



Lake Huron Citizens Fishery Advisory Committee

Draft revised August 9, 2011

Established by the Michigan Department of Natural Resources to improve and maintain fishery resources of Lake Huron through better communication and partnership.

Lake Huron Citizens Fisheries Advisory Committee (LHCFAC) Meeting Doherty Hotel, Clare, MI Wednesday, June 22, 2011

Attendees: Ed Barr, Ron Beyer, Dave Borgeson, Dave Caroffino, Gary Decker, Jim DeClerck, Larry Desloover, Jim Dexter, Bud Donnelly, Linn Duling, Dennis Eade, Todd Grischke, Tom Hamilton, Ji He, Lindsey Henski, Rick Kretzschmar, Frank Krist, Jerry Lawrence, Bill Leichtman, Terry Lyons, Shirley Martin, Ken Merckel, Craig Milkowski, Jack Noble, Judy Ogden, Bill Olar, Ron Ramsey, Ed Retherford, Jeff Schaeffer, Brandon Schroeder, Julie Shafto, Dick Swan, Paul Wendler, Gary Whalen, Forrest Williams, Dennis White

10:00 a. m. Frank Krist called the meeting to order. Attendees introduced themselves.

The minutes from the April 6, 2011 meeting were acknowledged and approved as is.

Discussion of the future direction of Chinook stocking in Lake Huron and public meetings to be held on the issue this summer – Todd Grischke, MDNR:

A whitepaper and other information regarding Chinook stocking in Lake Huron is posted on the DNR website (link provided to Frank Krist). The whitepaper discusses the poor return of stocked Chinook salmon, and the need to modify current levels of stocked Chinook salmon in Lake Huron. This is a process that involves public comment, public meetings and MDNR Natural Resources Commission approval. An email link is provided online at the MDNR Website for comment. In addition, three public meetings have been scheduled on the issue.

- Aug. 8, 7-9 p.m. Ubyly Fox Hunters Club, 8780 S. Ubyly Road, Ubyly.
- Aug. 9, 7-9 p.m., Oscoda, Oscoda Township Meeting Room, 208 S. State St., Oscoda. Building is on corner of Dwight Street and US-23. Attendees should access parking lot behind building using Dwight Street. Door on shared building will indicate Alexander Business Machines.
- Aug 10, 7-9 p.m., Cheboygan, Cheboygan Sportsman's Club, 13516 Seffren Road, Cheboygan.

September 1, 2011 will be the end of the public comment period, allowing time to evaluate input and to prepare Fisheries Division final recommendation before the October 1 egg take.

Chinook harvest, north to south, has crashed. The northern portion of Lake Huron is still providing a limited fishery. In 2007, 2008 and 2009 the DNR stocked 1.45 million Chinook salmon. Harvest in 2010, showed only 1,068 salmon to be of hatchery origin.

Options presented to the Lake Huron Citizens Fishery Advisory Council for discussion:

- 1 - Status Quo - Maintain current locations and numbers.
- 2 - Stock only Nunns Creek and the Swan River at current levels (the Nunns Creek stocking is required by 2000 Great Lakes Consent Decree and the State is obligated to plant 250,000 fingerlings each year).
- 3 - Stock only Nunns Creek and the Swan with a reduction in numbers at the Swan.

- 4 - Stock only Nunns Creek, St. Ignace, Cheboygan and the Swan River (Stocking from the Swan River north).
- 5 - Reduce Chinook stocking by 50%, or some other percent reduction, at all locations.
- 6 – Lake Huron Citizens Fishery Advisory Committee suggestions.

There was much discussion and several points were made including: 1) Since few Chinook from hatchery origin that are stocked south of Alpena were surviving, reducing or eliminating stocking south of Swan Bay would allow limited resources to be directed toward other aspects of the Lake Huron fishery, 2) The Swan River stocking is an important Chinook salmon backup egg take location and produces a return fishery so stocking should continue, 3) the Nunns Creek stocking is mandated by the 2000 Great Lakes Decree and must continue, 4) the Cheboygan stocking is producing a return fishery and there is interest in continuing the plant.

