

Minnesota 1837 Fisheries Committee  
October 26, 2023, 10:00 am  
FDL Resource Management & Tribal Court Building  
28 University Road, Cloquet

1. Welcome and Introductions
2. Agenda approval – Approved as presented
3. Harvest update
  - a. State - handout

Walleye kill at 61,000 of 100,300 lbs. The state is still waiting on October harvest and tournaments. Perch at 5,901 lbs. Pike at 5,397 lbs. No burbot kill since the regulation is now catch and release only.

There was an increase in angling pressure in early August, likely a response to the walleye regulation change.

There was some discussion about possible increased angling efficiency associated with improved technology. Although tournaments account for a small proportion of total walleye catch/kill (especially with most now catch and release), it was discussed if using average tournament catch in modeling (instead of waiting on late reports) would help speed up stock assessment modeling. The actual estimates could be included in the following year's models.

Question about low winter catch rates. Winter effort elevated by multi-day trips, and actual catch rates are much lower for walleye in the winter.

- b. Bands – handout

Tribal harvest data were presented. Walleye harvest was 61,700 lbs., 6,000 lbs. of pike, 1,100 lbs. of perch. Tullibee netting will start in a couple of weeks.

4. Spring 2023 Mark-Recapture Population Estimates for Mille Lacs Lake

Presentation by Jones based on preliminary Schwarz report

- a. Walleye -

It was noted that certain models could be compared by AIC, and some could not. It was also noted that the pooled Peterson estimate is not the preferred model. Models needed to be stratified by sex and length. 4 models were stratified this way. Chen and Lloyd is preferred because it provides an unbiased estimate with moderate variance. Abundance of 14+ Walleye estimated at just over 600,000 fish. Discussion about 17+ and 19+ male and female walleye estimates for models. State will discuss with Carl to make those estimates.

## Northern Pike

The preferred method estimated 48,000 NOP 18 inches and longer. Low sample sizes required use of a pooled Petersen estimator. Pike tagging was tough because of ice and lack of Rum River trap. The NOP population appears to be stable. Discussion about the harvest of northern pike, and whether there should be more incentive to harvest pike. MNDNR noted that they preferred to have more big fish and fewer little fish. Discussed whether pike and walleye population estimates should be done in same year or not. The trade-offs among same year versus different year include crew fatigue and cost of additional recapture. The tribes recommended increased frequency of NOP population estimates.

### 5. Preliminary Fall 2023 Assessment Results for Walleye

#### a. State GN/EF/Forage results – handout

Highlights – Forage was lower in 2023 compared to 2022. Age-0 yellow perch and tullibee were both low. There has not been a tullibee year class in quite some time. MNDNR has heard from anglers that forage sampling missed much of the forage. Age-0 WAE catch rates appear to be at or below median and fish were small in size. There was a discussion about whether survival of walleye from age 0 to age 1 has changed over time. There was a recommendation that we look at the survival of juvenile walleye by looking at ratio of age 1 to age 0 for a year class.

Temperatures during gill netting were warmer than usual. Nets were set on September 17th. Some nets would have been pulled at warmer temperatures than is preferred. Catches in offshore nets seem to be declining noticeably more than for inshore nets. The length frequency distribution showed fewer age 0 walleye in 2023 than in 2022. Very few fish over 26 inches probably because the 2009-2012 year-classes were poor. Perhaps catchability was high in 2022 and low in 2023. The 2013 year class showed some growth since last year. Mature walleye lbs. per net dropped in both near and offshore nets. Age 1 walleyes appear to survive well, and the age 2 walleye appeared to grow very well. Only 2017 and 2013 year classes above median. Ages 3, 4, and 5 were below medians. Age 1 and 2 are above median.

Condition went down for all sizes in 2023. This suggests the potential for increased catch rates in creel survey. Catch rates of 9+ inch yellow perch has increased, especially in 2021 and 2022. Tullibee catch appears to have declined as well. In general, we are overdue for another year-class of tullibee (2014 last strong year class). Northern pike catch was the highest on record. Modal length about 25 inches, but large pike are still present. Note that despite changes in gill net catches, population estimates remain unchanged over time.

#### b. Bands EF results

GLIFWC's fall 2023 electrofishing survey results were presented. Overall, catch rates of age 0 and age 1 walleye were low, and the size of the age 0 walleye was generally small (age 0 23.7/mi, age 1 1.6/mile).

An analysis comparing the length of age 0 walleye in the fall to the age 1 walleye the next spring suggested longer walleye seemed more likely to survive from fall to spring than smaller walleye, and the percentage of walleye over 6 inches in the fall survey was related to a higher likelihood of a good year-class.

State and Bands will try to coordinate better so not in same part of the lake on the same night.

## 6. Initial discussions on Current Status of the Mille Lacs Lake Walleye Population

### a. 52 net summary

#### i. Spawning Stock

Current SSB from the fall gill nets is 14.5 lb per net. In the decision tree, this is consistent with Category 3.

#### ii. Condition

Walleye condition has declined from 2022 to 2023.

#### iii. Incoming Recruitment

The juvenile index was near 1, and will be finalized prior to the January season. The decision tree category will be finalized in January and appears to be between 2 and 3.

Discussion about the magnitude of the decline in gill net catch rates resulting in a recommendation to run models with and without the population estimates to see if current gill net catch is overly influential.

Modeling subcommittee is considering whether the juvenile index should include age-0 walleye.

## 7. Mille Lacs Harvest Policy

### a. Yellow Perch quota

There was a discussion about the role of large perch and the desire to have large perch. Perch has an action level at 20,000 lbs. and maximum of 73,000 lbs. total quota. Proposal is to leave the action level in place but remove the quota. Action point is pragmatic but may not be "safe." Is a cap necessary, fair, etc. Will revisit in January.

## 8. Overage Plan discussion

If there is a way to get to a plan where a slight overrun can be taken care of in the following year, there is interest from the State to consider at some point in the future. The State continues to hear from constituents that slight overruns should be allowed to be balanced. State is still interested in pursuing some kind of overage plan.

## 9. Other updates

a. State's winter 2024 Walleye regulation

The State's regulation will be the same as 2023 (HS2123, 1 bag). The bite is expected to improve slightly from 2022. If ice conditions are good, there will likely be more effort and harvest. There was some discussion about projected bite.

b. Results of 2023 Zebra Mussel survey

Mussels continue to show a gradual decline in density. Down to about ¼ of maximum in 2012.

c. Other

10. Identify steps to prepare for January 2024 meeting.

Modeling subcommittee will evaluate juvenile (age-0 to age-1) survival from electrofishing data.

Stock assessment models will be run with and without the PE. Juvenile index will be calculated and evaluated with and without age 0 data.

Next meeting will be January 17 and 18 at the Brainerd Arboretum. MNDNR will make sure that someone is there from the leadership team to work on the walleye and northern pike quotas in Brad's absence.

11. Open discussion

Need to come up with a single e-mail distribution list for all communications, or maybe a couple lists depending on content.

12. Adjourn

Attendance

Kelly Applegate

Mark Luehring

Carl Klimah

Conrad St. John

Kia Hmielewski

Adam Ray

Joe Dan Rose

Jon Gilbert

Eric Torvinen

Mark Duffy

John Hoenig

Susan Klapel

Tom Howes

Brad Parsons

Brian Nerbonne

Patrick Schmalz

Eric Jensen

John Kempe

Tom Jones