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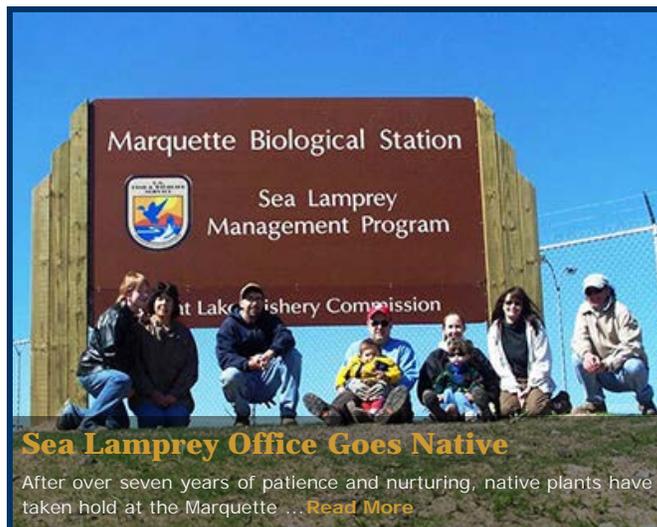
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Sea Lamprey Office Goes Native



Great Lakes Most Unwanted



The Coaster Connection



Early Detection of Invasive Species in Lake Superior



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Fish Tails

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

Field Notes

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

Last updated: November 14, 2013



Sea Lamprey Office Goes Native

BY CHRISTIE DELORIA, MARQUETTE BIOLOGICAL STATION



The "planting" crew in spring 2006 from left: Mandy Henson, Mary Henson, Curt Sheffield, Bob Kahl, Walter (Bob's grandson), Shawn Nowicki, Melody Nowicki, Cheryl Kaye, and Joe Genovese. Credit: Christie Deloria, USFWS

After over seven years of patience and nurturing, native plants have taken hold at the Marquette Biological Station. In spring 2006 after moving to a new building, staff, family, and friends came out one weekend to plant native seeds at the office. The results of those efforts are finally being seen. Christie Deloria biologist with the Service noted "The native plants like big bluestem and black-eyed susan grow extensive root systems first. So, you don't notice flowers or robust stems in the first few years." With permission from the landlord, four areas were planted with native plant seed and plugs.

The goals behind the planting were to highlight the potential use of native species in landscaping, to minimize mowing and water use, and provide small habitat patches for birds and butterflies. It seems to be meeting all of those goals. Although the site requires less maintenance than a traditional lawn, it still requires some attention. Bob Kahl, retired sea lamprey biologist and volunteer extraordinaire, has dedicated many hours of time to weeding, planting, and growing plants for the native plant garden. He's planted nearly 500 plant plugs and removed over

20 bags of non-native species. This fall he's also been out collecting seed to transfer and use at other sites.



In 2006 the site was just bare soil. Here, Joe Genovese waters the freshly planted seed. Credit: USFWS

The native plant garden has been a partnership effort among the U.S. Fish and Wildlife Service's Sea Lamprey and Ecological Services Programs, Hiawatha National Forest, Marquette County Conservation District, Northern Michigan University students, and various volunteers.



The same site in 2013 hosts a plethora of native species including big bluestem grass. Bob Kahl collects seed from the mature grass at the Marquette Biological Station. Credit: Christie Deloria, USFWS



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Conserving America's Fisheries

Great Lakes Most Unwanted: Alpena FWCO Searches for New Invasive Species

BY ERIC STADIG, ALPENA FWCO-WATERFORD MICHIGAN SUBSTATION

"184 Non-Native Species Established in the Great Lakes!" That headline is from the Great Lakes Aquatic Nonindigenous Species Information System (GLANSIS) and highlights a growing issue within our Great Lakes. Fish biologists from the Alpena Fish & Wildlife Conservation Office (FWCO) are working to prevent the next aquatic invader from becoming established. Through paired-fyke netting, electrofishing, and trawling, crews have covered areas from the St. Marys River to the western basin of Lake Erie searching for nonnative juvenile or adult fishes. These efforts represent one of four portions of the Service's large-scale early detection monitoring program for aquatic invasive species using both traditional and non-traditional sampling gears in the Great Lakes.

