ALPENA FWCO NEWSLETTER

July - August 2013
Volume 3, Issue 4

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Alpena FWCO Conducts 2013 Fishery Independent Lake Whitefish Survey in Northern Lake Huron

By Adam Kowalski

During July and August, staff from the Alpena Fish and Wildlife Conservation Office (FWCO) and volunteers conducted the annual fishery independent lake whitefish survey in 1836 Treaty waters of northern Lake Huron. The purpose of this survey is to collect fishery independent abundance and biological data on lake whitefish stocks in treaty waters for use in statistical catch-at-age population models that are updated annually to determine harvest regulations for commercial fisheries in 1836 Treaty waters of the Great Lakes.

During the survey, 24 variable mesh gill nets (two to six inch) were set at randomly selected sites in lake whitefish management unit WFH 04 (Hammond Bay to Presque Isle) and lake whitefish management unit WFH 05 (Presque Isle to Alpena). All whitefish and lake trout collected were measured, weighed, sexed, assessed for maturity and visceral fat content, and checked for sea lamprey wounds, fin clips, and tags. Scales and otoliths were collected for age determination. Similar biological data were collected from non-target species. Five lake whitefish were collected from unit WFH04 and 19 were collected from unit WFH05. Although catches of juvenile whitefish were still low, more were sampled this year than in the past eight years.

Data collected during this survey will improve the accuracy of population models used to set lake whitefish and lake trout harvest guidelines in 1836 Treaty waters of northern Lake Huron. Harvest limits allow fisheries to be executed while still protecting the biological integrity of the stocks. This outcome is consistent with the Service's goal of maintaining self-sustaining populations of native fish species while meeting the needs of tribal communities under the "Aquatic Species Conservation and Management" and "Cooperation with Native Americans" priorities of the Fisheries Program Vision for the Future.

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Lake trout, round whitefish, Chinook salmon, burbot, and lake whitefish came aboard the R/V Artedi during the fishery independent lake whitefish survey in northern Lake Huron. Photo credit: Adam Kowalski, USFWS.

Artificial Reefs a Success in the Huron-Erie Corridor!

By Andrew Briggs

A large scale habitat restoration effort is currently underway in the Huron-Erie Corridor in an effort to delist the St. Clair and Detroit River Areas of Concern. One of the Beneficial Use Impairments being addressed is the Loss of Fish and Wildlife Habitat. Dredging within the corridor to facilitate commercial ship traffic has led to a drastic loss of rocky habitat. This rocky habitat is of great importance to many native species within the Great Lakes, particularly for spawning.

Artificial spawning reefs are being constructed in the Detroit and St. Clair Rivers to increase the amount of suitable spawning habitat available to native fish species. Reefs have already been constructed near Belle Isle (2004) and Fighting Island (2008) in the Detroit River and in the Middle Channel (2012) of the St. Clair River. Several more reefs are scheduled for construction in the fall of 2013 near Fort Wayne on the Detroit River and near Algonac and Harts Light on the St. Clair River. These reefs are constructed of loosely piled rock about two feet thick and are one to two acres in size. The species of particular concern include lake sturgeon, northern madtom, walleye, and lake whitefish, which are threatened and/or economically important fish species that utilize rocky substrate for spawning.

Fish biologist James Boase pulls in a gill net on the Detroit River. Photo credit: USFWS.

Monitoring efforts evaluating the current restoration sites have shown the constructed reefs to be a success. Prior to construction of artificial reefs near Belle Isle, only 2 fish species were captured at this site. Following construction, 20 species were captured with 14 of these being native species in spawning-ready condition or recently hatched from eggs. At the reefs constructed near Fighting Island, the U.S. Geological Survey documented lake sturgeon spawning in 2009, 2010, and 2012 and collected lake sturgeon larvae, indicating the first evidence of successful lake sturgeon reproduction in the Detroit River. Reefs constructed in the Middle Channel of the St. Clair River have also been a success, with lake sturgeon spawning being documented each of the last two years.

