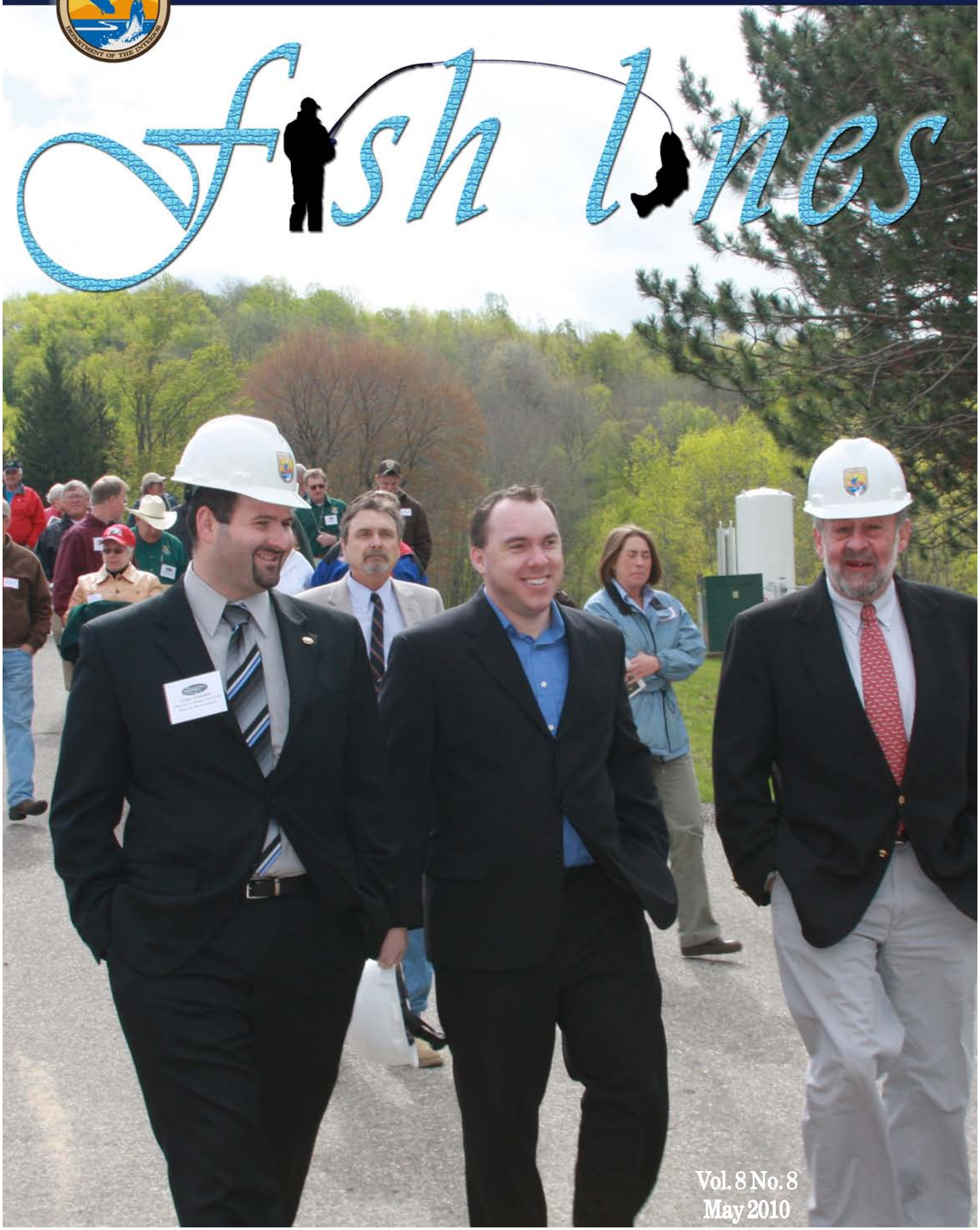
U.S. Fish & Wildlife Service - Midwest Region
Fisheries & Aquatic Resources Program

Fish Lines



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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.

Features

-USFWS
Tom Higgs checks the feed rate at a lampricide application site during the Ford River invasive sea lamprey treatment.

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

Fish Lines

2010 Vol. 8 No. 8

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-USFWS/KarlaBartelt
ARRA project dedication at the Jordan River NFH

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Conservation Briefs 10-22

Implementing the Great Lakes Restoration Initiative

BY HENRY QUINLAN, ASHLAND FWCO

Regions 3 and 5 of the Fish and Wildlife Service identified restoration of lake sturgeon populations as one of the high priority activities to be addressed throughout the Great Lakes with funds provided through the Great Lakes Restoration Initiative (GLRI). In April the Ashland Fish and Wildlife Conservation Office (FWCO), located on the south shore of Lake Superior in Wisconsin, implemented this priority working with the Bad River Band of Lake Superior Chippewa Natural Resources Department to gather information on the 2010 lake sturgeon spawning population in the Bad and White rivers, Wisconsin.

-USFWS

Biologist Henry Quinlan poses with an adult lake sturgeon captured during the 2010 spawning run. This female sturgeon was estimated to be 39 years old and is likely making her fourth or fifth spawning run.

In their native range, lake sturgeons are identified as endangered, threatened or a species of special concern by 19 of 20 states, the Province of Ontario and the Department of Fisheries and Oceans Canada. They are also a State of the Lakes Ecosystem Conference (SOLEC) environmental indicator species (http://binational.net/solec/sogl2009_e.html#Technical_Report -#125). SOLEC indicator species are selected by the U.S. Environmental Protection Agency and Environment Canada because they provide a measure of the health of the Great Lakes ecosystem, an environment in which millions of U.S. and Canadian citizens depend. Lake sturgeon require healthy tributary and nearshore habitat to carry out their life cycle, and their longevity (lake sturgeon can live to be more than 100 years old) provides a long-term measure of ecosystem health and human influence.

Lake sturgeons are the largest fish in the Great Lakes basin and historically were a prominent component of the nearshore and tributary fish community. Hundreds of thousands of lake sturgeon, some weighing more than 200 pounds and 6 feet in length, would ascend Great Lakes tributaries to spawn. However, from the mid 1800s through the early part of the 1900s, lake sturgeon populations were decimated by overharvest, poor water quality, and loss or alteration of habitat, primarily due to construction of dams on rivers used by lake sturgeon for spawning. Today, lake sturgeons persist as minor components of the fish community; many populations reduced to fewer than a hundred individuals and some gone completely from their former tributary and nearshore habitats. In U.S. waters of Lake Superior, lake sturgeons spawn in only three of eight tributaries where they thrived historically.

Under the guidance of the Great Lakes Fishery Commission (http://www.glfc.org/), Lake Superior fishery agencies developed a lake sturgeon rehabilitation plan (http://www.glfc.org/pubs/pub.htm#misc) and

Fish Community Objectives for Lake Superior (http://www.glfc.org/pubs/pub.htm#pubs) to guide restoration efforts. The management goal for lake sturgeon in Lake Superior is to maintain, enhance, and rehabilitate self-sustaining lake sturgeon populations where they historically occurred. To achieve this goal, agencies recognized that strategies such as habitat restoration, harvest controls, assessment and monitoring, better understanding of population biology and genetic structure, and greater public involvement were critical.

-USFWS

Pristine spawning habitat at the lower falls of the Bad River allow this sturgeon population to remain self-sustaining.

And that brings us back to the Bad River Indian Reservation where biologists from the Ashland FWCO and the Tribe spent three weeks this spring capturing adult lake sturgeon as they ascended the Bad and White rivers to spawn. The objective was to estimate the number of fish in the spawning run and to gather information on population demographics, such as age and size of fish cruising upstream and the ratio of males to females.