Why have early detection monitoring programs? If scientists can find new, nonnative species while they are still rare, then they might be able to stop them before they reproduce enough to become invasive. The prevention starts with the identification of the species both native and non-native. During this year's research trips, over 150 samples have been collected to find as many species as possible. Through these traditional sampling efforts, the fish biologists have identified nearly 50,000 fishes. Species ranged from native bowfin, walleye and emerald shiner to established invasives, such as, round goby.



Through trawling, paired-fyke netting, and electrofishing, Alpena FWCO crews have covered areas from the St. Marys River to the western basin of Lake Erie searching for nonnative juvenile or adult fishes. Credit: Eric Stadig, USFWS



Employing traditional sampling efforts (trawling, paired-fyke netting, and electrofishing), Alpena FWCO fish biologists have identified nearly 50,000 fishes. This native bowfin was caught in a paired-fyke net on Maumee Bay (Lake Erie). Credit: Eric Stadig, USFWS

Along with visual identification of each species, fin clips (pectoral, pelvic, adipose or caudal fin) from a subset of each species were collected before releasing the fish in the field. This method allows genetic confirmation for species identifications. These samples will be analyzed in collaboration with the U.S. Environmental Protection Agency, National Exposure Research Laboratory in Cincinnati, Ohio, using genetic barcoding. Genetic barcoding is particularly useful for early detection of aquatic invasive species, as results are automatically cross-checked against a global database of genetic codes for many species. This technique is also principally advantageous in the identification of a species that share very similar morphological traits with native species (i.e. European perch). Currently, Alpena FWCO fish biologists are wrapping up their sampling season with collections on Sandusky Bay in Lake Erie.



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The Coaster Connection: Lake Superior and Chicago

BY HENRY QUINLAN, ASHLAND FWCO

Ashland Fish and Wildlife Conservation Office (FWCO) fish biologist, Henry Quinlan, was the guest speaker for the Oak Brook, Illinois, Trout Unlimited Chapter at their September meeting. OBTU Chapter members have been involved in Lake Superior coaster brook trout rehabilitation, management, and research efforts for nearly 20 years.

Henry provided an overview of brook trout harvest regulations in Lake Superior and in tributaries accessible to migratory trout and salmon. In Ontario and Minnesota protective regulations have resulted in increases in abundance, size, and range of coasters. In Michigan and Wisconsin where regulations do not protect brook trout larger than eight inches in the tributaries, there is little evidence of coaster rehabilitation progress. Exceptions are at Isle Royale and in the Salmon Trout River (Marquette County) where protective regulations are in place. Henry also discussed management and assessment actions on a lake-wide scale and provided an update on the joint Wisconsin Department of Natural Resources/U.S. Fish and Wildlife Service effort to re-establish coasters in Whittlesey Creek, Wisconsin.



Fish biologists, Glenn Miller and Henry Quinlan install antenna for a PIT tag detection station on Whittlesey Creek, Wisconsin. Credit: USFWS



Brook trout caught during 2012 Whittlesey Creek survey and PIT tagged for tracking its movement in and out of the stream. Credit: USFWS

In 2008, the OBTU Chapter provided support to Ashland FWCO for coaster rehabilitation through their Conservation Fund. Equipment was acquired for setup of a passive integrated transponder (PIT) tag detection station that Ashland FWCO installed on Whittlesey Creek. The station allows continuous monitoring of brook trout movement in an out of Whittlesey Creek for fish that have received a PIT tag. To date over 2,500 have been PIT tagged and released in Whittlesey Creek. A few brook trout have been detected leaving the stream and entering Lake Superior and subsequently returning to the stream up to two years later.

With recent consolidation of Trout Unlimited chapters in Illinois, the TU Oak Brook Chapter now represents over 600 Trout Unlimited members throughout the state. Ashland FWCO fishery biologists and Oak Brook TU members continue to seek opportunities for collaboration to promote coaster rehabilitation progress in Lake Superior.



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Early Detection of Invasive Species in Lake Superior

BY MICHELE WHEELER, ASHLAND FWCO

As the largest freshwater aquatic ecosystems on the planet, the Great Lakes are a treasured resource in the Midwest. More than 300 species of fish and other aquatic organisms inhabit the basin; however many of these species didn't always call Great Lakes waters their home. Once established, these non-native invaders can substantially alter aquatic ecosystems and are difficult to control. Prevention and early detection are two of the tools agencies utilize most effective and efficient means to combat this growing threat.