This spring and summer, U.S. Fish and Wildlife Service fish biologists from the Alpena Fish and Wildlife Conservation Office – Waterford Substation conducted gill net surveys at current and proposed reef sites on the Detroit and St. Clair Rivers. Sampling was conducted over 13 weeks with 74 nets being set. A total of 16 species were captured over the sampling period. Data collected from gill net surveys will be compared prior to and after reef construction to evaluate the fish community response to these restoration efforts.

Monitoring these spawning reefs is important to the continued conservation of both aquatic species and aquatic habitat. The adult fish community sampling being conducted by the Alpena FWCO is just one aspect of the biological response being evaluated by project partners and a long-term monitoring program is currently being developed to assess system wide changes in these rivers. For more information on these projects please visit the Huron-Erie Corridor Initiative website at: http://www.huron-erie.org/.

Night Moves: A Quick Look into Alpena's Ichthyoplankton Sampling for Early Detection of Aquatic Invasive Species

By Eric Stadig

U.S. Fish and Wildlife Service fish biologists, Stephen Hensler and Eric Stadig, from the Alpena Fish and Wildlife Conservation Office (Waterford Substation) completed another larval fish sampling cruise. Armed with bongo nets and light traps aboard the R/V Kraken, the biologists searched for non-native species on Maumee and Sandusky bays. Larval fish sampling concluded on both bays after sampling in May, June, and July. This unique nighttime effort represents one of four portions of the Service's large scale early detection monitoring program using traditional and non-traditional gear types within the Great Lakes.

Ichthyoplankton (a.k.a larval fishes) are planktonic, meaning they cannot swim effectively against currents under their own power. Early stage larvae swim poorly and are impacted by hydrodynamic conditions such as seiches. Lake Erie is particularly prone to seiches because of its east-west orientation and shallow depths. Lastly, larval fish are heavily influenced by light conditions, such as exhibiting diel vertical migration being drawn to the surface by the moonlight. This behavior allows the larval fish to feed at the surface when their predators cannot see them as easily. This does, however, make them more susceptible to traditional sampling gear (such as bongo nets) during nighttime sampling.

The Alpena FWCO crew is seeing their larval fish sampling pay off with numerous samples filled with larval fishes. These samples will be analyzed in collaboration with U.S. Environmental Protection Agency (USEPA) offices in Duluth, Minnesota and Cincinnati, Ohio using both traditional taxonomic identification and genetic barcoding. Genetic barcoding is a particularly useful for early detection of aquatic invasive species, as results are automatically cross-checked against a global database of genetic codes for various types of species. The concept could provide an adaptation to fisheries monitoring plans worldwide.

A sample collected from Sandusky Bay, Ohio during an Alpena FWCO ichthyoplankton sampling cruise. Photo credit: Eric Stadig, USFWS.

The use of light traps was a major component for the Alpena FWCO ichthyoplankton sampling. They effectively sampled shallow areas where the bongo net was unable to be used. Photo credit: Eric Stadig, USFWS.

The Friends of the Lake Huron Watershed group meets at the USFWS–Alpena FWCO office on the third Wednesday of each month at 4:30 p.m. All are welcome to attend!

Debut of New Mobile eDNA Water Filtering Lab

By Steven Gambicki

Aquatic invasive species have always been a concern for Great Lakes enthusiasts. Since the 1800s, over 180 non-native species have been found within the Great Lakes. Some have become problematic as invasive species, causing severe environmental and economic losses. Once an invasive species is established, it is extremely difficult to control their spread and minimize their damage. New invasive species threaten the $7 billion Great Lakes fishery. Early detection of new invasive species is thus vital to protecting the Great Lakes fishery.

The U.S. Fish and Wildlife Service recently began analyzing environmental DNA (eDNA) as a means of detecting the presence of aquatic invasive species genetic material. The Alpena Fish and Wildlife Conservation Office is using a new tool to streamline eDNA processing. Alpena FWCO staff took delivery of a new mobile eDNA water filtering lab in the fall of 2012. The mobile lab makes filtering of water samples for eDNA more efficient. During the months of May, June and July of 2013, Alpena FWCO staff used the new mobile lab to filter water samples for early detection of invasive species from the Lake Huron-Lake Erie corridor, Lake Michigan, Lake Superior and the St. Marys River.

