

Mille Lacs Fisheries Advisory Committee (MLFAC)

Date: February 13, 2024
Time: 6-8pm
Location: Appeldoorn's Sunset Bay Resort or online via Webex

Committee purpose

To advise the Department of Natural Resources (DNR) on the State of Minnesota's fisheries management program for Mille Lacs Lake.

Committee members

<input type="checkbox"/> Jason Bahr	<input checked="" type="checkbox"/> Bill Eno	<input type="checkbox"/> Curtis Kalk	<input type="checkbox"/> Tony Roach*
<input type="checkbox"/> Justin Baldwin	<input type="checkbox"/> Ryan Fitzpatrick	<input type="checkbox"/> Paul Koering	<input type="checkbox"/> Megan Uphoff
<input type="checkbox"/> Wesley Basset	<input checked="" type="checkbox"/> Dean Hanson*	<input type="checkbox"/> Steve Kulifaj	<input checked="" type="checkbox"/> Mark Utne
<input checked="" type="checkbox"/> Jodi Crowell	<input type="checkbox"/> Steve Heiskary	<input checked="" type="checkbox"/> Melissa LeBeau	<input checked="" type="checkbox"/> Laurie Westerlund
<input checked="" type="checkbox"/> Larry Dahler	<input type="checkbox"/> Steven Johnson	<input checked="" type="checkbox"/> Peter Perovich	

DNR staff

- Brad Parsons, Fisheries Section Manager
- Brian Nerbonne, Regional Fisheries Manager
- Nate Painovich, acting Mille Lacs Area Supervisor
- Eric Jensen, Large Lake Specialist
- John Kempe, Mille Lacs Area Assistant Area Supervisor
- Kelly Wilder, Policy and Planning Supervisor
- Tom Jones, Regional Fisheries Treaty Coordinator
- Natalie Haberman, Planner/facilitator

Quick Summary

At the February 2024 MLFAC meeting, the DNR reported on the results of recent creel surveys. The DNR also presented on the recent population estimate and subsequent population modeling. The DNR then led a discussion on 2024 open water walleye regulations, based on the harvestable surplus determined for the 2024

fishing season. Finally, the DNR asked MLFAC members for suggestions on future meeting topics based on member interests and topics that have not been covered in a while.

Agenda

1. Welcome (Natalie)
 - Opening and committee member/DNR introductions
 - Today's agenda and logistics
2. Creel survey updates (John)
 - Update on winter creel survey to date.
3. Population estimate and population modeling (Tom Jones)
4. Regulations discussion (Brian)
 - Share safe harvest level for 2024.
 - Present modeling of potential regulations and how they compare to safe harvest level.
 - Discuss MLFAC member's priorities for when to offer harvest opportunity, size of fish to target for harvest, tolerance to potential for unplanned closure, desire to utilize planned closures, other options.
5. Future meeting topics (Natalie)
 - Discussion of topics to include for the remainder of the 2024 MLFAC meetings.
6. Public comment
 - 10 minutes for questions or comments from the audience – please limit your time to one minute each

Meeting Notes

1. Welcome

Natalie Haberman opened the meeting and reviewed the agenda. MLFAC members and DNR staff introduced themselves.

2. Creel survey updates

John gave an update on creel survey results to-date for the 2024 season. Early in the year, angler pressure was low due to late ice formation, with minimal harvest. More recently, pressure has increased but is still well below typical levels, resulting in about 190,000 angler hours. Despite low pressure, there has been about 8,000 pounds of walleye harvest this winter as of February 2. Catch rates are high, which results from fish having a lack of forage (meaning they are hungry).

MLFAC members asked the following questions:

- How do you ensure there is an equal distribution of creel sampling when the conditions this winter have impacted where anglers are fishing on the lake? I.e., the south end of the lake has had more use and harvest with anglers putting out their wheelhouses, whereas the north end has had limited access.

- John: We open the creel once all the accesses were open. There is always unequal pressure around the lake, and the creel methodology accounts for this.
- Eric: This year anglers are fishing specific times and locations rather than staying out on the lake overnight, making our catch rates hard to compare to previous years.
- Where have you seen the most pressure this winter? We have not seen a lot of activity on the north or west sides of the lake.
 - John: We have seen pressure out of Red Door Resort on the north side – a lot of ATV and side-by-side traffic.
 - Brian: Early season pressure last year was much higher but with less harvest. This year, pressure is down, but anglers are catching a lot more fish because they are biting more due to low forage.