Field crews utilized two methods to capture adult lake sturgeon making their spawning run, large mesh gill nets which allow non-target species to swim through, and wading with dip nets. The gill nets were set in the lower river to capture fish as they began their ascent to the Bad and White river spawning grounds located 36 and 46 kilometers, respectively, from Lake Superior.

Dip net efforts occurred in shallow water at the spawning grounds, where crews scan the river for glimpses of the shark-like tails protruding from the water. Upon a sighting, crews wade into the thigh deep water as the sturgeon calmly swims upstream through the turbulent water. When the opportunity arises, the huge dip net is slowly lowered into the water next to the fish in an attempt to get the head into the net. If successful, you'd better hang on, because some of these fish weigh up to 100 lbs and can take you for a ride. Wading through rushing, thigh deep water to capture a fish that weighs half as much as an adult person certainly provides an adrenaline rush, but it also requires balance, stealth, strength, patience and ultimately respect for this fascinating fish. Fish captured this spring have been preparing for the 2010 spawning event for 2-5 years by feeding on insects, crustaceans and fish to gather the energy reserves necessary to spawn. In the Bad and White rivers, male lake sturgeons mature at 15 years of age and females around 23 with males typically spawning every 2-3 years while females require at least 4 years between spawning events.

-USFWS

Josh Schloesser captures a lake sturgeon near the lower falls of the Bad River.

This year, biologists captured over 400 lake sturgeon. Each fish was checked for tags, and if no tag was found it was tagged with an internal Passive Integrated Transponder (PIT) tag and an external Floy T-bar anchor tag and released. Fish are double tagged since retention and detection of tags are critical as they allow biologists to track data on particular fish over time and estimate population size using mark-recapture models. Model estimates of the number of lake sturgeon in the 2010 spawning run was 850 (+ 180) individuals. This is the largest estimate yet from a Lake Superior population.

-USFWS

Josh Schloesser checks egg mats at the lower falls of the Bad River for deposited lake sturgeon eggs. Eggs mats were set at the known spawning grounds and at a site where spawning substrate was created to check for signs of spawning. No eggs were found at the new site this year.

This spring, 82 fish were captured that had been tagged in prior years by personnel from Ashland FWCO, Wisconsin DNR, Great Lakes Indian Fish and Wildlife Commission (GLIFWC), or Bad River Natural Resources Department. One of these fish was originally tagged 16 years earlier by GLIFWC in Lake Superior near the mouth of the Bad River. During the 16 years between capture and recapture, this fish grew from a 28 inch juvenile into a 52 inch mature adult, a growth rate of about 1.5 inches and 1.5 pounds per year.

-USFWS

Mark Luehring and Josh Schloesser, childhood friends, and now both biologists, pose with a 74 pound adult lake sturgeon captured in the Bad River. During spawning, eggs can make up 25% of a females body weight.

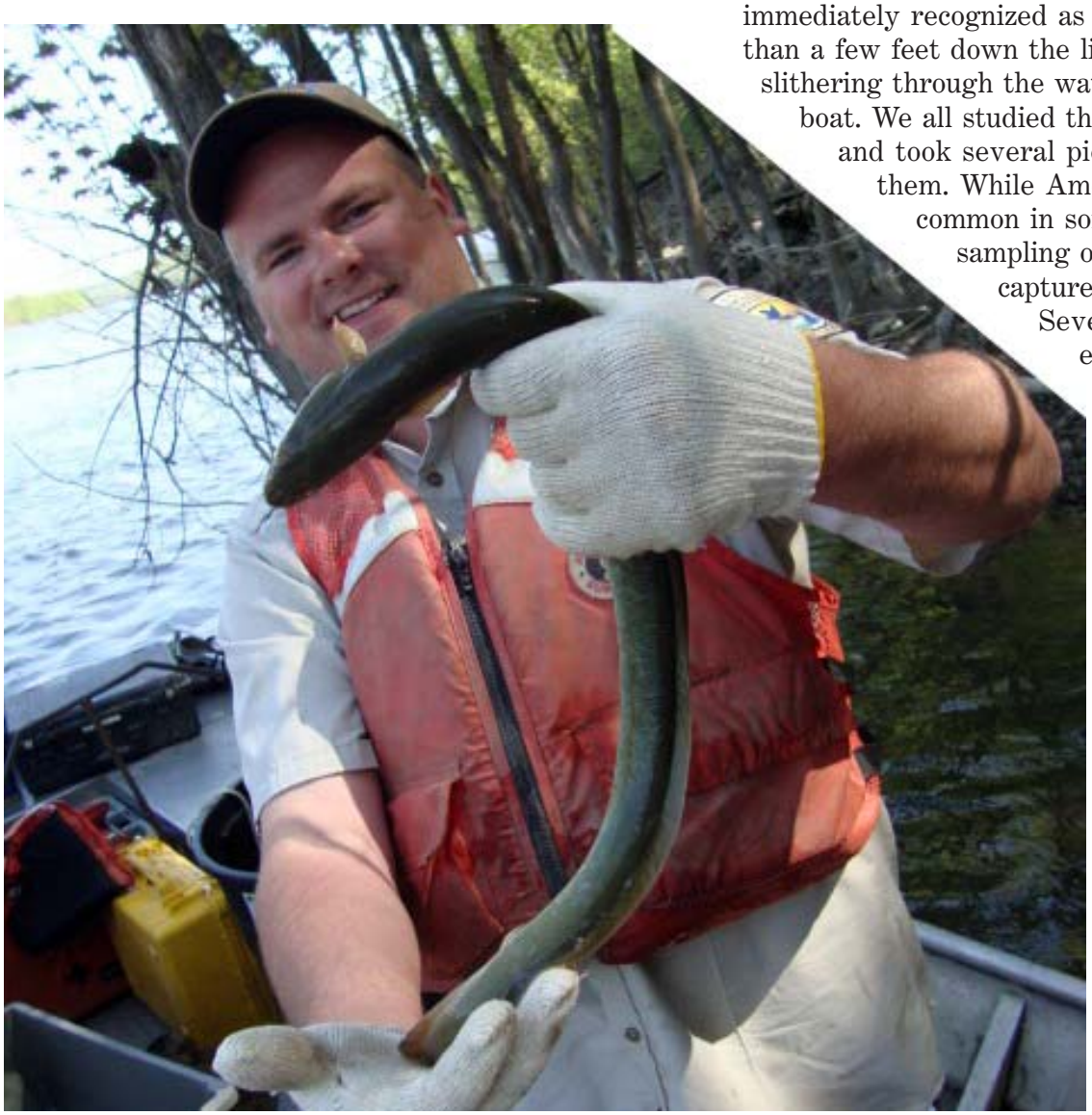
By collecting data such as length, weight, gender, stage of maturity and age from each fish captured, biologists can determine information on individual fish as well as the population as a whole. For individual fish we can determine growth rate (the increase in length or weight over time), sex of the fish, spawning periodicity (number of years between spawning runs), and movement and habitat use around Lake Superior. Population parameters such as estimates of relative abundance, population size, sex ratio of males to females, minimum, average and maximum age of fish in the spawning run for both male and female fish, and the length – weight relationship of the population. This information provides biologists with a better understanding of the current status of the population and allows examination of changes and trends over time. Armed with such information, Ashland FWCO biologists work with the Bad River Natural Resources Department biologists to develop management actions to further rehabilitation efforts for lake sturgeon populations in the Bad and White rivers and throughout Lake Superior

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

Eels in the Osage River

BY ANDY PLAUCK, COLUMBIA FWCO

Working in the same place day after day can get monotonous, even if your job is fishing. When we were given the opportunity to try out a new "fishing hole", we gladly accepted. Normally, field crews from the Columbia Fish and Wildlife Conservation Office (FWCO) are fishing for sturgeon on the Missouri River. Instead of battling the harsh conditions caused by high water on the Missouri River or "Big Muddy," Columbia FWCO was tasked with helping the Columbia Ecological Services Field Office capture a pallid sturgeon in the Osage River. While the clear water of the Osage is quite different than the turbid Missouri River, Columbia FWCO staff was up to the challenge. Trotlines would be the gear of choice as the crews had just finished running trotlines for several months on the Missouri River.