Water filtering for eDNA is logistically complicated to coordinate because of different sampling sites and the need for sterile filtering locations, deionized water and sterile equipment. With the new mobile lab all the equipment can be brought directly to the water sampling sites, saving hours of moving equipment and supplies. The mobile lab is a sterile self-contained unit that includes all the equipment necessary for filtering water samples. One issue is the need for large amounts of deionized water. Before use of the mobile eDNA lab, deionized water, used as a control during the filtering process, had to be acquired from cooperating institutions while in the field or purchased in large quantities beforehand. The new mobile lab contains a deionized water system. Now deionized water is only the turn of a faucet handle away.

As the U.S. Fish and Wildlife Service strives to protect the Great Lakes from new invasive species and stem the spread of current invasive species, the new mobile eDNA water filtering lab is an excellent, sterile, fully functional lab on wheels.

The new mobile eDNA water filtering lab deployed at the Sandusky River, Ohio. Photo credit: USFWS.

Tim Strakosh (Green Bay FWCO) filters a water sample taken from the Muskegon River, Michigan. Photo credit: USFWS.

Motorboat Operator Certification Course M/V Spencer F. Baird Safety Module Held in Cheboygan, Michigan

By Adam Kowalski

Motorboat Operator Certification Course (MOCC) instructors Adam Kowalski (Alpena FWCO), Dave Wedan, (LaCross FWCO), Scott Koproski (Alpena FWCO), Dave Bohn (M/V Baird), Rob Dickson (M/V Baird), Keith Duffton (M/V Baird), and Keith Colborn (M/V Baird) put on a three day M/V Spencer F. Baird Safety Module in Cheboygan, MI from July 23 to 25, 2013. The M/V Baird Module is designed to provide safety information to all Fish and Wildlife Service (FWS) employees who will be working on the Spencer F. Baird.

The following is a list of topics covered during the course: vessel orientation, life raft deployment, in-water survival, person overboard techniques, where to find waves and weather information, required and recommended equipment aboard the M/V Baird, how to use vessel communications, emergency procedures, anchor/fog watch, cargo handling, docking, undocking, line handling procedures, emergency egress, fire suppression, and gear setting concerns.

There was a diverse student body with two people from Iron River NFH, one from Pendills Creek NFH, two from Green Bay FWCO, and one from Alpena FWCO. Overall this course was a success, and all 6 students successfully completed the training. Students reported that they learned a great deal and felt that this course gave them the information they need in case of an emergency. Students left feeling confident they could deploy a life raft and make the proper life-saving decisions for themselves and everyone on board.

Students practice egress routs with blinders on during a Spencer F. Baird safety module held in Cheboygan, Michigan. Photo credit: Robert Dickson, USFWS.

Great Lakes Fish and Wildlife Conservation Offices Team Up to Complete Forage Survey

By Stephen Lenart

Biologist Stephen Lenart from the Alpena Fish and Wildlife Conservation Office (FWCO) and the crew of the vessel Spencer F. Baird (M/V Baird) partnered with the Green Bay Fish and Wildlife Conservation Office to conduct an acoustic forage (prey fish) survey on Lake Michigan during August 2013, marking the third year of a scientific partnership with the United States Geological Service and the Michigan Department of Natural Resources. The objective of the survey is to provide information to managers and researchers regarding the status of key prey fish stocks, including exotics such as alewife and rainbow smelt, and native species such as bloater “chubs”. Lenart acted as lead biologist on the M/V Baird during the initial part of the survey, working with Green Bay FWCO and M/V Baird staff to complete 3 acoustic transects in northern Lake Michigan. Green Bay FWCO biologist Dale Hansen replaced Lenart as lead biologist during the latter part of the survey, completing the remaining transects allocated to the M/V Baird. The Alpena and Green Bay FWCOs have worked jointly for the past few years to increase the Service’s role in such coordinated assessment activities on Lakes Michigan and Huron, and the acoustic survey is one of many examples where the Great Lakes FWCOs have pooled resources and expertise in order to meet the needs of the scientific and management communities.