3. Population estimate and modeling

Tom presented the results of the most recent population estimate for Mille Lacs that was conducted in the spring of 2023. The sampling estimates fish over 14 inches by tagging fish, releasing them to mix with the general population, and then recapturing both tagged and untagged fish to calculate the proportion that are tagged. The population estimate yielded a result of 606,000 fish over 14 inches in 2023; in 2018 this number was 998,000, and in 2014 it was below 300,000. These data fit the DNR's observations that the most recent strong year classes of 2013 and 2017 have now reached maturity and are beginning to be removed from the population.

Population estimates are conducted periodically on Mille Lacs and are used to ground truth annual computer modeling. The model estimates the walleye population in the lake based on annual sampling of anglers (creel survey), annual fall gill net surveys, abundance of age-0 and age-1 walleye from annual fall electrofishing surveys, and these periodic population estimates. These sources of information help the DNR understand recruitment (new fish that survive into adulthood), growth (of fish already in the system), and mortality (both natural mortality and estimated hooking mortality). The DNR and 1837 bands run a number of models to ensure accuracy. Modeling results track well with the most recent as well as historical population estimates, further confirming the model's accuracy.

MLFAC members asked the following questions:

- Which model is used to inform determining the harvestable surplus?
 - Tom: Usually the model produced by the DNR's consultant, although the models led by the DNR and the 1837 bands yield similar results.
- We continue to see multiple strong year classes; how does that reconcile with DNR saying there is poor recruitment?
 - Tom: 2002, 2013, and 2017 (to a lesser degree) were all year classes that boosted recruitment. They need to be stronger to make a population level impact. 2021 and 2022 show potential. Looking at the historical population trends back to the 1970s and 80s, we have fewer good year classes that are farther apart now.
- What do the fall test nets do?

- Tom: Gillnets are one input to the model. Over time they do well at tracking the population, but year to year there is variance due to other factors. The model smooths out extremes to reflect the population more accurately.
- From my experience, I don't think fish moved into the areas you were netting.
 - Tom: If fish are not in the shallows, they are in the deeper parts of the lake, where we also have nets. We are not trying to catch the most fish, but rather ensure we have a consistent approach.
- The fish come in when it's below 60 degrees.
 - Tom: We never set out the nets when it's below 60 degrees.
- If the catch rates have been so high in a short period of time, shouldn't we have more fish in the lake than what you are showing?
 - Tom: You can have high catch rates with a good bite and still not have a lot of fish. Last summer, some fish had body fat and good condition. This fall, their body fat was gone, so we anticipated we might have higher catch rates this winter, since the fish would be hungrier. The fish likely ran out of little perch around August, and the walleye population eats three million little perch per day in the summer.

4. Regulations discussion

Brian presented on the harvestable surplus for the 2024 season. This year, the total harvestable surplus is set at 157,500 pounds, with state-licensed anglers' share up to 91,550 pounds. Last year's total harvestable surplus was 175,000, with state-licensed anglers' share up to 103,000 pounds. The harvestable surplus is lower this year because of a decline in the walleye population. The state and 1837 bands agreed on a lower harvestable surplus in recognition of the declining population and as part of a more conservative approach to avoid needing to take more drastic measures in the future.

MLFAC members had the following questions and comments regarding the 2024 harvest regulations:

- State-licensed anglers harvested 37,000 pounds under the state's share last year, so it seems like there should be a buffer that allows harvest to surpass the harvestable surplus level in other years. The bands have been harvesting 85% of the bands' share of the harvestable surplus, with more efficient harvest methods. Anglers are not allowed to take home enough fish, and the regulations are too strict.
- DNR's management is not leading to improvements in the fishery over the years. Resorts are hurting and we are worried about the economic stability of the community. Fishing has decreased compared to other forms of recreation, and people are bringing their boats to smaller lakes as a result and hurting shorelines. The graphs and numbers don't seem like they're telling the whole story.
 - Brian: DNR is cognizant of these economic impacts as recruitment has become more sporadic, making it difficult to harvest as many fish as in the past.

Brian discussed expectations for the 2024 season, noting that forage netting yielded below average numbers for yellow perch, and very low numbers of tullibee. 2023 was not a good year for young-of-the-year yellow perch. In 2022, walleye were plumper, but with less forage last year, walleye were all thinner than in 2022, with the biggest declines for walleye under 14 inches who are not as able to feed on larger prey items as bigger sizes of walleye. Brian then explained that when catch rates are high in the fall, the following spring and early summer

usually have high catch rates as well, with no new forage reaching sizes of interest to predators like walleye until mid-summer.