-USFWS

Andy Plauck of the Columbia Fish and Wildlife Conservation Office tries to hold a very slippery American eel captured in the Osage River.

Not only was a pallid sturgeon captured on the first day of sampling, but some other interesting fish were brought into the boat. The first line was pulled into the boat to reveal a wriggling snake-like fish that we immediately recognized as an American eel. Not more than a few feet down the line, another eel came slithering through the water and was pulled into the boat. We all studied the strange fish for a while and took several pictures before releasing them. While American eels are fairly common in some places, prior to this sampling only two had ever been captured by the Columbia FWCO. Several weeks later, another eel was caught near the low head dam. This one fell off the hook and slithered from the front of the boat to the back. It was amazing to see how fast this fish could slither along the wet aluminum floor of the boat. When finally corralled into a corner, we grabed it long enough for a picture and measurement.

What makes this an interesting catch, for those who aren't that into fish, is that American eels are a catadromous fish. They spawn in the Sargasso Sea in the Atlantic Ocean. When the young eels mature, they find their way to North American shores. As they mature, they swim up rivers and can stay in freshwater for as long as 30 years before making their way back to the ocean to spawn. These three eels swam at least 1,200 miles up the Mississippi and Missouri rivers before entering the Osage River. Apparently there is something they like in the Osage!

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

Jordan River NFH Celebrates ARRA Groundbreaking Event

BY ROGER GORDON, JORDAN RIVER NFH

Staff of the Jordan River National Fish Hatchery (NFH), along with volunteers, hatchery Friends Group representatives, and Regional Fisheries staff welcomed the public, Congressional staffers and natural resource cooperators to a day-long open house on May 14th. The festivities celebrated the official kick-off of four American Recovery and Reinvestment Act (ARRA) projects awarded to the hatchery during 2010.

-USFWS

This new 50,000 square foot fish culture building is being constructed at the Jordan River National Fish Hatchery with funding provided by the American Recovery and Reinvestment Act of 2010.

The hatchery was a recipient of over 3.5 million dollars to fund four new construction and renovation projects. The projects include two fish culture rearing buildings to cover 40 existing raceways, renovation of the current propane fired heating system to geothermal technology, and modernization of the present hatchery effluent abatement system to a state-of-the-art system to remove solids and phosphorus from fish culture water prior to release into the Jordan River.

These improvements to the Jordan River NFH will significantly improve the efficiency of fish production as well as increase flexibility of fish culture programs carried out at the facility. Perhaps most importantly, the projects will help reduce overall energy use while improving impacts of this large service hatchery on the aquatic environment of the Jordan River valley of Michigan.

The hatchery hosted over 100 visitors and invited guests during the event which included Midwest Region Director Tom Melius, Michigan Department of Natural Resources fishery staff, and congressional staff from the offices of Senator Carl Levin (MI), Senator Debbie Stabenow (MI) and Representative Bart Stupak (MI).

-USFWS

Participants in the ARRA groundbreaking event at the Jordan River National Fish Hatchery were (Lt. to Rt.) David Swanson (Regional engineer) Hatchery Manager Roger Gordon, Jon Sumner (*Friends of the Jordan River National Fish Hatchery*), Mark Jaques (Nomad Construction), Roger Srigley (Congressman Bart Stupak aide), Gabe Schneider (Senator Carl Levin's office), Regional Director Tom Melius, Brandon Fewins (Senator Debbie Stabenow's office), Todd Turner (Regional Office), Jim Rand (Ballard's and Great Lakes Plumbing) Irma Noel-Rand (Ballard's and Great Lakes Plumbing), and Dr. John Richter (*Friends of the Jordan River*).

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

Show and Tell Invertebrates - A Middle School Hit!

BY MARK STEINGRAEBER, LA CROSSE FWCO

After traveling among classrooms to hear invited speakers, including me, give Environmental Day presentations on the morning of April 20 at Sparta Middle School, I overheard a 6th grade student on the way to lunch give a review of my talk, stating out loud that of all the day's special events, "That was the coolest one of all … he had live fish and insects to touch!"

-USFWS

Mark Steingraeber of the La Crosse Fish and Wildlife Conservation Office shows & tells the mayfly story at River Education Days held at the Trempealeau National Wildlife Refuge.

That's when I knew my extra effort the previous day to kick some gravel loose in the cool, swift water of Bohemian Creek and gather whatever drifted into the collection net for this Show and Tell performance was worth it. The variety of caddis fly, mayfly, and stonefly larvae, scuds and other aquatic invertebrates I gathered here, as well as some unexpected sculpins, formed the perfect cast of characters to accompany and support me in convincing these students, particularly those who may have lacked a connection to nature, of the green roles these and other benthic organisms play as critical links in aquatic food webs. Likening the occurrence of deep burrowing mayflies in certain Upper Mississippi River (UMR) habitats to the role of the proverbial canary in the coal mine, and considering the recent coal mine tragedy in West Virginia, I was also able to convince most of these students of the importance of aquatic invertebrates as sentinels of environmental health and safety.

Knowing I had this successful script to follow, as well as an even greater cast of unique characters direct from Old Man River to work with, I confidently took my show on the road again when asked with just a day's notice to connect a larger number of urban and rural teens with nature during the annual River Education Days event held May 18-19 at the Trempealeau National Wildlife Refuge. With UMR Pool 6 providing a scenic background under a bright blue sky, a chorus of neotropical songbirds surrounding us in a balcony of trees, and a kiddies pool filled with pond water harboring a variety of aquatic invertebrates to be discovered and identified, how could a day spent in the outdoors with nearly 200 eager to learn 5th grade students be anything but a successful hit!

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

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.

Wild Fish Health Survey in Ohio

BY KEN PHILLIPS, LA CROSSE FHC

Biologists from the La Crosse Fish Health Center (FHC) traveled to Ohio the week of May 24th to collect tissue samples for pathogen screening in support of the National Wild Fish Health Survey. The sampling was done in cooperation with Ohio Division of Wildlife (ODW) biologists, who collected the fish and also assisted with tissue collection for pathogen screening. Fish were collected from the Ohio River basin and Lake Erie during the sampling effort.

In the Ohio River basin, ODW fishery crews collected fish from the Muskingum River, Pleasant Hill Reservoir and the Scioto River. Seven species totaling 520 fish were collected by ODW fishery crews from the three sites via electrofishing. Fish species sampled included common carp, freshwater drum, gizzard shad, largemouth bass, longnose gar, pumpkin seed sunfish and smallmouth buffalo. A total of 121 fish were sampled from the central basin of Lake Erie and included freshwater drum, rainbow smelt and yellow perch. Because Viral Hemorrhagic Septicemia virus (VHSv) has been detected in Lake Erie since 2006, the primary purpose of the sampling was to isolate VHSv and determine if the genotype composition of the virus has changed since the initial isolation. Additionally, the tissue samples were also screened for Infectious Pancreatic Necrosis virus (IPNv), Largemouth Bass virus (LMBv), Spring Viremia of Carp virus (SVCv), Aeromonas salmonicida (furunculosis), Edwardsiella ictaluri (enteric septicemia) and Yersina ruckeri (enteric redmouth). The samples were transported to the La Crosse FHC for processing; final results are pending.

-USFWS/KenPhilips

Dave Insley (left) and Dan Kovalaske (right) of the Ohio Division of Wildlife, and Ryan Katona (back) of the La Crosse Fish Health Center collect tissue samples during a recent wild fish sampling in Ohio.