Hide and Go Seek, The Lake Sturgeon Edition

By Margaret Hutton

For nearly twenty years, organizations have been studying lake sturgeon in the Huron-Erie Corridor. Within the Huron-Erie Corridor there are thought to be three main spawning populations; one in the Detroit River, one in lower St. Clair River, and the last in southern Lake Huron near Port Huron, Michigan. While we understand that lake sturgeon are utilizing these locations within the corridor, little is known about where lake sturgeon travel before and after they spawn.

Lake sturgeon are potamodromous species, meaning for a majority of their life they live in the larger lakes, but travel up streams and rivers to locations with rocky habitat to spawn. Lake sturgeon do not spawn on an annual basis. Male lake sturgeon will only spawn every two to four years, while female lake sturgeon will wait four to seven years between spawning events. Within this time frame, little is known about the lake sturgeon's life history. Previous tagging efforts, using external tags and Passive Integration Tags (PIT), have shown that lake sturgeon can travel great distances. Lake sturgeon caught and tagged in the corridor have been recorded in areas as far as eastern Lake Erie and Green Bay, Wisconsin.

A new project funded by the Great Lakes Fishery Trust titled, "Lake sturgeon meta-population structure: migration pathways, spawning fidelity, and survival in a complex river-lake ecosystem" is about to answer some of the questions regarding fish movement in the Huron-Erie Corridor. U.S. Fish and Wildlife Service fish biologists from the Alpena Fish and Wildlife Conservation Office – Waterford Substation have partnered with the U.S. Geological Survey, Great Lakes Fishery Commission, Michigan Department of Natural Resources, and Ontario Ministry of Natural Resources in order to tag sexually mature, adult lake sturgeon in the corridor with acoustic transmitters.

The new transmitters will allow biologist to collect more continuous data compared to the external and PIT tags. With these transmitters, the fish does not have to be recaptured for the scientists to receive information. To date, 160 adult lake sturgeon have been implanted with transmitters by project partners. Lake sturgeon movements are currently being

Supervisory fish biologist Darryl Hondorp with the U.S. Geological Survey Great Lakes Science Center implanting an acoustic transmitter into an adult lake sturgeon captured from the Detroit River. Photo credit: USFWS.

Fish biologist, James Boase, inserting a transmitter into an adult lake sturgeon. The transmitter will send signals to acoustic receivers throughout lakes Huron and Erie for the next ten years. Photo credit: USFWS.

monitored using an acoustic telemetry array, with 77 receivers deployed within or in close proximity to the corridor. The lake sturgeon captured will still be tagged with external Floy and Monel tags for recreational anglers to report information on length and location by calling the telephone number on the tag with the corresponding lake sturgeon fish number, also located on the tag.

Preliminary movement results are consistent with previous theories that three spawning populations exist, however more data is needed to fully assess movement patterns of adults within this system. The results of this study will provide insight regarding potential spawning locations, seasonal movement patterns, and survival of this threatened fish species.

Alpena Releases the Kraken!

By Eric Stadig

U.S. Fish and Wildlife Service biologists at the Alpena Fish and Wildlife Conservation Office, Waterford Substation, rejoiced in the launch of a new vessel to their fleet, the R/V Kraken. This dual purpose, 21 foot, customized Oquawka boat, will be primarily used in the newly implemented Aquatic Invasive Species (AIS) monitoring program within the Great Lakes. It will also be used with lake sturgeon monitoring and habitat restoration projects in the St. Clair-Detroit River System.

The etymology of the kraken stems from legendary Nordic tales of the giant squid. Mythological tales paint the kraken as a monster of gargantuan size with frightening attributes terrorizing ships. Recent research discoveries portray the kraken as having profound intelligence, immense size, and a ferocious predatory nature. Thus, such a description is fitting for a vessel looking to tasked with hunting invasive species.

