



Lake Huron Citizens Fishery Advisory Committee

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

Lake Huron Citizens Fishery Advisory Committee Meeting Minutes Tuesday June 8, 2021 Online Zoom Sea Grant Assisted Meeting 10:00 am – 1:00 pm Approved

Attendees: Peter Esselman, Frank Krist, Ed Roseman, Beverly Bodem, Ji He, Cindy Huston, Todd Wills, Laura Ogar, Bryan Darland, Ed Barr, Brandon Schroeder, Tom Andris, Jim De Clerck, Thomas Heritier, Ed Retherford, Roger Bergstedt, Fred Sterns, Judy Ogden, Julie Shafto, Ken Pletcher, Blaise Pewinski, Tod Williams, Dave Caroffino, Jason Gostiaux, Jeff Jolley, Ed Eisch, Michael Feagan, Randy Claramunt, Dennis Gulau, Tom Frontjes, Donna Wesander, Tom Keerl, Dave Fielder, Stephen Lenart, Tess Nelkie, Michael Veine, Dave Borgeson, Randall Terrian, Dan Sampson, David Shaw, Ed Blissick, Gary Boersen, Tim Cwalinski, Christian LeSage, Paul Stowe, Meaghan Gass.

Welcome, Introductions and Announcements (Frank Krist and Randy Claramunt DNR Lake Huron Basin Coordinator).

Frank introduced himself and Randy. The meeting was running a couple minutes behind because of issues caused possibly by updates to either Windows or Zoom software but Meaghan Gass worked under much stress to find a solution and provide new links which quickly brought the meeting back on time. Meaghan Gass and Brandon Schroeder with the assistance of Cindy Huston, all from Michigan Sea Grant, hosted the meeting. Brandon gave an overview of the Zoom meeting rules and procedures.

During the short delay Jeff Jolley, Southern Lake Huron Unit Manager and Dave Borgeson, Northern Lake Huron Unit Manager provided the updates below:

Jeff Jolley

- Biologist Addie Dutton transferred to the Southern Lake Michigan Management Unit, she provided great service to the unit in her short time and laid the foundation for excellent relationships between the DNR and the public. The vacant biologist position has been approved for hiring and the announcement is active and closes on June 29th. A new biologist will likely come onboard by mid to late August. There were several comments from the participants indicating their disappointment in learning that Addie will be transferring. They appreciated her willingness to address the issues and share information with the stakeholders.
- Inland walleye production, stocking, and lake and stream surveys are underway.

Dave Borgeson

- Technician Supervisor Pat VanDaele transferred to Oden State Fish Hatchery, applications for the vacant position closed on June 11th.
- Several new creel staff have been hired in the unit.
- Technicians Ed and Emmett from the Unit participated in muskellunge egg-take activities.
- A lake sturgeon population survey occurred in Otsego Lake.

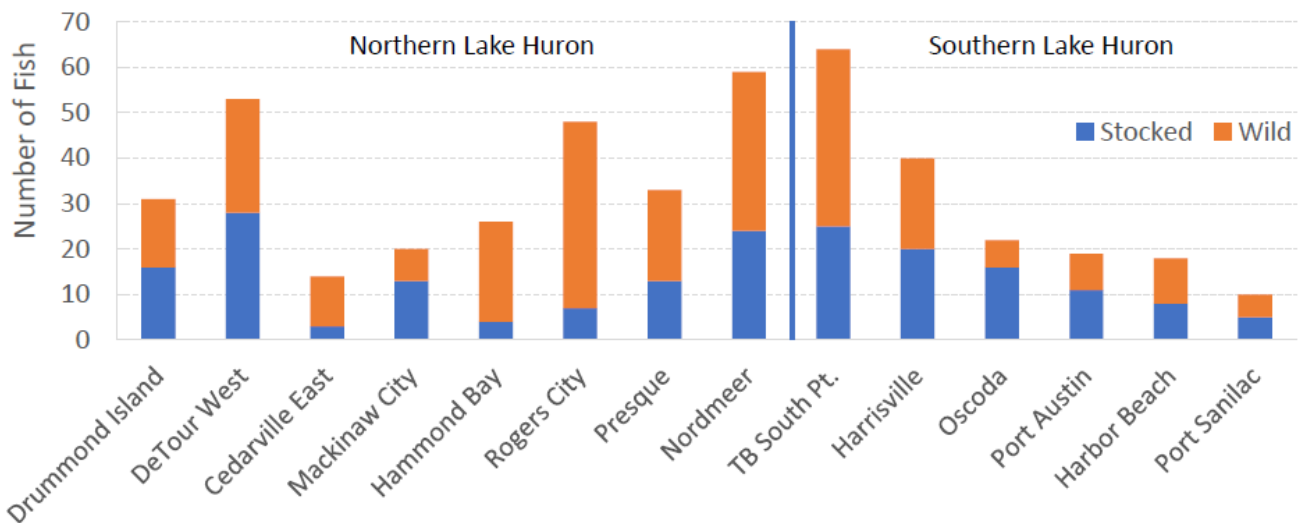
An overview of the Lake Huron lake trout status and efforts to resume lake trout stocking in southern Lake Huron (Randy Claramunt, Dr. Ji He DNR Great Lakes Research Fisheries Biologist, and Dr. Ken Merckel Great Lakes Fishery Commission Advisor).