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

The Lake Michigan Lakewide Management Plan Process

BY ROB ELLIOTT, GREEN BAY FWCO

The Green Bay Fish and Wildlife Conservation Office (FWCO) is increasing its involvement in the Lake Michigan Lakewide Management Plan (LaMP) process. Part of this involves increasing coordination between the Fish and Wildlife Service and the U.S. Environmental Protection Agency on activities related to the development and implementation of the LaMP and providing updates and facilitating coordination of the LaMP process and activities with the Lake Michigan Technical Committee under the framework of the Great Lakes Fishery Commission. As part of this increased involvement in the LaMP process, biologist Rob Elliott of the Green Bay FWCO attended a series of meetings of the Lake Michigan Monitoring Coordination Council, Lake Michigan Technical Coordinating Committee, and Lake Michigan Forum, all scheduled concurrently May 11-13, in Michigan City, Mich.

Focus during the meetings was on enhanced monitoring and project implementation occurring this year as part of the 2010 Lake Michigan Intensive Field Year, and on projects and initiatives resulting from the Great Lakes Restoration Initiative (GLRI). During each of the three meetings, Elliott and Bob Kavetsky (East Lansing Field Office) provided updates on the GLRI initiatives in Lake Michigan and across the Great Lakes basin, and a general overview of fisheries status and assessments occurring in Lake Michigan. An evening forum was also convened for the general public that focused on the rise in numbers of aquatic invasive species within the Lake Michigan basin.

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

Lower Bourbeuse River Landowner Committee

BY JOANNE GRADY, COLUMBIA FWCO

The Lower Bourbeuse River Landowner Committee met in Sullivan, Missouri, on May 5 with natural resource employees Joanne Grady of the Columbia Fish and Wildlife Conservation Office (FWCO) and Missouri Department of Conservation (MDC) biologists Kenda Flores and Rob Pulliam in attendance. The group convened for several reasons. First, we celebrated the group's recent honor from the National Fish Habitat Action Plan (NFHAP) board. Bob and Nicky Baker represented the landowners in Washington, D.C. while they and Kenda accepted the Extraordinary Action in Support of Fish Habitat Conservation Award. The camaraderie of this group was readily apparent as they've been working on restoring the Lower Bourbeuse watershed for almost ten years.

-USFWS/JoanneGrady

Members of the Lower Bourbeuse River Landowner Committee. (Lt. to Rt.) Front Row: Bob and Nicky Baker (landowners), Kenda Flores (Missouri Department of Conservation biologist); Back Row: Dorothea and Jim Koepke (landowners), Herman Merkel (landowner), Rob Pulliam (Missouri Department of Conservation biologist), C Dale Murphy (landowner) and Dave Dunn (landowner).

One of the primary goals of our meeting was to discuss with the group developing plans within the Fish and Wildlife Service, to map fish habitat and fish passage project locations and successes via the Internet. A generalized map location for the watershed projects with data and photos not identified as belonging to a specific landowner seemed to meet everyone's approval.

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

Meetings with Congressional Representatives from Southern and Central Illinois

BY ROB SIMMONDS, CARTERVILLE FWCO

Three Congressional Districts and both Illinois Senators were represented at a recent Fish and Wildlife Service-Congressional Coordination meeting. All Fish and Wildlife Service offices and programs in southern and central Illinois were represented, as well as folks from our Midwest Regional Office. These meetings provide a forum to share information between Congressionals and Fish and Wildlife Service staff.

Project leader Rob Simmonds of the Carterville Fish and Wildlife Conservation Office (FWCO) briefly shared information about office activities such as work on Scott Air Force Base and coordination of the Ohio River Basin Fish Habitat Partnership; however, most of the discussion pertained to management and control of Asian carp, particularly the efforts to prevent Asian carp from entering and becoming established in the Great Lakes.

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

Fish Health Survey of Fish from Pendills Lake

BY COREY PUZACH, LA CROSSE FHC

Sarah Bauer and Corey Puzach from the La Crosse Fish Health Center (FHC) teamed up with Anjanette Bowen from the Alpena Fish and Wildlife Conservation Office to check the health status of the fish in Pendills Lake. The lake is occasionally used as a water source for the Pendills Creek National Fish Hatchery. It is important to monitor disease status of fish in hatchery water sources in order to prevent introduction of diseases.

-USFWS/SarahBauer

The La Crosse Fish Health Center led a fish health survey on Pendills Lake which is one of the water sources for the Pendills Creek National Fish Hatchery.

After studying a lake map, the group set out in a small boat to survey the lake and set experimental and fyke nets. On a picture perfect morning in May, the group met to pull the nets and collect fish for the health sampling. Both gear types were very effective in capturing fish. Many fish were released back into the lake after the species, number and length were recorded. After the nets were pulled, the group went back to shore where fish health sample collection had already begun. A total of 60 brown bullheads, 60 rock bass, 30 pumpkinseed sunfish, 30 northern pike and 17 yellow perch were sampled.

A kidney sample was taken from each fish to screen for the bacterial pathogens Aeromonas salmonicide, Yersinia ruckeri, Edwardsiella ictaluri and Renibacterium salmoninarum. Kidney and spleen samples were then collected to screen for the viral pathogens Viral Hemorrhagic Septicemia virus (VHSv), Infectious Pancreatic Necrosis virus (IPNv), Oncorhynchus Masou virus (OMv), Infectious Hematopoietic Necrosis virus (IHNv), Largemouth Bass virus (LMBv) and Channel Catfish virus (CCv). Laboratory results of this wild fish health survey are pending.

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 La Crosse FHC: http://www.fws.gov/midwest/LaCrosseFishHealthCenter/

Tag Identification Database contains over 21,000 Tag Numbers

BY ADAM KOWALSKI, ALPENA FWCO

During the month of April, biologists Adam Kowalski and Anjie Bowen of the Alpena Fish and Wildlife Conservation Office (FWCO) updated the Great Lakes Lake Sturgeon Tag Identification Database (TID) and web site. Development of the database was funded by the Great Lakes Fishery Trust to house lake sturgeon tag information such as tag type, tag number, tag location and tagger contact information. The searchable database has been operational since 2006, and now contains information on over 21,000 passive integrated transponder (PIT) tags and over 170 external tag sequences from 22 different agencies. Kowalski will continue to maintain and update the database by requesting and entering tagging information annually. Feedback to Kowalski has been positive and the database is used frequently by biologists who look up information on tagged lake sturgeon they have captured. This database improves information sharing between agencies and the general public that encounter tagged lake sturgeon. The database is housed at the Great Lakes Fishery Commission's web site and can be viewed at: http://www.glfc.org/sturgeontag/index.htm.

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

Wisconsin DNR Fish Stocked with the *M/V Spencer F. Baird*

BY TAMMIE PAOLI, WISCONSIN DNR

The crew from the *M/V Spencer F. Baird* (Captain Mike Perry, chief engineer Bob Bergstrom, first mate Dave Bohn, and deck hands Bob Bruning and Ted Eggebraaten) spent a day in late May cooperating with Wisconsin Department of Natural Resources (DNR) staff to stock 42,454 8-inch brown trout and 4,361 rainbow trout into Wisconsin's Green Bay. The trout were stocked in 50 to 100 feet of water at three offshore locations between Marinette and Sturgeon Bay. The crew was equipped with scare guns to frighten away birds and prevent them from preying on the fish during release; however, the scare guns were not necessary for these stockings. Hydro acoustic equipment documented that the fish immediately moved to the lake bottom.

This cooperative effort was facilitated by the Wisconsin DNR to revitalize a popular brown trout sport fishery. Since 2000, brown trout fishing has experienced a sharp decline in Green Bay. Return to the creel has fallen from an average of 4% prior to 2000 to 1% from 2001 to present. The harvest in 2008 reached an all-time low in Green Bay and was estimated at 1,384 fish with an estimated 0.6% return of stocked fish.