The R/V Kraken has already garnered public attention. The general public has been incredibly receptive to the new vessel. They have stopped to ask questions regarding the vessel, the work it is used for and to inform the fish biologists on how unique the name is. This great public interest is possibly linked to the fascination of old folktales of giant kraken, recent footage on the Discovery Channel, highlights of the kraken from recent movies (Pirates of the Caribbean, Clash of the Titans, etc.), or great novels like Twenty Thousand Leagues Under the Sea. In any case, Alpena FWCO is thrilled with the public's interest towards the new vessel and exhilarated to be a part of something so special. It gives crews an opportunity to interact with the community and explain the new AIS monitoring program, invasive species, or aquatic ecosystems within the Great Lakes.

Alpena FWCO's R/V Kraken has garnered public attention across the region. Photo credit: USFWS.

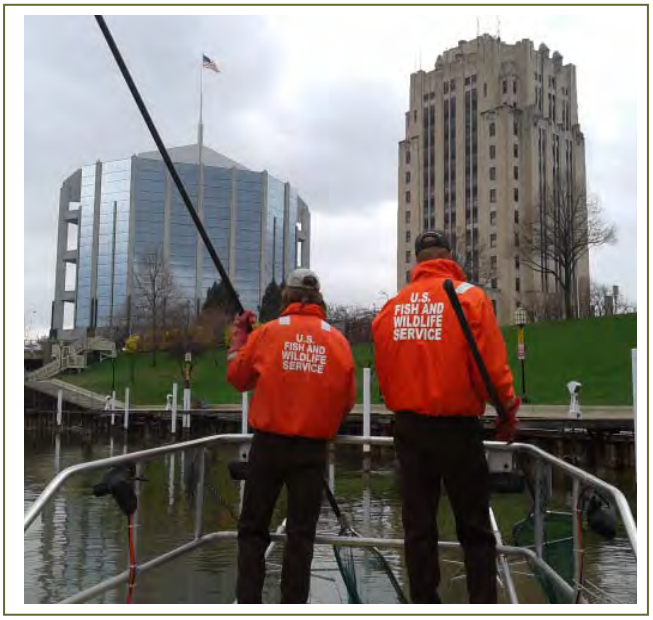
This dual purpose, 21-foot, customized Oquawka boat will be primarily used in the newly implemented Aquatic Invasive Species (AIS) monitoring program within the Great Lakes. Photo credit: USFWS.

The Kraken Is Real: Scientist Films First Footage Of A Giant Squid: http://www.npr.org/2013/01/13/169274472/the-kraken-is-real-scientist-films-first-footage-of-a-giant-squid

Alpena FWCO Assists Ecological Services with Contaminant Studies in Southeast Michigan

By Justin Chiotti

For the past four years, fish biologists from the Alpena Fish and Wildlife Conservation Office - Waterford Substation have assisted the East Lansing Ecological Services Office when conducting fish contaminant studies in Southeast Michigan. Since 2010, the USFWS Environmental Contaminants Program has led a collaborative effort with the U.S. Geological Survey (USGS) to evaluate contaminants of emerging concern (CECs) (e.g., personal care products, pharmaceuticals, plasticizers, flame retardants, new use pesticides and hormones) with respect to source, routes of exposure, and impacts to Trust Resources within the Great Lakes basin. A primary component of this work is to determine if CECs analyzed in water and sediment correlate with reproductive, morphological and behavioral effects in fish.



Fish biologists Margaret Hutton and Andrew Briggs netting fish for the contaminant study on the Clinton River near Mt. Clemens, Michigan. Photo credit: USFWS.

Fish, water and sediment were collected from the Detroit River in 2010, 2011, and 2012, and the River Raisin in 2012. This year, and with the addition of St. Cloud State University to the effort, samples were collected from the Clinton River Watershed. Fyke netting and boat electrofishing was conducted during May and June targeting bluegill, walleye, and white sucker. Upon collection, fish were dissected to assess a suite of bioindicators including: genotoxic/blood cell results, molecular analyses, histopathology/ reproductive endpoints, and in vitro screening assays.

Environmental contaminants specialist Jeremy Moore collecting blood from a white sucker collected in the Clinton River Watershed. Photo credit: USFWS.