Frank Krist introduced the topic of lake trout population in southern Lake Huron. Although there is natural reproduction of lake trout occurring, the surveys show they are being harvested faster than natural reproduction alone can replace them. Stocking of lake trout in the waters of the Main Basin of Lake Huron south of Alpena was terminated in 2018. Dr. Ken Merckel presented to the Great Lakes Fishery Commission (GLFC) a resolution calling for a review of the lake trout stocking strategy in Southern Lake Huron. Judy Ogden, also a GLFC Advisor assisted in preparing the resolution. The Ministry of Ontario and other Ontario GLFC Advisors responded to the resolution at the GLFC annual meeting during May and after several revisions the resolution was approved. It was agreed that the GLFC Lake Huron Committee will review the lake trout stocking strategy in Lake Huron.

Dr. Ji He commented on the research perspective of the issue. He had just completed the annual spring lake trout survey and the trend of declining lake trout recruitment in the southern waters continues as shown in the slide below.

The Chart shows the number of wild and stocked lake trout caught at each station in the Main Basin of Lake Huron during the spring of 2021.

Lake Trout Samples



Randy Claramunt added to Frank’s introduction on the topic that Dr. Merckel’s resolution went through extensive revisions prior to approval. Past lake trout hatchery stocking has mostly occurred through the Federal Hatchery System. Recently, there has been a shift to cisco production in the Federal System which currently limits the capacity to produce more lake trout.

An Ontario commercial fisher GLFC Advisor cited declining whitefish stocks and their concern that stocking additional lake trout might interfere with whitefish production which has been declining steadily. He indicated that Ontario commercial fishers are concerned that lake trout stocked on the Michigan side of the lake are migrating into the Ontario waters and are being caught in their nets. Since the Ontario commercial fishers have a limited amount of lake trout they are permitted to keep as

bycatch, too many lake trout around their nets can require them to shut down their whitefish fishery early in the season. In addition, whitefish bring about three times the price as lake trout at the market.

The approved resolution is to reexamine the lake trout stocking strategy and determine if the original reasons used to stop the stocking in the southern 2/3rds of Lake Huron are currently being met. The GLFC Lake Huron Committee, composed of managers from Michigan, Ontario and the Tribes could not reach resolution on the issue during 2020 which is why it has been elevated to the Great Lakes Fishery Commission. The GLFC will put it on their agenda to revisit and look at all the trade-offs. Some trade-offs might be limited hatchery capacity, impacts on managing predators and prey, and potential cascading effects. The Lake Huron Citizens Fishery Advisory Committee has already voted to resume stocking and support for the resolution was reaffirmed today by the Committee Members. Randy Claramunt's tenure as the GLFC Lake Huron Committee Chair has ended and Tom Gorenflo, Chippewa Ottawa Resource Authority, will be the new Chair of the Committee.

Judy Ogden commented that the proposal is more feasible since the science supports it.

Frank: There was much misinformation provided during the discussion of Ken's resolution at the GLFC Annual Meeting. For example, it was mentioned that the lake trout migrate from the Michigan side to the Ontario side of the lake during the summer to find cold water. Reviewing a contour depth map will show that there are vast amounts of cold water on the Michigan side of the lake that provide ideal habitat for lake trout the entire year. During the discussions at the GLFC Annual Meeting there was doubt about whether there was an actual decline in the lake trout catch in the south. The creel surveys have reported declines in lake trout catches across many Michigan ports from the peak years. In addition, not only the lake trout fishery declined greatly but the loss of the Chinook Salmon fishery has greatly reduced the fishing opportunity in the south as shown in the tables below.