Survival of stocked brown trout in Green Bay may be influenced by a changing historic forage base, higher incidence of predation by native fish species such as walleye or northern pike, increasing avian predation, and exacerbated by location and timing of stocking that often overlaps with spring spawning runs of near shore fish. The hope is that a combination of stocking larger fish later in the season and at an offshore location will increase survival and ultimately return to the creel starting in 2011.

For further info about the Wisconsin DNR: http://dnr.wi.gov/

Spring Electrofishing at Desoto NWR

BY AARON WALKER AND ANDY PLAUCK, COLUMBIA FWCO

Columbia Fish and Wildlife Conservation Office (FWCO) technician Aaron Walker and biologist Andy Plauck traveled to Desoto National Wildlife Refuge for spring sampling. In order to effectively sample the seven mile oxbow lake, the lake has been split into two sections, Aaron and Andy sampled one half of the lake and our partners from the Iowa Department of Natural Resources sampled the other half.

Night and day electrofishing runs were performed to conduct a general survey of the fish population. This data will be compared to previous years in order to examine trends in the fish population. Preliminary results from the sampling effort indicate that the walleye population continues to be strong. Unfortunately, we are still seeing significant numbers of invasive yellow bass in our samples. The status of the sport fish populations, along with the yellow bass population, will be discussed with partnering agencies and monitored in the coming years.

-USFWS/AaronWalker

Andy Plauck dips a fish while electrofishing at DeSoto National Wildlife Refuge.

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

Educating Students at Sprinkler Lake Educational Center

BY ADAM KOWALSKI, ALPENA FWCO

Biologist Adam Kowalski was invited to talk with students from Sanborn School at Sprinkler Lake Educational Center about invasive species. Kowalski focused on local invaders such as the round goby, ruffe, zebra mussels and sea lamprey. Other invasive species that are a threat to the Great Lakes such as silver and bighead carp were also discussed.

-USFWS

Students from the Sprinkler Lake Educational Center examine invasive sea lampreys.

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.

Kowalski explained how each invader arrived in the Great Lakes, why they are of concern, and what is being done to control, remove or prevent the spread of some of these invaders. He also explained things the public can do to help prevent the spread of invasive species. The two groups of 25-30 students and 5 adults were given an opportunity to handle a live sea lamprey (courtesy of the U.S. Geological Survey Hammond Bay Biological Station) and ask questions. Everyone took part in the discussion and had a lot of fun. The students especially liked sticking the lamprey to their hand and have their picture taken.

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

Asian Carp Updates

BY SAM FINNEY, CARTERVILLE FWCO

Asian Carp Marketing Summit Begins to Take Shape

If you can't beat 'em, eat 'em" was the headline of a recent news article on Asian carp. Well, I think we can beat 'em but why not eat a few too? Sam Finney of the Carterville Fish and Wildlife Conservation Office (FWCO) has been working with experts to craft an Asian Carp Marketing Summit that will take place in Alton, Ill. this September. Experts are currently building an agenda and invitee list for a meeting that will have the ultimate goal of developing markets and fisheries for Asian carp to help in our ultimate goal of eliminating Asian carp from the wild. The expert panel is made of folks that range in disciplines from fishery economists to outreach experts and from commercial fishing experts to biologists. At this point, the product of the summit will likely be a "straw dog" report on near and long term steps to take to stimulate markets and catch of Asian carp.

Draft "Monitoring and Rapid Response Plan for Asian Carp in the Upper Illinois River and Chicago Area Waterway System"

Recently, Project Leader Rob Simmonds and Assistant Project Leader Sam Finney, who both sit on the Monitoring and Rapid Response Workgroup of the Regional Coordinating Committee for Asian Carps in the Chicago Area Waterways System (CAWS), helped draft a plan to monitor Asian carp in the Upper Illinois River and the CAWS. The Illinois Department of Natural Resources, U.S. Army Corps of Engineers, and an expert panel that spans a variety of disciplines, agencies and the geographic area also assisted in drafting the plan. The plan uses numerous techniques including electrofishing, netting, commercial fishing, environmental DNA testing, rotenone and sonar in an attempt to locate and quantify Asian carps in the Chicago Area Waterways system. The plan specifically called for, among other things, the recent rotenone sampling event that occurred downstream of the T. J. O'Brien Lock and Dam on the Calumet River. The plan is still in draft

form and further revisions and finalization are expected to take place soon.

Biologists Sample Chicago's North Shore Channel for Asian Carp and come up Empty Handed

On May 11th through the 13th, biologists from the Carterville, La Crosse and Columbia Fish and Wildlife Conservation Offices (FWCO) recently sampled for Asian carp in the North Shore Channel of the Chicago Area Waterways System. We assisted the Illinois Department of Natural Resources and the U.S. Army Corps of Engineers in the effort.

The sampling event was done as prescribed by the "Monitoring and Rapid Response Plan for Asian Carp in the Upper Illinois River and Chicago Area Waterway System" and was in response to Asian carp DNA being found in the water. Biologists used electrofishing and nets and worked in concert with commercial fishermen to sample approximately five river miles from the Wilmette Pumping Station (thought to be a barrier to upstream fish movement) downstream to a series of commercial nets stretched across the river creating a barrier and effectively isolating the five mile area from potential fish escapement. Electrofishing boats ran side by side, upstream and down, sometimes as many as five boats wide; this technique also served to herd or drive fish into commercial fishing nets set in the area. The narrow, straight and shallow channel lent itself well to this approach. Although rain, lightning and rising water ran us off the water a few hours early, all biologists on the project felt strongly that the area was sampled thoroughly.

Rotenone Sample in the Chicago Area Waterway System Nets No Silver or Bighead Carp

From May 19th through the 26th, staff from the Carterville, Columbia, Ashland, Green Bay, Alpena and La Crosse Fish and Wildlife Conservation Offices (FWCO) and La Crosse Fish Health Center and Neosho National Fish Hatchery joined forces with 257 registered participants from 23 agencies and private companies to sample a two mile stretch of the Calumet River below T. J. O'brien Lock and Dam. Fish and Wildlife Service staff played many important roles in the operation ranging from staffing the incident management team to performing fish necropsies; from scooping dead fish to collecting and salvaging live fish before the operation began.

The operation commenced with salvaging valuable native and sport fish from the area to be treated with rotenone. The downstream end of the Calumet River in the treatment area was blocked off with netting, and the upstream end (T. J. O'Brien Lock and Dam) was closed to ensure that no fish came into or went out of the area during treatment. Rotenone was applied, a complete kill was confirmed using sentinel fish and rotenone concentration monitoring, and recovery of dead fish and detoxification of the rotenone began and continued for several days. When expiring, fish initially come to the surface and are collected prior to sinking to the bottom. During the subsequent days, decomposition causes many fish to float and the additional fish were collected and all fish were disposed of in a nearby landfill.

Divers were sent down to survey the bottom and found few fish. Given these results, experts agreed that the majority of fish present were collected. The operation was considered a success and a total of over 40 species comprising over 100,000 pounds of biomass were collected. No silver or bighead carp were collected, although DNA evidence prior to the event indicated that Asian carp were using this area. The media reports from the event were generally positive and site visits were made by numerous officials during the operation including U. S. Congresswoman Judy Biggert.

-USFWS/SamFinney

Multiple agencies and private companies sample a two mile stretch of the Calumet River below T. J. O'brien Lock and Dam because DNA evidence indicated that Asian carp were using this area.

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

Oh how Slimy can you get?

BY SCOTT YESS, LA CROSSE FWCO

It was a slimy experience that was enjoyed by 45 sixth grade students from Winona Middle School. They learned fish anatomy first hand when they dissected their own rainbow trout. This exercise gave each student the opportunity to discover the internal organs of a fish and learn about their function. Prior to dissection, the external features of the fish such as fins, gills and the lateral line were discussed. The students were very interested and curious about this exercise and several expressed their love for biology. After the dissection was complete, a short presentation on fish habitats and local species was presented.