Staff from the Ashland Fish and Wildlife Conservation Office (FWCO) has been working with federal, state, tribal, and local agencies including U.S. Environmental Protection Agency (EPA), Ontario Ministry of Natural Resources, Fond du Lac Band of Lake Superior Chippewa 1854 Treaty Authority, and Ashland County across the Lake Superior basin to monitor for new potential fish invaders. Sampling locations were prioritized based on likely introduction vectors, which included maritime commerce, recreational boating, and points of connectivity with the Mississippi basin.

Between June and September 2013, the St. Louis River Estuary, Minnesota/Wisconsin (WI), Upper St. Marys River, Michigan/Ontario (ON), Thunder Bay, ON, and Chequamegon Bay, WI were sampled as part of a comprehensive early detection program focused on detecting new non-native fish species using a variety of sampling techniques that target a variety of life stages.



Ashland FWCO staff collects water for eDNA testing from the St Louis River Estuary. Credit: USFWS



A fyke net is being lifted in a backwater portion of the St. Louis River. After the net is retrieved, the entire catch is identified to species and a count taken of every fish. Credit: USFWS

Larval fish sampling was conducted by EPA during June and early-July in the St Louis River Estuary. Ashland FWCO provided staff and a sampling vessel to assist EPA Mid-Continent Ecology Division. A total of 40 sites, less than two meters in depth, were sampled using a custom designed towing sled. At each site, the sled was pulled by hand for 100 meters for approximately three and a half minutes. The contents from the sled were then filtered through a fine mesh screen and preserved in alcohol. Over the next several months, the fish specimens will be identified to species and counted. The purpose of this research is to compare the efficiency of larval fish sampling to adult fish sampling for early detection monitoring.

Juvenile and adult fish sampling occurred with partner agencies at all four priority locations using fyke nets, boat electrofishing and bottom trawls. Sampling occurred during August through early-September to allow young-of-year fishes to grow large enough to be captured by our sampling gears. This past year was the first year of sampling with all three gear types in Chequamegon Bay, WI but the fourth consecutive year at the other three locations. This year's fish samples are still being processed, but to date there have been no new detections of non-native fishes.

Environmental DNA (eDNA) monitoring was conducted over two days in August in the St. Louis River Estuary. Detection of species at low abundance or those that avoid traditional sampling gear can make early detection problematic. However, species leave traces of themselves as sloughed scales, mucus or fecal matter that can be detected in water using eDNA analysis. The Ashland FWCO sampled areas where eDNA was likely to accumulate in St. Louis River Estuary, including backwaters and near river mouths. A total of 100 water samples were collected and shuttled back to the Ashland FWCO lab for filtering. The samples were then shipped to the U.S. Fish and Wildlife Service's Whitney Genetics Lab in La Crosse, WI for further processing.

Invasive species continue to threaten the diversity and stability of Great Lakes aquatic ecosystems. Once established, they can significantly alter the ecological stability of infested waters. Working cooperatively has proven to be an effective way to



USFWS Fish Passage and Partners Programs Collaborate on Dam Removal in Northeast Michigan

BY JOSEPH GERBYSHAK, ALPENA FWCO



Saunders Dam impounded 12 acres of water on the Black River, one of Michigan's premier trout streams, in Otsego County, MI. The removal process was captured with a time-lapse camera. Credit: USFWS

Saunders Dam, like most dams, had many harmful effects on the aquatic ecosystem. After only ten miles of headwater stream, Saunders Dam impounded 12-acres of water with its four feet of head. The dam impounded both the main branch of the Black River and a portion of Saunders Creek, a cold water tributary. The impoundment increased the amount of water exposed to the sun, increasing stream temperatures by an average of three degrees Fahrenheit. In addition, the impoundment slowed flows, causing the stream to drop its sediment load and blanketing substrate vital to stream health. The dam also created a barrier for aquatic organism passage for many species in the Black River, including native brook trout. The fragmentation of habitat impeded migration to critical spawning and nursery habitat.



The Black River at the former Saunders Dam site, brook trout now have access to 10 miles of headwater habitat. Credit: USFWS

The Black River, part of the Cheboygan River Watershed in Michigan, has been the target of many habitat improvement projects in the past decade. The latest project is a dam removal in the headwaters of this premier cold water fishery. It has been a long time goal of resource professionals to remove Saunders Dam, a dilapidated dam on this Blue Ribbon Trout Stream exclusively managed for brook trout. Saunders Dam, named after a former landowner, was built in the early 1900s for power generation, but the decaying dam no longer served a purpose and was causing many negative environmental impacts. The obvious solution for resource professionals was dam removal.



