 0.110–0.268) of these harvested fish originated from the nearby Peshtigo and Oconto rivers.

The unanticipated presence of sturgeon in the Menominee River harvest that originate from other populations is of management concern as it indicates that allowing spatially restricted harvests during non-breeding periods may not protect numerically depressed populations originating in nearby rivers. Because most populations in Green Bay and Lake Michigan are currently very small compared to historic levels, protection from all forms of excess mortality is desired to aid their continued rehabilitation. Concurrent with this study, regulations governing the hook-and-line fishery in the Menominee River were revised due to concerns with excessive mortality caused by several years of increasing fishing pressure. Included in these regulation changes was a conversion to catch and release fishing with no allowed harvest in the lower Menominee River. Based on the results of this study, this termination of harvest will also benefit the recovery of the neighboring Peshtigo and Oconto river populations. Though it is a goal of all involved management agencies to be able to reopen the harvest fishery in the lower Menominee

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.

River at some time in the future, it will be prudent to wait until all populations affected by the fishery are capable of sustaining the associated harvest. Publica-

tion reference is the North American Journal of Fisheries Management 29:1636–1643, 2009. Contact: Rob Elliott, Green Bay FWCO for more information at: robert_elliott@fws.gov.

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

Chloramine T Pivotal Study Conducted at Genoa NFH

BY JORGE BUENING, GENOA NFH

During the month of June, staff at the Genoa National Fish Hatchery (NFH) has been testing the efficacy of the antibacterial drug Chloramine-T on external bacterial outbreaks (*Columnaris*) in yellow perch. The results of this test will be used to assist the Aquatic Animal Drug Approval Office (AADAP)



-USFWS

The scientific experimental process was used at the Genoa National Fish Hatchery to test the efficacy of the antibacterial drug Chloramine-T on external bacterial outbreaks (*Columnaris*) in yellow perch. Three control tanks and three experimental tanks were used for the process.

in Bozeman, Montana, in compiling data and presenting it to the Food and Drug Administration (FDA) for drug registration approval. Upon approval, Chloramine-T will become labeled for use by fish culturists. Chloramine-T is important to aquaculture because of the chemical's ability to kill bacterial colonies that form on fish and in fish culture tanks.

The manner in which the drug was tested at Genoa NFH followed a scientific experimental process in which three control tanks and three experimental



-USFWS

Approximately 1,400 (1.6 inch) yellow perch were placed into each of six tanks for a study to determine the ability of Chloramine-T to help safely and effectively control bacteria outbreaks in fish culture tanks.

tanks were used. Yellow perch were infected with *Columnaris* bacteria and the infection was confirmed by the La Crosse Fish Health Center in La Crosse, Wisconsin. Approximately 1,400 fish were then placed into each of the six tanks, and water flow levels, water capacity and temperatures were all equalized. Three of the six test tanks were randomly chosen to be experimental tanks and received three treatments of Chloramine-T once every other day for six days. Daily mortality, dissolved oxygen and temperature were recorded for the duration of the experiment, which lasted for almost a month. Our findings will assist in proving the ability of Chloramine-T to help safely and effectively control bacteria outbreaks in fish culture tanks. This will allow for increased production in both aquatic species restoration and commercial aquaculture efforts.

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

Coordination Meeting for Eel River Fish Passage

BY ROB SIMMONDS, CARTERVILLE FWCO

The Eel River is a tributary of the Wabash River in northern Indiana. Like many Midwestern rivers, the Eel River has a series of run-of-the-river dams that no longer serve a purpose. Carterville Fish and Wildlife Conservation Office (FWCO) has been working with Dr. Jerry Sweeten of Manchester College in North Manchester, Indiana, to remove two of these



-USFWS/RobSimmonds

Early coordination meeting participants are at the site of the North Manchester Dam on the Eel River in northern Indiana where Dr. Jerry Sweeten of Manchester College (center) explains the effects of the dam on water quality in the Eel River.

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

Meeting of the (Habitat) Minds

BY JOANNE GRADY, COLUMBIA FWCO

Joanne Grady, Branch Chief for Fish Conservation at the Columbia Fish and Wildlife Conservation Office (FWCO), met with Mike Smith and Kenda Flores of the Missouri Department of Conservation (MDC) in their headquarters building in Jefferson City, Missouri. Mike is leading a new branch in Missouri's fisheries division which will deal specifically with aquatic habitat. Mike held previous positions in MDC's fish and policy divisions, so he's well schooled in the conditions and threats to Missouri's aquatic habitats. Kenda is the new Aquatic Habitat Specialist for the western portion of Missouri. While she may be new to this position, she isn't new to MDC or to

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

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.

dams. The North Manchester and Liberty Mills dams were both built in the mid-19th century, and are now in disrepair. With funding from the National Fish Passage Program (NFPP), the Ohio River Basin Fish Habitat Partnership, and our partners, these two dams will be removed. Before the dams can come out; however, we need to secure the appropriate permits and environmental reviews from a number of agencies.