Lake Trout Creel Harvest			Chinook Creel Harvest		
Year	2004	2020	Year	2002	2020
Oscoda	17,664	1,436	Oscoda	14,447	18
Port Austin	18,050	329	Port Austin	15,792	5
Grindstone Charter	7,718	2,036	Grindstone Charter	3,296	5
Harbor Beach	18,046	1,313	Harbor Beach	23,410	13
Port Sanilac	749	244	Port Sanilac	4,956	0
Lexington	1,676	0	Lexington	6,395	6

Randy C.: Some Canadian biologists have commented that some impacts might not be measurable because not enough time has elapsed since lake trout stocking south of Alpena was stopped. It has been suggested that more time without stocking is needed to determine if that strategy is not working.

Ji He: Reviewed the data. The information indicated there are reduced lake trout recruitment, reduced harvest, and reduced results in surveys in the US southern waters. Canadian data indicated reduced harvest but a steady catch in surveys in Ontario waters.

Jim Johnson: The science is settled and clear. Surveys began at the Thumb ports in 1969. Lower numbers of lake trout also mean that mortality from sea lamprey predation will increase on the fewer lake trout that are left.

Frank: Thanked Ji for reviewing the data and defending the need to continue stocking in his work with the GLFC Lake Huron Technical Committee Task Group. A report of those discussions was provided in 2020.

Randy Claramunt. Question 1: Do the Advisors continue to support reestablishing lake trout stocking in southern Lake Huron Waters? Question 2: Do the advisors want to change the resolution?

Advisors Vote: Ken Pletcher, Judy Ogden, Randy Terrian, Bryan Darland, Dennis Gulau, Blaise Pewinski, Tess Nelkie, Tom Frontjes, Jim DeClerck, Mike Veine and Frank all affirmed support of the resolution. The Committee will stay the course on the issue.

Judy Ogden: It will take several years before newly stocked fish could be part of the catch. She supports the resolution.

Randy Terrian: Hatchery space is an undiscussed issue. How do we do side-by-side cisco and lake trout hatchery production?

Randy C.: It is up to the USFWS to meet stocking needs. They will tell us what can occur at the Federal hatcheries. State hatcheries had some lake trout production in the past but had disease issues and had to forego their lake trout to focus on brook trout. Some lake trout production occurs at Marquette State Fish Hatchery to supply fish for inland lakes.

Blaise Pewinski: Detroit Area Steelheaders base their events on quality of fishing. They do not plan trips to Thumb ports because of poor lake trout fishing.

Tess Nelkie: If stocking resumes in the south, will similar numbers of lake trout be stocked compared to the past?

Randy C.: It will be up to the GLFC Lake Huron Committee but enough should be stocked to evaluate if the fish are surviving. Potentially, stocking two sites with 100,000 fish stocked at each site might provide the needed information.

Tom Andres: Is there a comparison between angler effort and Ji's survey Catch Per Unit of Effort (CPUE)?

Randy C. If angler effort has gone down proportionally to the decline in lake trout then there would be no change in the lake trout population, but the effort has not gone down proportionally. Ji's surveys show that the catch per the same unit of effort used over the years is declining in the south, so the actual lake trout number is actually declining.

Tom Andres: Asked Frank If a tradeoff is needed to stop cisco stocking in Saginaw Bay in order to raise and stock more lake trout would the Advisors support that change?

Frank: That is not known because the Committee has not discussed that issue since that option has not been raised by the federal hatcheries or anyone else before. Also, to follow-up on Randy's comments, changes in salmon abundance and how anglers target fish is a complicating factor. For example, when the Chinook Salmon were plentiful, most anglers fished suspended in the water column and did not usually target lake trout. Currently, lake trout are very important in the catch at most deep water ports so more effort is being made to target lake trout. For example, during the 1980s through the early 2000s there was an excellent extended salmon fishery off of Rogers City where I fished many times each week from mid-June until mid-October and I rarely caught any lake trout because we targeted salmon in the mid waters. There were both lots of salmon and lake trout caught in the southern waters during the early 2000s but at that time salmon were king at the ports, so it is likely that the vast number of anglers were targeting Chinook Salmon. So when both salmon and lake trout numbers are low, that takes away much opportunity to catch fish and reduces enthusiasm to visit a port.

Tod Williams: The GLFC Annual Meeting was a productive.