-USFWS

Winona Middle School students try their hand at dissecting a rainbow trout.

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.

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

Veterans Fishing a "Reel" Success

BY LUCAS PURNELL, LA CROSSE FHC

Ryan Katona and Lucas Purnell of the La Crosse Fish Health Center (FHC) assisted at the Tomah Veterans Administration Medical Center's 20th annual Fishing Tournament in Tomah, Wis. on May 18. Fish health staff measured and recorded the lengths of fish caught by the veterans. Prizes were awarded to veterans who caught the longest rainbow trout, bluegill, black crappie and largemouth bass. Sixth grade teachers and students from Tomah Middle School must also be recognized for their contributions to this event. One student was paired with each veteran, making it possible for everyone to participate in the fishing tournament. Lastly, thanks must be given to the staff at the Genoa National Fish Hatchery for providing the fish fry.

-USFWS/NancyChristopherson

Lucas Purnell and Ryan Katona record fish weights at the Tomah Veterans Administration annual fishing tournament.

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

Fishy Family Fun

BY COLBY WRASSE, COLUMBIA FWCO

Despite a cool and rainy day, over 750 people attended the Macon Family Outdoor Fun Day. Families that attended had the opportunity to take part in a variety of outdoor activities including: fishing, firearms safety, a live reptile exhibit, hunting simulator, and much more. One of the high points was the live fish display staffed by Colby Wrasse of the Columbia Fish and Wildlife Conservation Office (FWCO). This exhibit included several species of Missouri River fish, which elicited great interest from the crowd of onlookers. As usual, the unique characteristics of the shovelnose sturgeon stole the show. Both young and old alike marveled at this prehistoric species, and hopefully they gained some level of understanding and appreciation for sturgeon and other native Missouri River fish.

Events, such as Macon Family Outdoor Fun day, gather a large and diverse audience eager for new experiences, which makes it a perfect platform to spread our conservation message while educating people about the Missouri River and its inhabitants. More than 750 people from the Macon area now know a little about Missouri River fish. Just one more small step in the right direction.

-Missouri DOC/ChrisMcleland

Columbia Fish and Wildlife Conservation Office technician Colby Wrasse talks about blue catfish to an audience at Macon Family Outdoor Fun Day.

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

Introducing Boy Scouts to Michigan Mammals

BY ADAM KOWALSKI, ALPENA FWCO

Biologist Adam Kowalski attended a local Boy Scout meeting to talk about Michigan mammals. Kowalski brought Alpena Fish and Wildlife Conservation Office's (FWCO) skull collection and talked about each animal, letting the boys handle the skulls and answering questions about the animals. He talked about the habitat needs of each mammal, whether it was a predator or prey species, and the typical diet for each species. Kowalski also talked about how he obtained his position with the Fish and Wildlife Service and the importance of earning a college education.

There were 25 Boy Scouts in attendance. The boys were extremely fascinated with the skulls and had very good questions about animals in general. Along with the boys were several parents who stayed to listen to the talk and participate in the discussion.

-USFWS

Adam Kowalski of the Alpena Fish and Wildlife Conservation Office showed local boy scouts how to identify several mammal skulls.

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

Lake Trout and Lake Whitefish Surveys in Lake Michigan

BY DALE HANSON, GREEN BAY FWCO

Green Bay Fish and Wildlife Conservation Office (FWCO) biologists Allen Lane, James Webster, Ted Treska and Dale Hanson spent the first week of June doing a lake whitefish gillnet survey in Grand Traverse Bay and waters near Leland, Mich. In all, the crew set nearly 30,000 feet of gillnet, which ranged from 2" to 6" mesh. This annual survey is used to monitor relative abundances of lake whitefish and lake trout within these fishery management units. All captured fish were measured, weighed, examined for lamprey wounds and ageing structures (otoliths), and stomachs were retained from lake trout and lake whitefish. This suite of "biological data" provides other important survey indices such as a time-series of invasive sea lamprey wounding rates, lake trout and lake whitefish size and age compositions, and fish diet information.

-USFWS/James Webster

Biologist Ted Treska releases a burbot that was captured during a lake trout and lake whitefish survey in Lake Michigan.

These surveys are a cooperative venture performed by the Fish and Wildlife Service, State of Michigan and Tribes within the 1836 Treaty Waters of the Upper Great Lakes. Fishery independent survey data compliments other fishery data collected through commercial and recreational catch monitoring. All available fishery data are input into an "integrated analysis" to assess the status for each management unit's fish stocks, and this process is ultimately used to generate harvest quotas. The integrated analysis approach was a critical component of the 2000 Consent Decree as it fosters the adoption of scientifically defensible management policies to regulate harvest in 1836 Treaty Waters.

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 Green Bay FWCO: http://www.fws.gov/midwest/Fisheries/library/StationFactSheets/greenbay.pdf

Lake Sturgeon Spawned at Rainy River First Nations

BY SCOTT YESS, LA CROSSE FWCO

Lake sturgeon once inhabited the Red River of the North and its tributaries. In 1926, a lake sturgeon weighing 176 pounds was caught in White Earth Lake; however, since the turn of the century lake sturgeon populations have declined due to over harvest, pollution and water development projects. The last record of a lake sturgeon in this area came from Lake Lida in 1957. In 1997, the White Earth Natural Resources Department (NRD) assisted by the Fish and Wildlife Service, Rainy River First Nations and Minnesota Department of Natural Resources (DNR) entered into an agreement to restore lake sturgeon in White Earth and Round lakes on the White Earth Reservation.

Lake sturgeon are primitive fish that historically inhabited many of Minnesota's large rivers and the lakes associated with those rivers. Native American cultures were partially dependent on the availability of lake sturgeon. Indian villages were often located near waters were sturgeon spawned. Early European settlement on Lake of the Woods was due to commercial fishing for lake sturgeon, when their caviar and fine flesh were known worldwide. It is a goal of the resource agencies to restore lake sturgeon to this part of its original range. The management plan calls for an annual stocking of 8,000 fingerlings in White Earth Lake and another 5,000 fingerlings in Round Lake.

Prior to stocking fingerlings, a significant team effort takes place. One huge hurdle is to test the sturgeon for viral infections prior to shipping the eggs. It took a true team effort to accomplish this goal. First, Scott Yess (La Crosse Fish and Wildlife Conservation Office) traveled to Baudette, Minn. to collect fin clips from 30 lake sturgeon held by the Minnesota DNR. The fin clips were delivered to Becky Lasee (La Crosse Fish Health Center) on April 19th. Results of the viral tests were negative. This allows the importation of sturgeon eggs to Genoa National Fish Hatchery (NFH).

On May 9th, Randy Zortman, Jerald Roberts and Tom McCully (White Earth NRD) along with Scott Yess assisted Joe Hunter (Rainy River First Nations) and his staff with spawning 6 adult lake sturgeon. Yess then delivered approximately 75,000 eggs on May 12th to the Genoa NFH. The staff at Genoa did a fantastic job preparing the facility to receive the eggs. In late summer, the lake sturgeon will be tagged and then transported to the White Earth and Red Lake reservations. This was an incredible team effort and thanks to all who participated.

-USFWS

A biologist prepares to take a lake sturgeon's eggs by caesarian section.