Working with Manchester College, we invited representatives from the Fish and Wildlife Service's Ecological Services and Private Lands Programs, Indiana Department of Natural Resources, Indiana Department of Environmental Management, U.S. Army Corps of Engineers, U.S. Geological Survey, and others to an early coordination meeting for the dam removal project. Meeting participants were given a brief overview of the project and the group discussed regulatory issues we would face with each agency. The group also made site visits to give participants first-hand working knowledge of each dam and to encourage additional on-site discussions. The meeting was very productive, and allowed us to open clear lines of communication with all of our partner agencies that will be involved in this project.

partnering with the Columbia FWCO. She was previously leading MDC efforts in the Bourbeuse watershed to improve stream habitat in cattle producing watersheds under National Fish Habitat Action Plan (NFHAP) grants awarded by the Fish and Wildlife Service. The trio met to discuss previous and ongoing National Fish Passage Program and NFHAP projects in Missouri. We also discussed future plans for aquatic habitat within the state and participation in the various NFHAP partnerships which cover portions of Missouri. Overall, we left the meeting excited about where we can go by working together to conserve and restore Missouri's aquatic habitats.

STEPS Step Forward!

BY MARK STEINGRAEBER, LA CROSSE FWCO

Flying carp were the target during a week of electrofishing by two crews from the Fish and Wildlife Service (La Crosse and Columbia) and a crew



-USFWS

April Ammon transfers a fish, captured by electrofishing, into a temporary holding tub. She is one of three Student Temporary Experience Program (STEP) employees stationed at the La Crosse Fish and Wildlife Conservation Office.

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

from the Great Lakes Indian Fish and Wildlife Commission. For the first time in collective memory, the La Crosse Fish and Wildlife Conservation Office

(FWCO) has been fortunate enough to hire not one, not two, but three temporary employees to help lighten the work load this summer for its permanent staff. April Ammann, a graduate student at St. Mary's University of Minnesota came on board in April to work primarily as a GIS specialist supporting National Fish Habitat Partnerships administered by the La Crosse FWCO. In May, undergraduate students Jenna Merry and Jordan Brillowski came on board from Winona State University and the University of Wisconsin-Stevens Point respectively, and have since been contributing to the success of a variety of projects in both the field and office environments.

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.

S-T-E-P Spells Opportunity to Natural Resource Students

BY DARLA WENGER, GENOA NFH

Summer means opportunity for college students at the Genoa National Fish Hatchery (NFH). Due to a diverse production program, many hands are needed throughout the field season as lake sturgeon are brought on feed and native mussel recovery and restoration programs are in full swing.

Luckily, this also coincides with college summer break for Katie Murcko and Orey Eckes. The Fish and Wildlife Service's Student Temporary Employment Program (STEP) provides an excellent opportunity to gather valuable on-the-job experiences while school is out, and fills a much needed role in providing temporary employment opportunities when labor

requirements are greatest at the hatchery. Katie, a senior at Eastern Michigan University, returned to the hatchery to assist with the mussel culture programs.

Orey, a senior at the University of Wisconsin - La Crosse, will assist with lake sturgeon production and also the outreach events that are held at or near the Genoa NFH. The La Crosse area also leads itself to many opportunities as the La Crosse Fish Health Center and the La Crosse Fish and Wildlife Conservation Office are both just minutes away, and are an integral part of the success of the hatchery's programs. Welcome aboard Kate and Orey!

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

Iron River NFH Welcomes New Assistant Manager

BY SHAWN SANDERS, IRON RIVER NFH

After nearly six months without an assistant project leader, the Iron River National Fish Hatchery (NFH) staff eagerly awaited the arrival of Nick Starzl into his new position. Nick brings a wealth of experience from a number of NFHs. Nick started his career in his hometown of Yankton, South Dakota, in 1996 where he assisted in paddlefish and endangered pallid sturgeon culture at the Gavins Point NFH. He made his first Region 3 appearance at the Neosho NFH in 2000, learning the tricks of the trade for two years rearing rainbow trout and pallid sturgeon. At Genoa NFH, he was responsible for creating an efficient record-keeping system for the operation

of culturing many cold, cool and warm water species while assisting in mussel culture propagation. Iron River NFH recruited Nick because of his work ethic, positive attitude and zest for the work of culturing Region 3 fishes.

Nick has entered our Great Lakes arena with a sense of appreciation and awe for the immense undertaking which is taken on every year to help restore this system. In his spare time, Nick enjoys spending most of his time with his family, woodworking, and when time allows, pheasant and deer hunting in the fall.

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

Thank You!