MLFAC members had the following questions and comments regarding 2024 expectations:

- If the DNR thinks there is not enough forage in the lake, why don't we harvest more and larger fish to decrease predation?
 - Brian: The lake has good and bad years for forage; we should not react too quickly to one year of data.
- It seems like the sustainable level of biomass has decreased in general. Maybe the target of maximizing spawning stock biomass is no longer the right approach.
 - Brian: The 2013 and 2017 year classes remain the bulk of fish that are still out there. We can harvest more, but there is uncertainty how soon another big year class might recruit. We might have a few years at low population levels like 2010-2013 waiting for that next big year class, requiring tighter regulations.
- Do you think harvesting so many fish from the 2013 year class is impacting the number of 27-30 inch walleyes? We are not letting the 2013 year class walleyes get larger than 23 inches.
 - Brian: We have started to have forage issues, and in multiple years those fish did not grow much. In 2021 and 2022 when forage improved, we saw those fish begin to grow again, with some fish now greater than 23 inches. However, with weak year classes for the few years prior to 2013, there are not many fish from 2012 or earlier to fill larger size classes.
- You said the 2021 and 2022 year classes were good, but the 2023 year class was bad? How will that affect recruitment this year
 - Brian: We will have to wait and see this fall about the 2024 year class.
- When I fished last fall, the 23-24 inch fish were the healthiest I had seen in years. Some of the smaller ones under 19 inches were skinny. If we do have a lack of forage, can we expect cannibalism with walleyes again?
 - Brian: It doesn't bode well for the 2023 year class because of predation and lack of forage.

Brian then presented on exploratory modeling of potential regulations. The DNR ran models and assumed a 50% increase in catchability in 2024 compared to last year. We expect a 10% increase in effort compared to 2023 because when the fishing is better, more anglers come out. We also expect a warm summer, which will likely result in higher water temperatures, exacerbating hooking mortality.

Modeling analyzed the following regulations to inform the conversation. DNR will consider these as well as other regulation options.

- 21- to 23-inch harvest slot for the full season like we had in 2023: Harvest would be 145,000 pounds, likely closing the fishery before the end of June.
- Catch and release all season: Harvest would be 75,000 pounds from hooking mortality.
- 21- to 23-inch May harvest, catch and release rest of summer, and July 1-15 closure: Harvest would be 80,000 pounds
- Catch and release early season, 18- to 20-inch harvest slot August through October is predicted to take about 80,000 pounds.

- Catch and release early season, 21- to 23-inch harvest slot August through October is expected to take just under 80,000 pounds.
- 21- to 23-inch harvest slot in May, catch and release for the rest of the summer likely results in an unplanned closure starting in August.

MLFAC members had the following questions and comments:

- Why isn't the DNR presenting options for harvesting smaller walleye?
 - Brian: We looked at smaller sizes like 18-20 inch harvest slots, but found that they had an even higher chance of an unplanned closure.
- There are a lot of walleye under 18 inches right now. What if we targeted 15- to 17-inch fish?
 - Brian: The state and the bands want to ensure fish spawn at least once. The tribal fishery targets males 15- to 17-inches. The nets are in shallow areas where males come to spawn and there are fewer females.
- Why don't the bands catch a lot of females?
 - Tom: Males and females have different behaviors during spawning, making males more vulnerable to gillnets. Almost all mature males are near the shore for weeks waiting for females, while each female may only be in shallow water for one or two days to lay eggs. Tribal harvest from nets is currently 80% males and used to be 95% males. We see more females in trap nets.
- The bands' harvest data indicates an average weight of two pounds or less, is that correct?
 - Tom: Yes, about 1.5 pounds.
- When you put these projections on the harvestable surplus together, have you ever gone back and looked at previous years' levels and compared the outcomes? It seems like the assumptions are too conservative.
 - Brian: Yes, they are conservative assumptions. We have been more conservative to avoid unplanned closures, rather than leaning the other direction.

Brian then led a discussion with MLFAC members on potential regulation triggers, regulation changes that would go into effect if certain conditions are met. Members had the following questions and comments:

- What were the triggers last year?
 - Brian: By the end of June, if the harvest was under 50,000 pounds, the state allowed a broader slot limit to increase harvest starting August 1.
- You must have historical data of a certain percentage of harvest that happens in June. We know what we are allowed, could you factor that into what the triggers are?
 - Brian: That is what we did with that trigger. We recognized that if the state didn't reach 50,000 pounds by the end of June, we could relax that slot without undue risk of an unplanned closure.
- What is your comfort level of being under the harvestable surplus?
 - Brian: Given all of the uncertainty with catch rates, water temperature, and angling pressure, it is difficult to select a regulation that lands a number within 10,000 pounds of the limit. We set somewhat conservative regulations with a buffer to avoid unplanned closures.

- I understand the logic of being conservative at the beginning, but if we have not reached the harvestable surplus by the end of the summer, we should be allowed to harvest more fish for the rest of the open water season.