Saunders Dam during removal, a water control structure was constructed to lower the head in a controlled manner, reducing the amount of sediment that was mobilized. Credit: USFWS

Until recently, the dam and surrounding property was privately owned and the owner had no interest in removing the dam. However, the Michigan Department of Natural Resources recently purchased a 517-acre parcel of the property, which included the dam, and the property was added to the Pigeon River Country State Forest. The purchase created the opportunity for dam removal.

Many local groups collaborated to accomplish the long anticipated task of Saunders Dam removal. The U.S. Fish and Wildlife Service National Fish Passage Program and Partners for Fish and Wildlife Program, provided the majority of the funding for the dam removal. The Service partnered with Huron Pines, Michigan Department of Natural Resources and the Upper Black River Watershed Council, along with numerous local businesses and private donors to remove the dam and open up fish passage to ten miles of headwater habitat.



Where in the World are Carmen Sandiego and Her Fishy Friends; the Lake Trout, Lake Sturgeon, Chinook Salmon and Asian Carp

BY MARK HOLEY, GREEN BAY FWCO

To figure out where stocked and invasive species migrate and live in the Lake Michigan and beyond, sleuths from the Green Bay Fish and Wildlife Conservation Office (FWCO) combine the latest advancements in fisheries technology to detect and identify fish and coordinated sampling activities with our partner state and tribal fishery investigators.

Lake Trout and Chinook Salmon: The Green Bay FWCO has tagged all lake trout and Chinook salmon [stocked](#) into lakes Michigan and Huron since 2011, about ten million fish annually. High tech [automated tagging trailers](#) tag about six inch fish at state and federal hatcheries before they are stocked. A very small wire tag that bears a batch tag number is inserted in the cartilage of the fish's snout and the adipose fin is clipped. The clipped fin allows anglers and fisheries professionals which fish they catch have a tag.

Green Bay FWCO field staff also samples the catch of anglers in lakes Michigan and Huron. Angler samples allow fishery managers to determine how the stocked lake trout and Chinook salmon distribute around the lake and which stocking sites contribute to the angler catch – important information required by fishery agencies to manage the fishery.



Jim Webster and Allen Lane closely monitor lake trout receiving the coded wire tags at the Jordan River National Fish Hatchery. Credit: USFWS

Asian Carp: To implement the Asian Carp Framework, in 2013, the Green Bay FWCO conducted its first lake wide collection of water samples to test for the presence of [Asian carp eDNA](#) (environmental DNA). A total of 968 samples were collected from 10 Lake Michigan tributaries or harbors. Water samples are filtered and prepared for the lab tests to identify if Asian carp DNA. If a sample tests positive for eDNA, additional samples will be taken and sampling to catch live fish initiated. No live Asian carp have been captured in Lake Michigan.



Green Bay FWCO staff collecting water samples to test for Asian carp eDNA. Credit: USFWS

Lake Sturgeon: The Green Bay FWCO, Michigan DNR, Wisconsin DNR, and the Little River Band of Ottawa Indians all rear lake sturgeon in trailers converted to hatcheries to rear and imprint sturgeon to the river water where they will be stocked. The goal is to have these young sturgeons to return to these rivers when they mature and spawn. Since 2009, [3000-5000 lake sturgeon](#) have been released into Lake Michigan from the six rearing trailers around the lake. Each sturgeon stocked receives a tag with a unique number or fin clip to allow fishery experts identify each individual fish as long as they live. Coordinated sampling efforts among the Lake Michigan fishery agencies in 2013 recovered a number of tagged sturgeon indicating the [streamside rearing is working](#) to restore lake sturgeon in Lake Michigan.



A young lake sturgeon recently caught in Green Bay that was released from the Michigan Department of Natural Resources streamside rearing facility at the Whitefish River. Credit: USFWS



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Fish Tails

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

Definitely Connecting People with Nature...Canoeing the Jordan River with Spring Arbor University Students

BY RICK WESTERHOF, GREEN BAY FWCO

Every fall the freshman class at Spring Arbor University (SAU) treks north to Cedar Bend Farm near Mancelona, Michigan to learn about the great outdoors. One of the highlights for the students is canoeing the Jordan River from Graves Crossing to Webster's Bridge - approximately a three hour trip. This is the second year that Rick Westerhof from the Green Bay Fish and Wildlife Conservation Office (GBFWCO) assisted with one of the weekly Jordan River canoe outings.