Results of the participant digital input during the spring Lake Huron Sea Grant Workshops – Brandon Schroeder, Michigan Sea Grant:

A summary of the presentation feedback was previously provided by Frank Krist via email.

This year, four abbreviated evening workshops were conducted from 6:00 – 9:00 p.m. They were held in Cedarville, Ubly, Port Huron, and Oscoda with good participation at all locations. Brandon summarized the digital input received. In 2010, the most pursued species were walleye, steelhead, lake trout, and perch. The preferred species were walleye, perch, steelhead and Chinook. Attitudes at all four locations were consistent that stocking should be adjusted by either decreasing or ceasing Chinook plants.

A brief update on the progress of the brown trout stocking project with an emphasis on the criteria used to measure success and a discussion on obtaining as many heads as possible with coded wire tags for the Steelhead Pen Project – Jim Johnson, MDNR:

Brown Trout Study Criteria – A pilot study to determine if larger brown trout (11 to 13 inches) would survive better began with stockings in the fall of 2009 and 2010 with the last plant scheduled for the fall of 2011. The pilot study will continue to monitor the returns and the work will end in 2015. Only those fish that survive their first winter and are over 16 inches long will be counted in the project's creel results. The experiment will be considered successful if the return fishery harvests at least 5% of the brown trout stocked.

Brown Trout Harvest Summary from 2010 Creel Data – We are looking for catch data from the 2009 and 2010 fish. The estimated harvest results for all the ports creeled in 2010 were 840 brown trout. An analysis of a sample of the fish caught showed that 5.6% were Age 1 (the fish are Age 1 when stocked), 72.2% were Age 2 and 22.2% were Age 3. The vast majority of the fish harvested were Age 2 fish and averaged 16.9 inches in length and 2.5 pounds. These brown trout were much smaller than Age 2 fish stocked as fall yearlings from 2002 to 2005 which averaged 22.9 inches in length and 6.7 pounds.

Brown Trout Success Rate – Lakewide about 85,000 browns are stocked each year of the study and for 2010 the return rate for browns over 16 inches was 0.45% which is much below the target of 5%. Age 2 brown trout account for the majority of fish caught since few live beyond age 3. Previous studies showed that approximately 62% were harvested at Age 2, 35% were harvested at Age 3 and only 3% were harvested at Age 4.

Steelhead Pen Study Update – The steelhead pen study began this spring comparing steelhead stocked directly into Lake Huron with steelhead stocked in pens to allow the fish to become acclimated before release. The fall of 2011 will be the first year run of 14-16" steelhead and in order for the study to be successful the coded wire tags in the heads must be returned in large numbers. We need the snouts! Please encourage anglers to provide frozen heads to the MDNR! These fish are there to be harvested and studied.

Encourage catch and release anglers to harvest these steelhead and turn in the snouts. The steelhead in the study can be identified by an adipose fin clip. During 2012, the coded wire tagged (CWT) steelhead will be caught all over Lake Huron and we will need to come up with a way to collect these fish/snouts. Jim will have a collection kit created and will distribute this kit to creel clerks.

The status and progress of Atlantic salmon rearing in the DNR fish hatcheries – Gary Whalen, MDNR:

This marks the third year we have been evaluating Atlantic salmon at Platte River State Fish Hatchery. Things to consider; can another facility rear fall fingerlings to yearling size, can we complete Atlantic salmon rearing at production scale, can the Platte River Hatchery complete the entire process (from eggs to yearlings)? Keep in mind that Platte River Hatchery has disease issues. When disease shows up, the entire lot must be destroyed.

Atlantic Salmon Results to Date – In 2009, The Platte River Hatchery transferred 19,000 fall fingerlings from Lake Superior State University (LSSU) which resulted in 12,698 spring yearlings being raised and stocked successfully in April 2010 at the Whitney Drain. No fish health issues were seen. In October 2010 LSSU sent 20,048 small fingerlings raised in ambient water (113/kg) and 7,587 larger fingerlings raised in heated water (24/kg) to the Platte River Hatchery. All of the fish grew and were in good condition (saw some cold water disease and furunculosis). From these fish, 6,613 larger yearlings (13.5/kg) and 15,129 smaller yearlings (38/kg) were stocked on the same day and locations as the LSSU stocked fish. Both the LSSU and State fish were stocked at the same locations.