The Detroit, Raisin and Clinton Rivers are U.S. Areas of Concern (AOCs) under the bi-national Great Lakes Water Quality Agreement (GLWQA). Each of these areas contain Beneficial Use Impairments (BUIs) such as degradation of fish and wildlife populations potentially resulting from excessive contaminant levels. While CECs are not specific to AOCs, pending results from this study, specific CECs may be considered Chemicals of Mutual Concern under Annex 3 of the revised GLWQA.

For more information on the work being conducted in Southeast Michigan and Huron Erie Corridor, please visit the Huron Erie Corridor Initiative webpage: http://huron-erie.org/.

Environmental DNA (eDNA): Non-Traditional Sampling of Great Lakes Tributaries

By Eric Stadig

Crews from multiple Alpena Fish and Wildlife Conservation Offices (FWCO)-Alpena and Waterford Substation, as well as crew members from Green Bay FWCO teamed up again to perform a large scale Asian carps (silver and bighead) eDNA sampling event. The collaboration of field crews, and an eDNA filtering crew have succeeded in completing multiple eDNA sampling trips in Lake Erie as well those in the St. Clair-Detroit River System tributaries (Raisin, Swan Crew, Rouge, Belle, and Black rivers), and also in Lake Michigan tributaries (Grand, and Muskegon rivers). The most recent sampling event included the Maumee and the Sandusky rivers.

The eDNA field sampling was executed spatially in each river by a downstream to upstream manner. Samples were collected in targeted areas where accumulation of potential Asian Carps eDNA is most likely to occur (backwaters, eddies, barge slips, island side channels, pooled areas, confluences, etc). Each 2-L sample bottle was filled by skimming the surface water and collecting any floating material/surface film that may have traces of genetic material left behind in the water (eg., scales, cells, and feces).

Physical environmental conditions (wind direction, water temperature, depth, etc.) were noted at each sample site and the sample location was recorded using GPS. Safeguarding against DNA cross-contamination was an important step in this overall process, latex gloves were changed after each sample was collected. Sample blanks prefilled with deionized water, were tested to assure QA/QC including prevention of contamination in the transport vessels and/or during the sampling process. Disinfection of boats occurred by applying a bleach solution to both boat and trailer once the vessel was out of the water ensuring no cross-contamination from moving one water body to another. Samples were filtered in the new Alpena FWCO eDNA trailer on site. Once the process was completed, samples were packed and shipped on dry ice to the USFWS Whitney Genetics Lab for subsequent analysis.

Through the ease of the using the eDNA trailer, and the hard work and commitment of the crews involved, everyone should be excited about the early detection efforts taking place via collaborative efforts among the USFWS offices and partners.

Alpena FWCO's new mobile eDNA trailer has allowed crews to filter collected samples more efficiently across the region. Photo credit: USFWS.

Alpena FWCO fish biologist Margaret Hutton scouts potential eDNA accumulation areas on the River Rouge. Photo credit: USFWS.

Alpena FWCO fish biologist Eric Stadig prepares to collect an eDNA sample on the Muskegon River. Photo credit: USFWS.

3rd Graders Enjoy a Field Trip to Paxton Quarry and Learn How to Fish

By Andrea Ania

On a beautiful sunny day in late May, Wilson School 3rd graders (Alpena Public Schools) were bused to Paxton Quarry for a full day field trip. Paxton Quarry is the site of a former shale mine owned by LaFarge Corporation (Alpena, MI). The quarry mine is now full of water and stocked with fish, which the company uses for educational and recreational purposes. Bass, rainbow trout and walleye are some of the fish species stocked in the quarry waters. During this field trip students were taught how to use a fishing pole and given an opportunity to catch fish. They also learned about aquatic insects and local plants and animals that live in the area.

Students sorted through aquatic insects at one of the stations. Photo credit: USFWS.

The Friends of the Lake Huron Watershed (FOLHW), a newly formed Friends Group with the Alpena Fish and Wildlife Conservation Office (FWCO), spearheaded the event. Members Carl Anderson, Tom Gilifillan, Gerry Kraft, Roger Witherbee, and Ron Young educated and instructed students during the field trip along with Alpena FWCO staff. LaFarge Corporation provided access and use of the site, day use facilities, and fishing opportunities; Bucks Bait and Tackle donated the bait.