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

Green Bay FWCO donates Survey Fish to Local Food Pantries

BY TED TRESKA, GREEN BAY FWCO

In the process of performing the annual lake whitefish assessment survey in accordance with the 1836 Treaty, the Green Bay Fish and Wildlife Conservation Office (FWCO) provided over 1,000 pounds of fresh fish to local food pantries in the Traverse City, Mich. area. Biologists Ted Treska, Dale Hanson, Jim Webster and Allen Lane processed approximately 250 lake trout, round and lake whitefish, burbot (freshwater cod), and a few yellow perch for distribution at the Mancelona food pantry and Traverse City Goodwill Kitchen. The fish, collected near Elk Rapids and Leland Mich., varied in size but the largest was a 14 pound lake trout with most lakers weighing 5-9 pounds and the whitefish weighing between 2-5 pounds, all of which should provide a valuable source of protein for those who use the food shelves. Pantry coordinators were very happy to receive the fish which had been prepared to a point where they can be handed out or frozen for later distribution.

The coordination with local pantries is an ongoing part of an effort to maximize the benefits of the survey which requires lethal sampling of the fish. Data from the survey helps feed into the calculation of total allowable catches in waters covered by the Treaty.

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

Great Lakes Mass Marking Biologists Visit the Pacific Northwest

BY JAMES WEBSTER, GREEN BAY FWCO

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.

On May 17-21, biologists Jim Webster and Allen Lane of the Green Bay Fish and Wildlife Conservation Office (FWCO) visited four established coded-wire tag (CWT) recovery labs in Washington and Oregon. The objective of these visits was to learn the "state of the art" methods for CWT recovery, extraction and cataloging, and subsequently apply that knowledge to the formation of a tag recovery lab at the Green Bay FWCO. The FWCO will be the site of the centralized "Great Lakes Mass Marking Laboratory" that will provide services to the Great Lakes region. The tag recovery lab will be an integral component of the overall mass marking program.

Mass marking is the tagging and marking of all stocked fish with the use of CWT and adipose fin clips, which allows discreet batches of fish to be identified and evaluated upon their recapture in fishery assessments. Great Lakes fishery agencies, through the Great Lakes Fishery Commission, have requested the Fish and Wildlife Service to deliver a mass marking program based on its successful delivery of the basin-wide sea lamprey control and lake trout rehabilitation programs.

Duties to be performed at the lab include receiving and collecting tagged specimens from cooperating agencies, extracting the 1.1 mm tags, and reading the tag codes. These data, as well as fishing effort and biological data associated with each fish, will be entered into a centralized relational database. Tag recovery labs in the Pacific Northwest routinely process large numbers of tagged fish. As an example, the Washington Department of Fish and Wildlife lab in Olympia, Wash. recovers up to 100,000 tags per year. Well reasoned organizational and procedural protocols are imperative to accurate, efficient and cost effective processing of large numbers of specimens. Observing the established protocols at these working labs will help the Green Bay FWCO plan their procedures to serve the Great Lakes basin.

Other tag recovery operations visited were the Oregon Department of Fish and Wildlife (Clackamas, Oregon), Columbia River Fisheries Program Office (Vancouver, Wash.) and Western Washington Fish and Wildlife Office (Lacey, Wash). Also visited was the Pacific States Marine Fisheries Commission Regional Mark Processing Center in Portland, Oregon, where the CWT database for the entire Pacific Northwest is maintained.

The Great Lakes Mass Marking program got underway this spring when Fish and Wildlife Service staff tagged and fin clipped 1.1 million Chinook salmon at state fish hatcheries in Michigan and Wisconsin, and starting in August, will tag and fin clip 4.7 million lake trout at Fish and Wildlife Service hatcheries.

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

ARRA Funding supports Stream Habitat Restoration in the Meramec Watershed

BY JOANNE GRADY, COLUMBIA FWCO

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.

American Recovery and Reinvestment Act of 2009 (ARRA) funding provided through the Fish and Wildlife Service, in conjunction with other partnership dollars, was used to improve fish and aquatic habitats on three Missouri farms in the Meramec watershed. Adam Bowman of the Missouri Department of Conservation hosted a site tour on May 4th for Branch Chief for Fish Conservation Joanne Grady of the Columbia Fish and Wildlife Conservation Office (FWCO). We visited three cattle production farms in the Meramec watershed to inspect work put in place with ARRA funding. The objective of these projects was to reduce stream bank erosion rates, sedimentation and nutrification by installing alternative livestock watering systems, light equipment and livestock crossings, exclusion fencing, and by protecting and planting the riparian corridor. Each landowner selected tools from this list to meet their farm's needs and objectives. Their riparian corridors are comprised of a variety of trees, shrubs and grasses. Removing the cows from the stream corridor and maintaining the vegetation aids in: stabilizing the stream bank, increasing channel depths, reducing bed load, providing in-stream cover, regulating water temperatures and filtering nutrients. These projects aid in reducing stream problems both upstream and downstream by protecting the riparian corridor from livestock use and will contribute to improved water quality for the species that depend on these streams for survival.

In light of the ARRA funding intentions to create jobs in addition to funding habitat improvements, efforts were made to strategically spend ARRA funds to meet both objectives. ARRA funds supported excavation, rip rap hauling, pipe ditching, well drilling and water tank placements. Partner funds paid for fencing and riparian plantings.

The Meramec basin is a species-rich aquatic system with 43 species of freshwater mussels and 90 species of fish. It is a priority aquatic watershed in Missouri's State Wildlife Action Plan. The area experienced widespread logging in the early 1900s and has been additionally fragmented by pastures and development. Its close proximity to St. Louis means that the watershed is both impacted by development and treasured for the vital role it plays in outdoor recreation and tourism. Natural resource concerns in the upstream portions of the watershed include forest and forest riparian corridor conversion to pasture and row-crops along with associated excessive nutrification and increased sedimentation within waterways.

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

First Official Steering and Coordination Committee Meeting for the Ohio River Basin Fish Habitat Partnership

BY ROB SIMMONDS, CARTERVILLE FWCO

We've had a core group of individuals helping to guide our Ohio River Basin Fish Habitat Partnership for the past couple years and have had a governance structure on paper and partially assembled; however, May 2010 marks our first official meeting with our Steering and Coordination Committee in place. The gathering was actually a meeting of all interested participants in the partnership, with a particularly large contingent from Indiana given our Indianapolis meeting site. We started the meeting with a review of various elements of the partnership followed by presentations and discussion with other efforts in the basin such as the Appalachian Landscape Conservation Cooperative (or LCC) and the Ohio River Basin Collaboration. We identified as many real needs and opportunities for cooperation among the efforts. In addition, we discussed our ongoing outreach needs, some governance needs, and the habitat assessment that is underway for all of the Fish Habitat Partnerships in the Midwest. We closed by gathering additional information that was needed to finalize our strategic plan. All and all, this was a very productive session, but what we really need to do is to have our various committees make some real progress in several areas between now and our fall meeting.

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

The Details about My Detail

BY PATTY HERMAN, COLUMBIA FWCO

Without ever having to leave my desk, I worked a detail with the Columbia Field Office (FO) for six weeks. We in Fisheries have often wondered what a day in the life of our next door neighbors was like – and what all those half-sheets of orange paper were for. Now I know! Much like in Fisheries, Ecological Service office's daily operations are varied and busy. The sheer volume of project review letters that come into the office each month (the half-sheets of orange paper) was impressive. Often, just a basic description of a project is sent with a request to identify any potential endangered species or associated habitats. The receiving biologist has to interpret the project and determine if endangered species, migratory birds, streams or wetlands may be impacted and, if so, how to mitigate for any damages. It takes a biologist's eye and a lawyer's knowledge of policy to execute the project proposals.

I was also able to use my fisheries background to submit comments to the senior biologist regarding a rather contentious and ongoing floodplain protection project and mitigation proposal. This was a real opportunity to pull out the theoretical modeling lessons I learned in graduate school so long ago. It wasn't all permitting and policy paper-work, though.

I was also invited out to help find Massasauga rattlesnakes as part of a mark/recapture study. This wasn't my first rattlesnake hunt, but it was my first experience holding a rattle-snake bare-handed, who was quite cross about the situation. My fabricating skills were also put to good use creating wire bird traps for a lead contamination study. All in all, this was a great experience. Thanks to the Columbia FO biologists, I got to look at the world from a regulatory standpoint instead of from my normal land manager perspective. Oh, and those half-sheets of orange paper? Ellie uses those to track and file all of those project proposals - and the bright color helps prevent those letters from getting lost on your desk!