On a late September day, "it looked like it was going to rain all day", but the weather cleared and the sun came out for most of the afternoon, making for a very pleasant canoe outing on the always cold (water temperatures in the mid to upper 40's) Jordan River for the 16 students from SAU and Rick. Just as the year before, several students never canoed before and are provided a quick paddling and safety lesson by the owner of Swiss Hideaway Canoe Livery. The paddling lesson includes how to "steer the canoe" and "oh darn, here comes the emergency tree stroke". Several safety tips are provided that include "don't grab the tree limb", "don't stand up in the canoe", and everyone must have a personal floatation device. The students are put to the test immediately as the toughest section (fastest and tree laden) of the river begins at Graves Crossing down to the Old State Road culverts, which typically should take 45 minutes. This outing only one canoe tipped in this section and they required no assistance (Rick didn't have to get wet) getting back in their canoe. There were a few canoes that were bouncing from bank to tree to bank and tree again. Apparently, they forget the paddling lesson. It's not uncommon for the 45 minute trip to take one and half hours.

Once the canoeists go through the "twin tubes (culverts)" at Old State Road, they pull out and enjoy a short rest, warm up and float through the "twin tubes" again on personal floatation cushions. The "twin tubes" is one of the most exciting aspects of the trip because if you turn too sharp after going through the left tube, you can easily be swimming or collecting a "little water" in your canoe. Everyone successfully navigated the "twin tubes" and five to eight brave students floated through the tubes, which I think is a rite of passage or slightly crazy given the water temperature. Most canoeists enjoy the challenge of the "twin tubes", but it unfortunately has adverse impacts on the river. At low flows and high flows it becomes a barrier for many fish species (weak swimmers and non-jumpers), is a major site of erosion and sediment entering into the river, impounds water above the undersized culverts, doesn't span bank full, creates a scour pool at the downstream end, and Old State Road's structural integrity is being compromised, as the Antrim County Road Commission has reinforced the embankments with concrete. The Conservation Resource Alliance and the GBFWCO submitted a proposal to the FY 2013 U.S. Fish and Wildlife Service's National Fish Passage Program for the Old State Road engineering and feasibility design project to replace the "twin tubes", but unfortunately it didn't get funded.

The Jordan River canoe trip is a great opportunity to connect students with nature. It provides an opportunity for the students to learn how to experience and enjoy the outdoors via a canoe, learn about the wildlife and fish that use the river (see ducks, birds, maybe an otter and coho and chinook making their spawning run up the Jordan River), see adverse impacts from undersized and perched culverts, develop teamwork, and learn about natural resource careers. Maybe in a few years the students will see a new road stream crossing (bridge) at Old State Road that provides for improved fish passage, eliminates adverse impacts on the river and still provides recreational enjoyment.

Pond Harvest = Present Opening (for fish biologist)

BY JORGE BUENING, GENOA NFH

With the arrival of October the time to harvest ponds is upon us at Genoa National Fish Hatchery. This is our chance to get to see what a summers worth of feeding and water monitoring has produced. One of Genoa's former fish biologists used to say "pond harvest is like opening presents because you just don't know what you are going to get". I find this statement very true because even though we know what fish were placed into the ponds in the spring; we are not sure what numbers the ponds have produced until the fall harvest.

Some of our ponds are stocked with fry and we know the initial number that we are starting with. Species such as smallmouth bass, largemouth bass and walleye are cultured this way.

Another method of pond culture is simply allowing the adults to spawn in the pond and seeing what is produced. This method is used for bluegill, black crappie, fathead minnows and yellow perch. It really is just letting nature take its course and assuming that everything goes right.

With the work that goes into setting up ponds in the spring a variety of factors could contribute to mortality during the summer including predation, starvation, cannibalism, poor water quality, and others. That is where we step in and attempt to minimize losses due to these various factors. It is the "opening of the presents" that reveals how our efforts have paid off. These fish are distributed to Illinois, Iowa, Wisconsin, and Minnesota to fulfill various management objectives. They also provide recreational fishing opportunities on federal lands including military bases and fish and wildlife refuges of the U.S. Fish and Wildlife Service. Some of the fish are sent to stock tribal lands as part of mitigation plans established between the United States Government and various Native American nations. Other fish will be used as host fish and aid in the production of freshwater mussels. No matter where these fish end up we hope that they will help to improve the system that they are placed in for the continuing benefit of the American people.