A potentially accurate method of surveying and estimating Round Gobies abundance will be tested in Lake Huron during 2021. Dr. Peter Esselman, USGS Great Lakes Science Center Research Biologist.

Dr. Peter Esselman of the USGS Great Lakes Science Center is conducting research to develop a more accurate survey method to estimate the abundance of Round Goby, which is a very important prey fish. Previous goby estimates were made and are likely biased low because trawl nets cannot be used effectively in rocky habitat that is preferred by this bottom dwelling prey fish. This new and very promising method uses a camera system and innovative computer software housed in an autonomous underwater vehicle (AUV).

The AUV is programmed to travel across specified transects and take photos regularly of the bottom. The large number of photos are then analyzed to determine the bottom type and identify the species and size of any fish found in each photo. After surveying many sites, the abundance of Round Goby is estimated for the entire lake. During 2020, a pilot study was conducted in Lake Michigan that resulted in large improvements in the technology. This year the study is expanding and 8 sites in Lake Huron will be surveyed including:

- Cheboygan
- Detour
- Rogers City
- Alpena
- Oscoda
- Tawas
- Port Hope
- Port Huron

If you notice the survey vessel at your port, Peter encourages anyone that is interested to communicate with the crew.

For a much more detailed overview of this new method, see the following link to Peter's presentation presented to the Great Lakes Fishery Commission Lake Michigan Committee meeting this past March, <https://www.youtube.com/watch?v=0K2IOZ6u59Q>. The first slide and last slide are below. Notice the autonomous underwater vehicle (AUV) in the lower right-hand corner of the first slide and the contributors are noted on the second slide.





Randy Terrian: This work is very impressive and encouraging. It appears that this project will not only provide an accurate method of determining goby abundance, but it can show the size of the fish. If the age-class of each goby can be determined, it would seem that it might be possible to better measure the predator pressure on this prey fish. This might be another metric for characterizing our prey base and has implications for predator/prey management dynamics.

Randy Claramunt: Randy Terrian made an excellent point about the goby sizes impacting predator/prey implications. Since gobies reproduce several times each year and mortality rates can reach 90%, measuring the abundance at one time period each year only provides part of the estimate. The number of additional gobies produced throughout the season must also be calculated to provide an accurate measurement of how much goby biomass is available to predators the entire year. Another point that this new technology will possibly provide is a measure of the mortality rates of gobies in different types of lake bottom material. For example, in rocky areas the mortality rates of gobies might be rather low since there is much cover to hide while in the open flats the mortality rates might be extremely high. This information will assist in developing stocking policies.

Peter Esselman: appreciated Randy Terrian's comments and he is also optimistic about the new method. Before the age of the gobies can be determined from the photos, however, more data on the relationship between the size and age structure of the goby within the populations are needed. An effort is being made to incorporate the amount of annual goby production into the results after the survey is completed. One potential method would be to run a second survey over the same area. The AUV can be programmed to travel the same tracks within about 6 feet of the original path. This provides an advantage because the repeat survey will essentially be over the same habitat.

Jim Johnson: complimented Peter's work and Jim was very impressed at the level of technical detail that is going into the project. During Peter's presentation, nearly all of Jim's many questions were answered. Since the technology provides such clear photos of the bottom, a by-product of the work will be an effective method of determining the spawning sites of lake trout which is so important to ensuring sustainability of their population. The following link shows work done on substrate mapping, <https://www.usgs.gov/media/images/great-lakes-substrate> Lake Huron was the Diporeia capital of the Great Lakes because of the excellent habitat for this energy rich shrimplike crustaceans, but now it is the goby capital. This innovative work will contribute much to fishery management.

Peter Esselman: Gobies have mouths that allow them to eat quagga and zebra mussels and they regularly eat the mussels. Because of this, an effort is being made to measure mussel abundance. In addition, the technology appears to be able to quantify the amount of the common filamentous green algae, Cladophora, on the bottom. The Goby Project and its technology are expanding into measuring many environmental aspects of the food web.

Julie Shafto: can this technology be used to enhance the measurement of other prey fish besides gobies?

Peter Esselman: Yes, the autonomous underwater vehicle can be equipped with an echosounder (high level fish finder) and measure mid water prey fish such as smelt and alewife near the surface. Because of the survey vessel's large size and noise of the engines, the current onboard echosounders do not see the fish in the first several feet below the surface. The AUV can be programmed to run at any depth and any extended distance from the survey vessel and look up with its echosounder to more accurately measure prey fish abundance near and adjacent to the surface. There are newly developed AUVs that can be programmed to run and survey specific paths for days without servicing.