The group then discussed their preferences for unplanned closure dates and had the following questions and comments:

- I prefer to fish in the spring and fall.
- I would prefer to avoid closing the fishery early.
- Can you also have triggers to open the fishery up more if harvest is low?
 - Brad: If we are reducing, the band would be okay with the protocol because we are being proactive to protect the resource.
- Did you make any progress on the allowable overage? We have been 136,000 pounds under the allowable harvest for the last few years.
 - Brian: Yes, this is something we brought up at the most recent Fishery Technical Committee meeting and want to work on more.
 - Brad: The reasoning for not carrying over any balance from year to year is that if fish aren't killed, they are available to be caught in fall gillnets which informs future projections.

Brian then led a discussion around MLFAC members' priorities for regulations, including the timing of harvest opportunities and the importance of unplanned closures. MLFAC members had the following questions and comments:

- I have always been more open to unplanned closures later in the year, it doesn't impact me as much compared to other businesses. I also support the July 1-15 closure because it helps reduce hooking mortality.
- I prefer shorter planned closures over closing the fishery for two weeks or more at a time. If we have to close it at the end of August, it happens. A two-week closure and restricting live bait are disruptive.
- I prefer the fishery to be open at the end of the season because I like fishing in the fall.
- If we estimate that we want to be able to harvest 3,000 pounds of fish in the fall, perhaps we can close the fishery in August to accommodate for that.
- I am curious why others are against the July 1-15 closure. Anglers are starting to get used to it, and businesses and resorts still have people coming up here during that time. By the end of August, it gets much quieter on the lake. I would prefer a closure from August 20 through September because of that.
- I would rather give up some harvest sometime during the season to avoid hooking mortality for a more consistent season.
- The water is much warmer in July, and the highest hooking mortality has been 20,000 pounds. We should avoid this.
- We made accommodations to keep the fishery open in the fall but didn't see a lot of anglers. Seems like it is less of a tradition than it used to be.
- I would prefer to see more catch and release and continuity of the season over restricting harvest to keep the fishery open.

Brian asked the members how important it is to have some harvest and how important it is for early versus late season harvest. He noted that if the state harvests too many fish early in the season, it is harder to adjust and fix this later.

MLFAC members had the following comments:

- Selling the catch and release only regulation is going to be harder than it was five years ago. People will catch a lot of fish and not want to throw them back. It may be confusing if anglers are catching a lot. On top of that, we have had a bad ice season.
 - Brian: It is going to be tough this year. People will catch a lot of fish.
- It seems like we would come close to the harvestable surplus just from catch and release alone.
- We need to be careful this spring, I don't want to shut the season down in June.
- How do you convince people that they can harvest in the spring and switch to catch and release in the summer when hooking mortality is high?
 - Brian: There will still be hooking mortality, even if we offered harvest in July. We are going to need to have a bag limit and size limit that is somewhat restrictive, so there will still be fish being released. Offering harvest at that time may encourage more people to fish at that time, compounding the problem.

5. Future meeting topics

Kelly and Natalie led a discussion about additional topics MLFAC members would like to discuss at future meetings. Members suggested including telemetry results, smallmouth bass, economic concerns, tourism opportunities, and fishing tournaments for future meeting topics.

6. Public comment

Audience members had the following questions and comments at the conclusion of the meeting:

- Mille Lacs has shifted to focus more on recreation rather than harvest in recent years. As a result, the clientele coming up wants consistency with regulations. We don't want unplanned closures, and it has been picked up by the media that Mille Lacs is unpredictable. As a resort owner, I would rather see Mille Lacs become catch and release in perpetuity because it is predictable. The July 1-15 closure has no impact on businesses. People prefer early season if you are going to offer harvest.
- You mentioned we are up 50% on catch rate. Is this based on the pounds caught ice fishing thus far?
 - Brian: No, we used fall numbers, and it points to better fishing. The winter numbers support that assumption.
- Would using barbless hooks help with the hooking mortality issue?
 - Tom: When we were studying hooking mortality, we found that barbless hooks didn't have a lot of impact on mortality, the barbless hooks caused fatal injuries if the fish was hooked in a bad place.
- I wanted to point out that the makeup of MLFAC is skewed towards business owners. We heard a lot of discussion tonight about preferences for unplanned closures based on business interests, but think more public opinion should be considered.

- If there is a closure, it doesn't make sense to have one late in the year when the water is cold. We should keep the fishery open in the fall when there is less hooking mortality. At the last meeting, there was talk about eliminating the night ban but the DNR said they needed three total years of data before implementing that. Have you come to a conclusion on that?
 - Brian: Yes, we haven't run the numbers but need to look at that. We need to have a better understanding of what the harvest might be and share that with the bands first.