The mission of the FOLHW is to work with the U.S. Fish and Wildlife Service and other organizations and educators to conserve, protect and enhance fish, wildlife, plants, and their habitats for the continuing benefit of the Lake Huron Watershed. They are a valuable asset to the Alpena FWCO and a vital tool in helping educate people about the Service's work in the area.

For more information about the FOLHW, visit their Facebook Page located online at: http://www.facebook.com/pages/Friends-of-the-Lake-Huron-Watershed/167083076759262.

Students learned how to use a fishing pole and casting for fish. Photo credit: Ron Young, Friends of the Lake Huron Watershed.

Students put their newly learned fishing skills to work. Photo credit: USFWS.

Observing Fisheries Biologists in Their Natural Environment

By Margaret Hutton

The summer is a great time for high school students to rest and rejuvenate after a long nine months at school. Six students from around the Metro Detroit area from different schools and varying backgrounds, decided to take an active role in managing the resources at their fingertips. The Detroit River International Wildlife Refuge annually hires students as part of the Youth Conservation Corps (YCC) program, a summer employment and education program for young men and women from all segments of society, who work, learn and earn together by doing projects on public lands. Students work on a variety of conservation management projects on the Refuge, including wildlife habitat improvement projects, trail work, and environmental education. This opportunity gives them a personal, hands on, view of what environmental careers entail and how important it is to manage the resources in your own backyard. But for a day, they were able to gain an understanding of other environmental careers available around the Great Lakes.

On July 2nd, the YCC climbed aboard the R/V Nme' and the R/V Kraken to job shadow a typical day as a fisheries biologist in the field. U.S. Fish and Wildlife Service fish biologists from the Alpena Fish and Wildlife Conservation Office - Waterford Substation, James Boase, Justin Chiotti, Andrew Briggs, and Margaret Hutton set traditional sampling gear in the Detroit River that are used during the field season: setlines, gill nets, and minnow traps. After a little prompting, the students jumped right in pulling the gear and assessing the data collected. Their hard work was fruitful in catching a plethora of different species. Two lake sturgeon were captured, along with channel catfish, freshwater drum, a few shiner species, and the State of Michigan endangered northern madtom, a sight rarely seen by the public.

Upon talking with the students, the biologists were also able to give them a synopsis of the other projects that are occurring in the Huron-Erie Corridor and in the Great Lakes. The students were also curious about what fisheries biologist do in the off season when sampling on the rivers and lakes no longer occurs. Because the students are beginning to make decisions about their future careers and next steps after high school, each

High school students from around the Metro Detroit area along with Service fisheries biologists, graduate students, and program managers from local universities proudly displayed a lake sturgeon caught in the Detroit River. Photo credit: USFWS.

Biologist gave highlights that led them on their path to working with the Service.

On this day, a local program manager from the University of Michigan-Dearborn, Dorothy McLeer, along with a few graduate students accompanied the Service crew. This gave the students the opportunity to inquire about the role the university plays within projects throughout the Great Lakes.

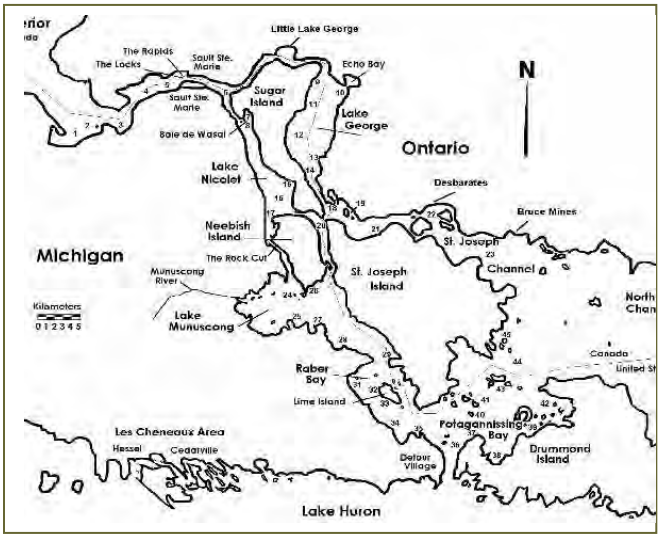
For students on the verge of making tough decisions about their futures and careers, opportunities such as this are important. Job shadowing is an invaluable way for students to gain a better appreciation for what scientists around the Great Lakes are working towards but, also, how different organizations come together to collaborate for the advancement of the resource.