Fish Health Issues at the Platte River Hatchery – Brundage Creek and Brundage Spring are positive for Mcer (Whirling Disease) and a \$150,000 grant has been obtained with the goal of installing UV disinfection technology on the Brundage Spring this fall. In addition, if enough funds are left Brundage Spring will be dredged incrementally to reduce or eliminate the habitat of the parasite.

Atlantic Salmon 2011 Plans – 1) The Thompson State Fish Hatchery received 79,764 eggs from LSSU on February 2, 2011 with currently about 75,000 surviving. The surviving fingerlings will be transferred to the Platte River Hatchery in early October. 2) There are plans to transfer from LSSU approximately 8,000 to 10,000 large fingerlings and 17,000 small fingerlings from LSSU to the Platte River Hatchery in early October 2011. 3) The production goal for 2011 from the above two experiments is to produce 60,000 to 75,000 yearlings in small outdoor raceways to be stocked in the St. Marys River in June 2012.

Atlantic Salmon Egg to Yearling Analysis – If UV is successfully installed then the Platte River Hatchery could obtain green eggs from LSSU in October. A full production cycle test could be conducted and any resulting yearlings would be stocked in 2013.

Key Atlantic Salmon Rearing Issues – 1) Obtaining sufficient eggs for full production scale; at least 125 adult females and 125 adult males are needed to produce 375,000 eggs with about 40% survival to yearling. To maintain broodstock and produce 30,000 yearlings 75,000 eggs are needed. To produce 120,000 yearlings 300,000 eggs and 4 large raceways are required. This is twice the hatchery space needed to raise brown trout or steelhead yearlings. 2) The waste effluent requirements of full Atlantic salmon production must be determined but currently the effects appear to be minimal. 3) Determine if installing UV disinfection at the Platte River Hatchery resolves disease issues. 4) A backup brood stock needs to be developed.

Atlantic Salmon Rearing Options – 1) Platte River State Fish Hatchery has small outdoor raceways with a potential of 60,000 to 75,000 yearlings. There is a potential to use the large indoor raceways. 2) Thompson State Fish Hatchery has a successful history of rearing Atlantic salmon. However, we would need to reduce

another species to make room for Atlantics at a 2:1 ratio. The indoor raceways are too small for yearling production. 3) Wolf Lake State Fish Hatchery has a poor history rearing Atlantics and we again would need to reduce another species to make room at a 2:1 ration. 5) Oden and Marquette State Fish Hatcheries are expensive captive brood stock stations and transferring wild eggs to these facilities would pose severe bio-security issues. Harrietta State Fish Hatchery is a Great Lakes egg source disease free facility; again presenting bio security issues.

Feasibility of production level rearing of Cisco (Lake Herring) at Wolf Lake State Fish Hatchery – Gary Whelan:

Key areas of evaluation include broodstock collection, egg collection, incubation, rearing densities, marking, and spring fingerling size during stocking. There is still much experimentation needed to achieve production levels. Progress has been made in all areas, but we need a LOT more knowledge!

Cisco Broodstock Collection – To obtain a production level of 750,000 to 1,000,000 eggs, 100 males and 100 females are required. The fish must be alive when the eggs are obtained. The eggs are collected from adults harvested in the St Marys River and the ripe fish are available during a very short time during the second to the third week of November. Weather at that time of year is a major challenge. The number of broodstock available for harvest appears to be very limited for production scale.

Cisco Egg Collection –During 2010 approximately 1,000,000 eggs were collected using two large trap nets and four 300 foot gill nets. The advantage of using trap nets is the fish can be maintained alive until ripe but the nets are often difficult to set with smaller boats suitable for the shallower waters of the River. The gill nets are easier to handle but because live fish are needed, high fish mortalities limit the net's suitability. It has been determined that an on-site spawning trailer is suitable for egg collection.