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/

From Spreadsheet to Sand Bar

BY ANDY STAROSTKA, COLUMBIA FWCO

Lincoln University's Environmental Science students experienced field work first hand as they volunteered time to conduct sampling for stur-geon on the lower Osage River. The business and accounting majors were taking the class as part of their general studies. Though the students were not biology majors, they were quick to lend a hand with field work and enjoyed some blue bird days on the water. The students found the work enjoyable but realized that field work is just one facet of a natural resource biologist's duties. Much like these business majors, biologists spend plenty of time behind desks building spread sheets to conduct data analysis and writing reports to summarize the many hours spent collecting data. Columbia Fish and Wildlife Conserva-tion Office (FWCO) has a long relationship with Lincoln University, including several seasonal employ-ees. These are not the first field trips that Lincoln students have taken with the fisheries crews. Mis-souri River field crews have provided large river sampling gear demonstrations for several years now.

-USFWS

Lincoln University business major Erston Malley prepares trot lines for deployment.

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

[111th CONGRESS House Bills]
[From the U.S. Government Printing Office via GPO Access]
[DOCID: h51ih.txt]
[Introduced in House]

111th CONGRESS
1st Session

H. R. 51

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.

IN THE HOUSE OF REPRESENTATIVES

January 6, 2009

Mr. Kirk introduced the following bill; which was referred to the Committee on Natural Resources

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A BILL

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.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. SHORT TITLE.

This Act may be cited as the "Eradicating Asian Carp in the Great Lakes Study Act of 2009".

SEC. 2. ASIAN CARP ERADICATION STUDY AND REPORT.

(a) In General.—The Director of the United States Fish and Wildlife Service shall conduct a study to—
(1) identify methods to eradicate Asian carp from the Illinois Waterway System, including methods for harvesting Asian carp; and
(2) evaluate the feasibility and costs of each such method.

(b) Consultation.—The Director shall conduct the study under subsection (a) in consultation with—
(1) the Administrator of the National Oceanic and Atmospheric Administration; and
(2) at least two interstate bodies representing the Mississippi River and Great Lakes States.

(c) Contents.—The study shall include, at a minimum, an evaluation of the feasibility of temporarily harvesting Asian carp as a method for eradicating the carp from the Illinois River. Such evaluation shall include evaluations of—
(1) species biomass and distribution for all fish species in the Illinois River, including a comparison with historical biomass and distribution data if such data is available;
(2) possible harvesting methods for Asian carp;
(3) possible products that could be generated from Asian carp;
(4) available types of temporary processing locations for harvested Asian carp;
(5) the environmental effects of constructing and operating temporary processing facilities at such locations;
(6) methods to repopulate the Illinois River ecosystem with native species; and
(7) the effect of Asian carp on the Illinois River ecosystem if temporary harvesting of Asian Carp is not conducted.

(d) Report.—
(1) In general.—The Director, in consultation with the Administrator, shall submit to Congress a report containing the findings, conclusions, and recommendations resulting from the study under subsection (a).
(2) Contents.—The report shall include recommendations concerning—
(A) regulatory and other mechanisms to ensure—
(i) expeditious action to address the Asian carp problem;
(ii) effective eradication of such carp; and
(iii) that an appropriate deadline is set for the completion of harvesting of such carp;
(B) preferred harvesting methods for Asian carp;
(C) the ideal quantity and distribution of—
(i) temporary processing locations for harvested Asian carp; and
(ii) temporary buying stations for harvested Asian carp; and
(D) methods to repopulate the Illinois River ecosystem with native species.

(e) Deadlines.—The Director shall—
(1) begin the study under subsection (a) not later than three months after the date of enactment of this Act;
(2) complete the study not later than 15 months after the date of enactment of this Act; and
(3) submit the report under subsection (d) not later than three months after the date of completion of the study.

<all>

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

Midwest Region Fisheries Divisions

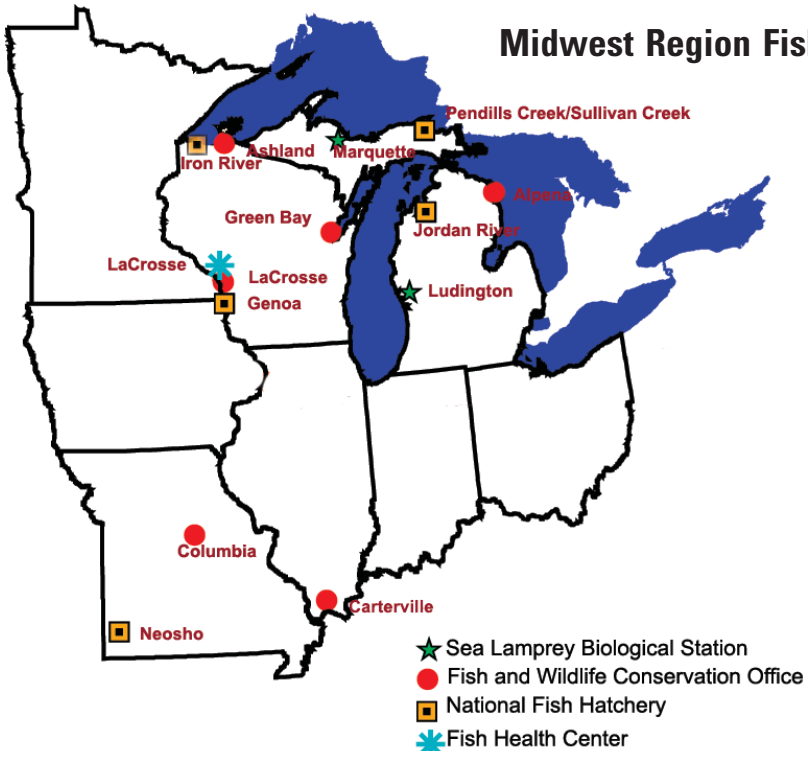
National Fish Hatcheries
The Region's National Fish Hatcheries primarily focus on native fish restoration/rehabilitation by stocking fish and eggs, such as pallid and lake sturgeon and by developing and maintaining brood stocks of selected fish strains, such as lake trout and brook trout. Hatcheries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



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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

- Operation Pelican
  - Brian Elkington, Columbia FWCO

Aquatic Species Conservation and Management

Aquatic Invasive Species

- La Crosse FWCO Assists with Rotenone Treatment on the Illinois Waterway
  - April Ammann, La Crosse FWCO
- LFHC Monitors Sentinel Fish in Asian Carp Rotenone
  - Eric Leis, La Crosse FHC

Public Use

- Alpena FWCO Invited to Talk with Students at Sunset School
  - Adam Kowalski, Alpena FWCO
- Check Out Fishing for Fun Backpacks Near You!
  - Heidi Keuler, La Crosse FWCO
- Kids Enjoy Anatomy Lesson
  - Sarah Bauer, La Crosse FHC
- Paxton Keeley 4th Graders learn about Fish Anatomy and Body Systems
  - Aaron Walker and Adam McDaniel, Ccolumbia FWCO

Cooperation with Native Americans

Leadership in Science and Technology

Aquatic Habitat Conservation and Management

Workforce Management

- Columbia FWCO Welcomes New Step Students!!
  - Brandon Baumhoer, John Carroll, Scott Childers, Clint Feger, Daniel Gruhn, James Needham, Randi Preece and Brandon Spratt; Columbia FWCO

2nd Annual Youth Outdoor Fest

Youth Outdoor Fest
July 24, 2010
Pettibone Park La Crosse, Wisconsin
11:00 am —5:00 pm