Keeping it Clean...The Challenge of Maintaining Gear in a Disinfected State

BY JOSEPH GERBYSHAK, ALPENA FWCO

Preventing the spread of pathogens, bacteria and invasive species is an essential element in maintaining natural, healthy ecosystems. Inhibiting unwanted organism transfer between watersheds is a crucial task for anyone venturing into aquatic systems; however, it is especially important for staff from Alpena Fish and Wildlife Conservation Office (FWCO) considering the vast area they work, which stretches from the St. Marys River to western Lake Erie.

After disinfecting gear, maintaining gear in a disinfected state is not as simple as it may seem. Alpena FWCO has two storage areas, a large garage mainly used for housing boats and in various watersheds is periodically transferred in and out, creating the possibility for contamination to occur. Before a net repair room where nets and trawls are stored. Both of these areas are considered contaminated because gear used in a different watershed, disinfection must occur immediately prior to leaving the field office because there is not an area free of contamination to store it. This can be a labor some and time consuming process, especially when numerous gear types are in need of disinfection and a long day in the field is scheduled.

In order to house disinfected gear in a contamination free area, a storage shed was purchased to serve as a clean environment. The 140 square foot storage shed was placed next to Alpena FWCO's current storage facilities and alleviates the need for disinfecting trawls, gillnets and trap nets immediately prior to departure into the field. Having various types of gear disinfected and ready to be mobilized is beneficial if field work unexpectedly arises, such as assisting partners or in a rapid response situation.

Elementary Students Explore the Fish Community of the Thunder Bay River

BY STEPHEN LENART, ALPENA FWCO

In early fall Alpena Fish and Wildlife Conservation Office (FWCO) biologist Stephen Lenart spent the morning exploring the fish community of the Thunder Bay River (River) in Alpena, Michigan with four groups of 4th and 5th grade students from Au Gres Elementary School. Lenart began by asking questions of the students regarding their knowledge of local fish species. Many of the students had a favorite and some were able to share their personal knowledge of invasive fish species and why they are a threat to our native fish populations. The students also demonstrated knowledge of when and why different species use the River during part of their life cycle. Students then put on their "field biologist" hats and used minnow traps to collect fish from different habitat types within the River. Students were given field notebooks and asked to record information on the number of each species captured and the size of individual specimens. The importance of accurate data recording was emphasized, since each of the four groups was to contribute to the experiment. The fisheries experiment was only part of the fun, as students were rotated between a variety of activities that included water quality and macroinvertebrate stations. The idea behind the event was to provide a broad overview of the connections between the biotic and abiotic components of the local ecosystem. This outreach initiative was hosted by our neighboring federal partner, the National Oceanic & Atmospheric Administration's (NOAA) Thunder Bay National Marine Sanctuary (TBNMS). The Alpena FWCO has a documented history of success in partnering with the TBNMS outreach staff and this most recent event was an excellent example of how we can leverage our combined resources to help educate the next generation of citizen stewards.

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Midwest Region Fisheries Divisions

National Fish Hatcheries

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

Fish and Wildlife Conservation Offices

Fish and Wildlife Conservation Offices (FWCO) conduct assessments of fish populations to guide management decisions, play a key role in targeting and implementing native fish and habitat restoration programs; perform key monitoring and control activities related to aquatic invasive species; survey and evaluate aquatic habitats to identify restoration/rehabilitation opportunities; work with private land owners, states, local governments and watershed organizations to complete aquatic habitat restoration projects under the Service's National Fish Passage Program, National Fish Habitat Partnerships, Partners for Fish and Wildlife and the Great Lakes Coastal Programs; provide coordination and technical assistance toward the management of interjurisdictional fisheries; maintain and operate several key interagency fisheries databases; provide technical expertise to other Service programs addressing contaminants, endangered species, federal project review and hydro-power operation and relicensing; evaluate and manage fisheries on Service lands; and, provide technical support to 38 Native American tribal governments and treaty authorities.



Sea Lamprey Biological Stations

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

Fish Health Center

The Fish Health Center provides specialized fish health evaluation and diagnostic services to federal, state and tribal hatcheries in the region; conducts extensive monitoring and evaluation of wild fish health; examines and certifies the health of captive hatchery stocks; and, performs a wide range of special services helping to coordinate fishery program offices and partner organizations. The Whitney Genetics Lab serves as a leading edge genetics laboratory and conducts environmental DNA (eDNA) sample processing for early detection of invasive species.



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