Brandon Schroeder: mentioned that teachers that work with students on Great Lakes projects were very impressed with the Goby Project and this is the type of material that gets kids excited about science.

Peter Esselman: He is very willing to share information about this work and he encourages anyone that would like more information or has questions and comments to contact him, pesselman@usgs.gov.

Frank: Surprising to see gobies missing from some areas in the Alpena Area that Peter surveyed during April in 2017.

Peter Esselman: It is possible that some of the gobies were in shallower water than they surveyed. In areas like Thunder Bay where the deep water is many miles offshore, it is possible that the gobies may have adapted to staying in the shallower but colder water during the winter. It has been documented in other Great Lakes that gobies will go as deep as 400 feet or so where the water is warmest during the winter at 39 F degrees. Another factor that could result in missing the gobies is that the bottom trawl may have missed the gobies because it was pulled over the rocky habitat instead of being lowered where the gobies are usually concentrated. Of course, the new technology will eliminate that problem since the AUV will be moving directly over the rocky habitat taking detailed high-resolution photos of the bottom along with the fish and other items that are there.

Captain Ed Retherford: He has been fishing around Thunder Bay Island in 30 to 60 feet of water during the last couple of weeks in the areas shown in the presentation where gobies were not found in the 2017 survey. Ed caught many lake trout, and they were full of gobies with a few smelt and small burbot.

Julie Shafto: mentioned that a diver off of Adams Point near Rogers City dove into about 45 feet of water and found lots of rocks and lots of gobies.

Peter Esselman: The mapping of the bottom should assist in determining the best goby habitat and the current data are being updated with additional mapping work and should be available later this year.

Randy Claramunt: With the invasive mussels greatly increasing the clarity of the water, it is possible that the current traditional survey gear is scaring the prey fish now resulting in much data being missed compared to the period before the mussels became established. This new technology should assist in correcting the errors in the estimates caused by the prey fish being disturbed by the vessel and survey equipment in the much more clear water.

Frank: Will this new technology likely show that there are more gobies than the previous surveys indicated.

Peter Esselman: Since the new technology does a much more detailed job of measuring the gobies in their preferred rocky habitat it is likely there are more gobies present than previously estimated.

Jim Johnson mentioned that Dr. Ji He documented that whitefish eat a significant number of gobies and with the whitefish population declining the goby population may be increasing currently.

The new Cormorant control program, will it assist in managing cormorants in Saginaw Bay? (Randy Claramunt).

Randy Claramunt provided an overview of the new double-crested cormorant (DCCO) permit system for lethal control to manage free-swimming fish. Michigan has received a permit for the lethal take of 10,000 birds. USDA Wildlife Services is the sub-permittee and will perform the lethal control. Discussions are underway to apply lethal control on the Charity Islands. The Charity Islands are a National Wildlife Refuge (Federal) managed for bird conservation. There are 1,800 birds on the Charities. Spoils Island at the mouth of the Saginaw River has approximately 200 nests. Reports point to a potential shift in migration that might have occurred, and a majority of the birds appeared to have migrated up the Lake Michigan coast this spring.

Randy Terrian: Asked about deputizing DCCO controllers.

Randy Claramunt: Controllers need to be sub-permittees, closely follow all rules, complete training, and be certified with background checks, along with other requirements. There are funding costs with all of these requirements, and it is unlikely that it will be cost-efficient or feasible to enlist the average citizen as a sub-permittee. It is more efficient to use USDA Wildlife Services for this task.

Tom Andris: Can you move the numbers of harvest birds around (i.e., take more in Lake Michigan)?

Randy Claramunt: Yes, we have some flexibility under the new permit system.

Ed Beckley: Are we paying for DCCO control with fisheries money? Citizens would do this for free.

Randy Claramunt: Even with volunteer help from public, significant additional program funding would be needed to cover the costs to train and equip citizens as sub-permittees for control under the new permit system.

Ed Beckley: Expressed frustration with bureaucracy.

Tess Nelkie: Is only shooting used to kill birds?

Randy Claramunt: Nest oiling is also used and this counts against the permitted numbers of take.

Mike Veine: How many are on the Charities?

Randy Claramunt: 1,800 birds.

Randy Terrian: Pointed out that we will be watched, so it is important to be vigilant and follow the rules.