Alpena FWCO Assists St. Marys River Fishery Task Group Conduct a Fish Community Assessment of the St. Marys River

By Adam Kowalski

During August 2013, the St, Mary's River Fishery Task Group (SMRFTG) conducted a coordinated fish community survey of the St, Mary's River. The Michigan Department of Natural Resources, Ontario Ministry of Natural Resources, Department of Fisheries and Oceans Canada, Chippewa Ottawa Resource Authority, Bay Mills Indian Community, and U.S. Fish and Wildlife Service (Alpena FWCO) surveyed 45 sites from the upper River to Potagannissing Bay with 1000' variable-mesh gillnets. Ageing structures, length, weight, diet, sex, maturity, and lamprey wounding were recorded for all target species. Diversity and relative abundance indices will be calculated for all species collected. Alpena FWCO conducted its part of the survey during the week of August 26, 2013. Alpena FWCO staff surveyed 7 sites in Lake Nicolet, which is downstream of the main shipping locks.

The Alpena FWCO crew lifted a gill net on Lake Nicolet as a freighter passes by. Photo credit: USFWS.



Netting locations for the 2013 fish community survey. Image credit: Michigan DNR.

An Ancient Creature From the Deep Takes Center Stage

By Margaret Hutton

Almost 30,000 people live in Port Huron, Michigan and within a span of about seven years, that number of lake sturgeon will migrate to the Blue Water Bridge to spawn. Even with so many lake sturgeon calling this area home for part of their life, many people from Port Huron had never heard of or even seen a lake sturgeon. That all changed on June 2nd, 2013 when the first Sturgeon Festival occurred highlighting these gentle giants for the general public to come and view.

On a breezy Sunday afternoon, 1,200 people from Port Huron and other areas of Metro Detroit gathered to learn about lake sturgeon in Lake Huron and the St. Clair River. Many different organizations came together

with the U.S. Fish and Wildlife Service (Service) to lend a hand as sponsors and help highlight the sturgeon. General information about lake sturgeon and why they are important to this system was available to the patrons who joined the festivities and presentations were given highlighting the work the Service and partners are doing to restore lake sturgeon populations in this area.

With so many wonderful agencies lending a hand, the general public was able to experience lake sturgeon at different stages in their lives. The St. Clair/Detroit River Sturgeon for Tomorrow group allowed the public the ability to get up close to two juvenile lake sturgeon, a sight rarely seen by even those who work in fisheries. Another highlight was the sold out sturgeon cruise on the Huron Lady II, where live video of sturgeon in their natural environment was taken by divers from Gregory AD under the blue water bridge.

The final stars made their debut when fisheries biologists James Boase, Eric Stadig, and Margaret Hutton from the Alpena Fish and Wildlife Conservation Office - Waterford Substation and Mike Thomas from the Michigan Department of Natural Resources, set setlines out in hopes of allowing the public to see firsthand what a lake sturgeon looks like. Their labor was fruitful with two lake sturgeon, one reaching around three feet and the other reaching just over five feet in length.

Fisheries biologists Margaret Hutton and Eric Stadig helped fellow fish enthusiast Drew display one of the lake sturgeon at the Lake Sturgeon Festival in Port Huron. Photo credit: USFWS.

People seemed very excited and thrilled throughout the day by the incredible creature highlighted. Many people were inspired by the creatures to take a more active role in what was occurring in their own backyard. With new knowledge of what occurs in the Great Lakes waterways, hopefully the general public will find that they also can take steps to help their neighbors in the deep.