BY COLUMBIA FWCO STAFF

For several weeks this spring, the Columbia Fish and Wildlife Conservation Office (FWCO) was a beehive of activity. Between our standard sampling, broodstock collection efforts and hosting the Wonders of Wildlife (WOW) school - our staff was working night and day! We needed some help. Over 30 dedicated souls from local organizations, universities and other agencies volunteered to help us on the river and in the shop. Another dozen or so volunteers from local conservation organizations and student clubs assisted with the WOW school. To recognize the hard work, countless hours, blood and sweat (but no tears) of our fantastic volunteers, Columbia FWCO held a fish fry and pot luck dinner at Cosmo-Bethel City Park. This was a great opportunity to relax, play, tell a few river tales and eat some really good food. Our volunteers were individually recognized and were awarded a "pallid coin" and a t-shirt commemorating the spring events.

The event was bittersweet; however, as we bid adieu to a couple of our co-workers. After five years with us, Cliff Wilson had an opportunity to continue his work with the pallid sturgeon and to move his family back to their hometown. He accepted a position with the Missouri Department of Conservation at the Missouri River Field Station in Chillicothe, Missouri. Luckily, we will still get to see Cliff at meetings and training sessions, and perhaps even on the river. Josh Schloesser also got an opportunity to "go home" to

Wisconsin where he is doing a detail with the Ashland FWCO. Both were also coined and clad with a commemorative t-shirt at the party.

Once again, we would like to thank everyone that helped us with our broodstock efforts, outreach events and our day-to-day operations. We couldn't have done it without you. Thank You!



-USFWS/PattyHerman

Volunteers and staff of the Columbia Fish and Wildlife Conservation Office fill their plates with tasty vittles at a fish fry in honor of their volunteers.

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

Congressional Actions

H.R. 51 (ih) To direct the Director of the United States Fish and Wildlife Service to conduct a study of the feasibility of a variety of approaches to eradicating Asian carp from the Great Lakes and their tributary and connecting waters. [Introduced in House]

H.R. 4604 (ih) To direct the Secretary of the Army to prevent the spread of Asian carp in the Great Lakes and the tributaries of the Great Lakes, and for other purposes. [Introduced in House]

H.R. 48 (ih) To amend section 42 of title 18, United States Code, popularly known as the Lacey Act, to add certain species of carp to the list of injurious species that are prohibited from being imported or shipped. [Introduced in House]

S. 1421 (rs) To amend section 42 of title 18, United States Code, to prohibit the importation and shipment of certain species of carp. [Reported in Senate]

S. 1421 (is) To amend section 42 of title 18, United States Code, to prohibit the importation and shipment of certain species of carp. [Introduced in Senate]

H.R. 3173 (ih) To amend section 42 of title 18, United States Code, to prohibit the importation and shipment of certain species of carp. [Introduced in House]

S. 3553 (is) To require the Secretary of the Army to study the feasibility of the hydrological separation of the Great Lakes and Mississippi River Basins. [Introduced in Senate]

S. 237 (is) To establish a collaborative program to protect the Great Lakes, and for other purposes. [Introduced in Senate]

H.R. 4472 (ih) To direct the Secretary of the Army to take action with respect to the Chicago waterway system to prevent the migration of bighead and silver carps into Lake Michigan, and for other purposes. [Introduced in House]

S. 2946 (is) To direct the Secretary of the Army to take action with respect to the Chicago waterway system to prevent the migration of bighead and silver carps into Lake Michigan, and for other purposes. [Introduced in Senate]

H.R. 5625 (ih) To require the Secretary of the Army to study the feasibility of the hydrological separation of the Great Lakes and Mississippi River Basins. [Introduced in House]

