

Lake Michigan Fisheries Forum
Weyers-Hilliard Branch of the Brown County Library
2680 Riverview Drive, Green Bay, 54313

April 8, 2017

NOTES

10:00-10:10 Arrive (**library opens at 10am**)

10:10-10:15 Welcome and introductions

- Roll call of Lake Michigan Fisheries Forum representatives.
- Introductions from other attendees

10:15-10:45 Green Bay update - Tammie Paoli (WI DNR)

- Species responsibilities (yellow perch, brown trout, and northern pike)
- Yellow Perch.
 - Monitoring surveys include spring fyke netting inside of Little Tail Point (every other year) to monitor spawning adults, summer shoreline seining at 14 sites to monitor YOY nearshore, summer trawling surveys at 78 sites to monitor YOY in shallow and deep sites, commercial dockside sampling to get length, sex, weight, and age data.
 - High populations in 80-90s, but not great year classes back then.
 - Recent years, good year classes but population holding around 3 million. Steady population.
- Brown trout.
 - Reduced harvest in WI and in waters of GB since 2000, has stayed down. Similar trends in both Wisconsin and Michigan portions of Green Bay.
 - Information from WI creel surveys and MI creel survey show the same declining trends over time.
 - WI began offshore stocking yearling brown trout using RV Coregonus in 2012 to avoid stocking on top of walleye spawning runs.
 - Total harvest has yet to respond as we hope, but harvest and harvest rates were improved in 2015 and 2016 so there are promising signs.
- Shift from zebra mussels to all quagga mussels in Green Bay happened after Lake Michigan. Larger changes in GB food web likely to happen and a factor in balance of food web.

10:45-11:15 Green Bay update - Steve Hogler (WI DNR)

- Species responsibilities (walleye, musky)
- Walleye.
 - Walleye history in Bay and stocking.

- Stocked 73 million fry and 3.1 million fingerling from 1973-1984 across Green Bay
 - Stocked 1 million fry and 1.5 million fingerling in Sturgeon Bay 1994-2012
 - Not currently stocked in Wisconsin part of GB but Michigan stocks in Bay De Noc area
 - Construction of spawning reefs to improve reproduction
 - Assessment methods (Spring and Fall electroshocking and creel survey)
 - Spring tributary Assessment
 - Spawning adults ranging in length from 14 to 32" in length
 - young aged population dominated by 5 and 6 year old walleye
 - excellent growth rates
 - Fall Surveys
 - All ages but primarily young of year and juvenile walleye
 - Good year classes for the last 13 years or so. Great year class 1993, 2003, 2013.
 - Catch and harvest have been on the rise the last decade.
- Muskellunge
 - History of stocking. Plan developed because lots of prey in GB but not much predators.
 - Stocking
 - Two sources Fox River and St Clair River
 - Fox River raised at Besadny Facility stocked in fall about 4000 fingerling per year since 2010.
 - St Clair River, raised at Wild Rose, stocked as yearling and since 2015, 5000 stocked into bay and all brood stock lakes stocked at 1 to 3 per acre each year
 - GB has reputation for large fish.
 - Little harvest, especially after increase of size limit to 54".
 - Increasing effort shows the popularity of fishery
 - Future work
 - Continue to import fish from Michigan until brood lakes produce eggs to increase genetic diversity
 - Quantify and build habitat (woody debris)
 - Conduct movement study on Green Bay
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11:15-12:00 Green Bay research - Dan Isermann (USGS & UWSP)

- Diet study: Walleye, perch, and whitefish
 - What is eating what?
- Different species with acoustic tag net.
 - Tagging whitefish, walleye, musky.
 - Look at movement in GB and outside of GB.
- Where do fish go?
 - Walleye fishery, what is source.
 - Follow whitefish.
- Musky.

- Where is spawning.
- What is bottleneck.
 - Egg, larval?

12:00-12:30 Lunch

12:30-1:00 Green Bay research – Chris Houghton (UWGB)

- Stable isotope info.
 - Walleye eating alewives based on diet and stable isotope.
 - Comp nearshore and wetland. Perch and walleye.
- Cat island restoration could create duck Creek Delta, which used to be there.
 - Habitat mapping of area.
 - Can still see channel from early delta.
- Pike spawning research.
 - Wetlands can produce many larval pike.
 - Looking at what makes good habitat.
- Small tributary usage by lots of species.
 - Wide range of species using the tributaries, including some sport species.
- Whitefish production from GB Rivers.
 - Documenting larva from known river spawning areas.
- Use otolith microchemistry to identify spawning locations, River v. Bay/lake
 - Should be able to track later in life.
- Sturgeon Dynamics.
 - Where do larval go, young of year. Identify habitat use of YOY sturgeon.