Cisco Incubation and Early Rearing – Initial work showed good eye ups at 2.8 degrees C (37 degrees F) and mortalities at 10 degrees C (50 degrees F). Unfortunately, 2.8 degrees is too cold for the fish to grow well and during 2010 the fish were tested at 7.5 degrees C since others had success with good growth and survival at 7.8 C. The eggs harvested in 2010 were transferred to the Thompson Fish Hatchery where 43 to 46% were fertilized. Eye up occurred by November 28 and the fish were transferred to Wolf Lake State Hatchery. On December 13 and 14 2010 there was a chiller failure resulting in a major die off.

Cisco Rearing and Stocking – The surviving fish were transferred to two foot circular tanks held at 7.6 C degrees on February 20, 2011. An inventory on March 24 indicated there were 11,190 fish (28 cm, 5356/kg) remaining. On June 22, 2011 9,500 fingerlings were stocked in Thunder Bay. Their length ranged from 75 to 90 mm (3 to 3.5 inches). Tank densities for cisco likely need to be 40,000 compared to 50,000 spring fingerlings for Chinook salmon. More testing is needed.

Cisco Marking, Rearing Size and Production – Oxytetracycline (OTC) marking was successful during 2007 and 2008. The 9,500 fingerlings produced in 2011 were marked with OTC and lab tests showed a 100% marking rate. The following are the number of cisco stocked during the study: July 24, 2008 6,240 averaged 99 mm in length; July 14, 2009 40,012 averaged 85 mm in length and June 22, 2011 9,500 averaged 75 to 90 mm in length. These fish are advanced spring fingerlings and the best size for stocking is not known so more information is required.

Fisheries Management and Law Enforcement updates:

Jim Dexter, Acting MDNR Fisheries Division Chief – The Governor signed next year's budget. We are still down from where we were a few years ago. We are interviewing a few positions, the Basin

Coordinators for Lake Huron and Erie will be posted at the end of this week. We plan to have somebody on by mid to late August for both positions.

Craig Milkowski, MDNR Commercial Fish Specialist, – The Ghost Ship out of Oscoda appears to be trafficking drugs. A small plane flies low, drops a package, and then a boat circles out and nets the package. There is a drone out looking for activity and is now circling Oscoda/Tawas area.

Dave Borgeson, Northern Lake Huron Management Unit Supervisor – VHS knowledge has expanded so our walleye production has expanded. Harvest is going on right now with high priority lakes being stocked. We will be conducting a Burt Lake sturgeon population estimate survey in July.

A research project examining the ecological role of river mouths along the Great Lakes – Dr. Jeff Schaeffer, United States Geological Survey Great Lakes Science Center:

Note: The Lake Huron Diet Study continues running and is currently in its third year. Previous assistants are back, and things are running very well. Stomachs are coming in at about the same rate as previous years.

Ecological role of river mouths along the Great Lakes – Near shore river mouth ecosystems have experienced food web changes. While near shore trawls, bottom trawls and acoustics are all conducted, it is the surf zone we need to know more about. There is tantalizing evidence that near shore biomass may be supporting production. Why or how can it be productive and is the biomass coming from rivers?

River mouths are important historically since this is where humans tend to interact (cities, harbors, beaches). River mouths also carry nutrients/energy used by organisms into the lake. River mouths are commonly being termed Areas of Concern due to contamination, degraded wetlands, etc. With limited funds, how do you restore a river mouth? Very little guidance exists, since we are still learning about river mouth's structure and function.

Currently, we are trying to classify river mouths by watershed characteristics and size as either delta, open, drowned, or barred on Lake Michigan.

Three intensive surveys are being conducted on the Manitowoc River WI, Ford River MI, and the Pere Marquette River MI. The Ford River is an intact delta, the Pere Marquette River is degraded, while the Manitowoc River is even more degraded.

We are working directly with the Great Lakes Commission, meeting with scientist and resource managers to share data as well to communicate with others. Our objectives are to determine the relative importance of lake and watershed derived nutrients and the effect of river mouths on nutrient delivery to the lake.

In 2012, the study will be rolled over to Lake Huron. Rivers being considered for Lake Huron include the Au Sable, Saginaw and Nottawasaga (Canada) which appears to be the spawning grounds for most of the wild salmon in Lake Huron.

Meeting Adjourned at 3:10 p.m.

Next Meeting will be October 19th at the Ram Center in Roscommon, MI.