Agency Updates

Paul Stowe, MDNR, Platte River State Hatchery: Because of the loss of Atlantic Salmon last year at the **Platte River Hatchery** there were only enough fish available from this Hatchery to stock just over 42,000 Atlantic Salmon into Lexington Harbor on April 14-15. Because of good growing conditions in the hatchery and less density, the Atlantic salmon were largest ever raised at 17 fish per kilogram and

they averaged just over 7 inches. The *Harrietta Hatchery* was able to make up some of the loss of Atlantic Salmon that occurred at the Platte River Hatchery. They stocked 27,000 in the Au Sable River, 28,000 in the Thunder Bay River and 21,000 in the St. Marys River. These Atlantic Salmon were smaller at 31 to 32 fish per kilogram about a month ago so the fish going to the St Marys River this week are probably considerably larger. Because Harrietta increased the number of fish to raise, not only were they smaller than it was hoped but there were some disease issues. Coho stocking went well with some very nice fish being planted in Lake Huron.

Dan Sampson, MDNR, Northern Michigan Hatchery Manager: It has been a good rearing season at the *Oden, Marquette, and Thompson Hatcheries*. There were no major problems rearing and stocking the fish. It is good to have the steelhead in the raceways again.

Todd Wills, DNR Lake St. Clair/Lake Erie and Alpena Fisheries Research Stations Manager: At the end of March after many years, service in the DNR, Lake Huron research vessel Captain Jeff Diamon retired. Thank You Jeff! His position has been advertised and applications will close on June 14. The long continuing annual spring lake trout survey was completed.

Julie Shafto, MDNR, Creel Program: Three new creel clerks have been hired for Lake Huron and Julie is doing double duty training these new clerks. An excellent lake trout fishery occurred in northeastern Michigan this season. The water is beginning to warm, and the anglers are now catching many smaller lake trout. During last week, several Atlantic Salmon have shown up with Lake Superior State University clips and no clips, which are most likely DNR fish stocked last spring. Also, since the water warmed up a few kings and Coho are being caught at Rogers City and Rockport with same good reports coming from Presque Isle.

Tim Cwalinski, MDNR, Northern Lake Huron Unit Senior Biologist: We worked closely with the hatchery staff to stock the Atlantic Salmon in Thunder Bay and the Au Sable Rivers in optimal windows based on conversations that occurred at the previous Advisor's meeting. For example, the Atlantic Salmon were stocked in the Au Sable River around May 20 when according to the monitoring done by Randy Terrian the walleyes, cormorants and lake trout were at low levels around the river. We are conducting inland surveys currently and we will be focusing on inland walleye stocking. It appears that the ponds are producing a lot of walleyes this year.

Dave Fielder, MDNR, Research: Dave indicated he is working with other researchers to obtain a grant from Michigan Sea Grant to use acoustic telemetry to tag and follow digitally, walleye caught at river mouths and potential offshore spawning reefs, to determine which areas in the Saginaw Bay area are used by spawning walleyes. There is still a lot of information that is not known about where the walleye are spawning in the Bay area. The goal is to tag 350 walleyes over 2 years with acoustical transmitters. Fish caught with hook and line often experience less stress than fish caught in short set gill nets so there may be a need for volunteer anglers to assist in capturing the fish for the study. The Lake Huron Citizens Fishery Advisory Committee supported this proposed walleye tagging project and that support letter was added to the proposal package. There are several additional studies using acoustic telemetry with other species that are ongoing and some additional ones that will be beginning by next year including a cisco migration study with the fish stocked in Saginaw Bay. These studies will cover most of the lake with receivers and all the data obtained will be coordinated and shared between the projects. This will enable much to be learned about the fish movement throughout Lake Huron for not only the walleyes but all the other species being studied. Andrew Briggs would lead the new walleye study and if funded the study will begin next year.

Mike Veine: The walleye fishing seems much worse this season, and it appears that the 10-12'' year class is mostly missing. There is frustration about many commercial nets being set in the Au Gres area and many anglers are discouraged by the hazards these nets may cause. There is also concern about how many walleyes are being killed as bycatch in these nets.

Ed Beckley, M-65 Bait Shop: He is receiving many complaints that anglers do not want to fish the Point Au Gres area because of all the commercial nets that are out there.

Meeting Adjourned at 2 pm and was followed by an hour of Fish Talk

Next Meeting

Wednesday August 11, 2021 at Jay's Sporting Goods in Clare from 10 am until 3 pm