1:00-1:30 Update Lake Michigan Commercial Fishing Board (Charlie Henriksen)

- More outreach from Board
- Lake trout harvest interest?
 - Sport, commercial harvest split?
 - Very preliminary, so no details or specifics
- Study proposal to do research to support management
 - Tag whitefish on spawning grounds to track movement.
 - Bycatch of commercial harvest in GB.
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1:30-2:30 Terms of reference discussion

- Discussed potential changes in terms.
- Move from an information Forum to more recommendation type Forum
- General agreement in changes that more formally recognize forum members through seating and rules for discussions.
- Major changes to the Terms of reference include:
 - Recommendation type Forum
 - More strict rules on meeting attendance

- Lays out procedural rules for recommendations including consensus, consulting recommendations or majority vote
- Public comments will be incorporated into each Forum meeting based on the decision of the Forum members
- Brad will prepare a draft TOR based on the recommendations from Forum members. Titus will circulate the draft TOR and allow two weeks for members to vote yes or no on the new TOR.

2:45-3:45 Terms of reference discussion (if needed)

3:45 Wrap up

Shared a survey from a project funded by Michigan Sea Grant on the restoration of cisco (lake herring) in Lake Michigan. Project description attached.

Attendance:

Forum members

Mark Maricque, Dale Maas, John Janssen, Ted Eggebraaten, Charlie Henriskon, Lee Haasch, Jerry Fetterer, Chris Strege, Bob Wincek, Russ Kleinert, Jeff Treu, Keith Waloway, Richard Jones, Dennis Hickey

Guests

Dan Isermann, Chris Houghton, Chuck Bronte, Pat Hermes, Todd Stuth, Mike LeClair, Andre Jacque, Chuck Weier

Wisconsin DNR

Brad Eggold, Mike Donofrio, Tom Meronek, Tammie Paoli, Steve Hogler, Jennifer Sereno

Wisconsin Sea Grant

Titus Seilheimer

Cisco Restoration in Lake Michigan



PHOTOS: JASON SMITH, LITTLE TRAVERSE BAY BANDS OF ODAWA INDIANS

CORE QUESTION:

How can cisco restoration efforts be tailored to fit the needs of Lake Michigan stakeholder groups?

WHAT IS INTEGRATED ASSESSMENT?

Rather than running additional experiments, an integrated assessment (IA) research team summarizes what is known and offers an assessment of how the science could be interpreted and used. The team focuses on a complex environmental issue and then conducts a comprehensive analysis of natural and social scientific data and information.

The IA process is different from traditional research because researchers work closely with stakeholders to examine an issue from many perspectives, identify challenges, and evaluate feasible solutions. The aim is to create results that are current, trusted, accessible, and useful.

OVERVIEW

Cisco once was the dominant native prey fish in the Great Lakes food webs. Populations plummeted between 1920 and 1970 due to overfishing, habitat loss, and interactions with invasive species. Today, habitat conditions are beginning to improve and key invasive species populations have declined. Fishery managers are now discussing what it might look like to restore cisco populations in Lake Michigan.

Though many stakeholder groups are interested in restoring cisco, they disagree on the best approach. Some advocate helping existing remnant populations recover, while others recommend stocking Lake Michigan with young cisco from elsewhere in the Great Lakes region. Still others note that ecological conditions in the lake have changed drastically and question whether cisco would still be viable as a self-sustaining population.

PROJECT DESCRIPTION

The research team will use existing data and guided discussions to help stakeholders create a path for cisco restoration in Lake Michigan.

Drawing from existing publications, reports, and databases, the team will pool information about food web dynamics, rearing methods, fishery regulations, and other relevant topics. They will present this information at regular meetings held by charter fishing associations, regional fishery regulators, and Lake Michigan ecosystem managers.

The team also will distribute an electronic survey to key stakeholders involved in, or likely affected by, future cisco management decisions. The survey will allow stakeholders to convey and explain their preferred options for restoration actions.

The compiled research material and survey responses will provide a comprehensive launching point for a pair of stakeholder workshops, which will be the centerpiece of the project. The workshops will introduce participants to the integrated assessment process, deliver compiled background information, identify remaining data gaps, and review restoration strategies and lessons from other fisheries. Then, the research team will facilitate interactive discussions aimed at selecting preferred restoration options and clarifying major considerations embedded in each option. By the end of the workshop, the participants will either:

- Agree on a recommended course of action, or
- Identify roots of disagreement that will need to be addressed before recommendations can be made.



Cisco (Lake herring), *Coregonus artedii*
ILLUSTRATION: EMILY DAMSTRA

EXPECTED OUTCOMES

Through the workshops, the project team will provide a framework for helping managers and the fishing community advance a preferred option for Lake Michigan cisco restoration. Their work will be synthesized into a final report, which will summarize existing research, survey results, notes from the workshops, and a recommended path for future restoration efforts. The report also will include a decision tree, a chart that maps out all decision points and likely outcomes in a decision-making process.

Other deliverables will include fact sheets and informational tools, which will be made available through the Michigan Sea Grant website.

GET INVOLVED

Many groups have a stake in cisco restoration efforts, including federal, state, and local government agencies; non-profits and stewardship organizations; recreational, tribal, and commercial fishers; and academic researchers. An integral part of this project, stakeholder engagement will dictate which cisco restoration options are recommended to fishery managers. Through the online survey and follow-ups, stakeholders will provide vital input and feedback. The workshops will be almost entirely stakeholder-driven, with the project team providing information and moderating the discussion.

CONTACT

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