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

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

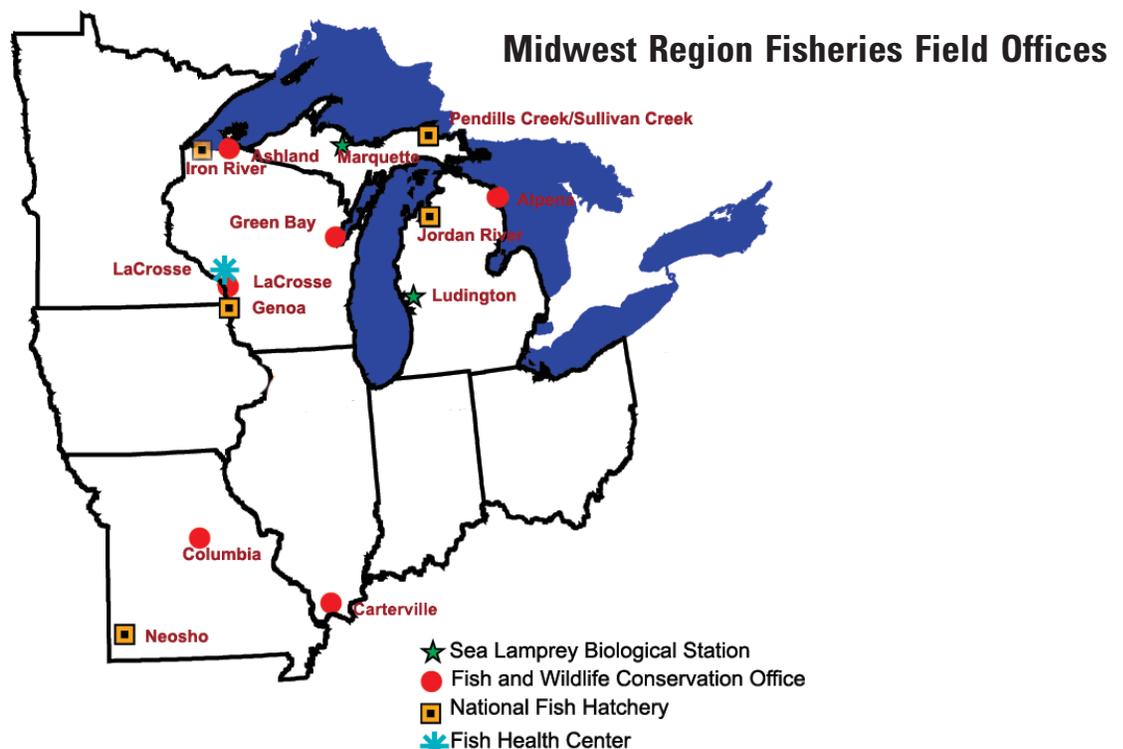
technical expertise to other Service programs addressing contaminants, endangered species, federal project review and hydro-power operation and relicensing; evaluate and manage fisheries on Service lands; and, provide technical support to 38 Native American tribal governments and treaty authorities.

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

Mike Weimer (mike_weimer@fws.gov)

Michigan

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

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

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

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

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

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

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

Illinois

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

Wisconsin

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

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

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

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

LaCrosse Fish Health Center
555 Lester Avenue
Onalaska, WI 54650
Becky Lasee (becky_lasee@fws.gov)
608/783-8441

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

Fish Tails

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

Partnerships and Accountability

Aquatic Species Conservation and Management

Aquatic Invasive Species

Public Use

- [10th Annual Desoto Refuge Fest](#)
 - Aaron Walker and Adam McDaniel, Columbia FWCO
- Columbia at the Crossing eXtreme Wilderness Family Event
 - Adam McDaniel and Brian Elkington, Columbia FWCO
- Columbia WOW School 2010; Partnership in the Great Outdoors!
 - Columbia FWCO Staff

- [Excitement Abounds at Family Funfest](#)
 - Brian Elkington and Adam McDaniel, Columbia FWCO
- [It's Dinner Time!](#)
 - Carey Edwards, Iron River NFH
- [Lincoln School 5th Graders Learn About Fisheries at Camp Chickagami](#)
 - Anjanette Bowen, Alpena FWCO
- [Students Learn about Butterfly Gardens](#)
 - Anjanette Bowen, Alpena FWCO
- [Trout Unlimited Fish Show](#)
 - Nikolas Grueneis, Iron River NFH
- [Wetlands Boardwalk and Outdoor Classroom Comes Together With Help from the Coulee Community](#)
 - Doug Aloisi, Genoa NFH

Cooperation with Native Americans

Leadership in Science and Technology

Aquatic Habitat Conservation and Management

Workforce Management

- [Columbia FWCO Welcomes CARE Student Employees](#)
 - Patty Herman, Tanner Goodale and David Nittler, Columbia FWCO

AmeriCorps Member at the Alpena FWCO

AmeriCorps Member Christina Carson joined the Alpena Fish and Wildlife Conservation Office (FWCO) in late May. She is working with placed-based education projects for the Northeast Michigan Hub of the Great Lakes Stewardship Initiative (GLSI). Her position was established through the GLSI, Huron Pines AmeriCorps program and Michigan Sea Grant. Part of her time will be spent working with Alpena FWCO's "Children and Nature" program at Wilson School. She is also conducting a number of other GLSI and volunteer activities for Huron Pines and Michigan Sea Grant. Christina will be at the Alpena FWCO through late October.

To learn about the following programs, use the web links below:

Great Lakes Stewardship Initiative: <http://www.glstewardship.org/>

AmeriCorps program: <http://www.americorps.gov/>

Huron Pines AmeriCorps program: <http://www.huronpines.org/project/65>

Michigan Sea Grant: <http://www.miseagrant.umich.edu/>

Fish and Wildlife Service's Children and Nature program: <http://www.fws.gov/letsgooutside/>