

Agenda
Minnesota 1837 Ceded Territory Fisheries Committee
9:00 a.m. July 20, 2021
Zoom Meeting

1. Agenda Approval and Introductions

2. 2021 Spring Band Harvest Summary (GLIFWC)

Harvest summary reports attached.

Spring harvest included 50,524 lb of walleye, about 11,700 lb remaining. Also included 2600 lb of northern pike, 115 lb of yellow perch.

No harvest occurred on any other water bodies.

Walleye catch rates in Tribal gillnets have increased since 2017 with recruitment of 2013 YC.

Yellow perch catches in Tribal gillnets have been low for last 4 years.

3. 2021 Mille Lacs Angler Harvest Update (MnDNR)

Harvest summary report of the State kill through June 30 attached.

Walleye kill was at 48,398 lb. State harvest of Yellow Perch, Northern Pike, and Burbot were all low. Tullibee harvest was approximately 20,000 lb last winter.

Anglers have released approximately 550,000 walleye through June 30.

Water temperatures were warm. Catch rates were above median, but lower than other recent years. The lower walleye catch rates are likely forage driven. Effort was approximately half of 1999-2020 median. Lower summer pressure was likely the result of a later fishing opener, restrictive regulations and lower (but still good) catch rates.

Current water temperatures are in mid 70s. Peak temperatures usually occur in late July or early August.

4. 2021 Spring Electrofishing Survey for Juvenile Walleye in Mille Lacs Lake (GLIFWC)

Spring electrofishing report attached.

Bands conducted spring juvenile walleye electrofishing in early June. Shoreline was subsampled (see map on last page).

Collected 347 age 1 walleye (8/mile). Catch rate for age 2 was 3 per mile.

Other data included length-frequency and CPE by segment.

Observed juvenile burbot in some segments.

Compared subsampled sites to whole lake data. Patterns in the entire shoreline sampling looks very similar to patterns in the subsampled data indicating that the reduced sampling station survey is providing same information.

2020 year class was above the median for the spring electrofishing data indicating a potential decent year class.

5. Data Exchange and Review

- a. Mille Lacs Lake – Jensen sent reports to Bands.
 - i. Creel Survey Report for 2020 Open Water and 2020-21 Winter Seasons (MnDNR)
 - ii. 2020 Large Lake Sampling Program Assessment Report (MnDNR)
- b. Other Lakes 2020 – Tom will get survey reports sent out this week.
 - i. Summer Assessments (MnDNR)
 - ii. 2020 Creel Reports (MnDNR)

6. Mille Lacs Harvest Policy

- a. Review & discuss current policy –

Review

In 2021, harvestable surplus was set at the same level as 2020. State had an allocation of 87,000 lb with a 100,000 lb conservation cap. FTC would reconvene if state harvest approached quota to see if we could avoid an overage.

At January 2021 meeting, Katie Draper proposed no overages for state. There was some discussion at that meeting, but no decision was made.

Also, there was some discussion that fishery goals should be more instrumental in setting harvest levels, but a process not established.

Discussion

State's objective is to set regulations such that target kill is well below quota but wants the flexibility to remain open if small overages won't lead to biological consequences.

Mille Lacs Band is agreeable to overages as long as a conservation cap is set and not exceeded, and the State is willing to communicate with the bands about alternatives to slow harvest if necessary in the event that the State kill approaches the State quota.

It was noted that previous 5 year overage plans had nearly all (if not all) of the components discussed (a quota, conservation cap that varied based on population condition, mechanism for addressing small overages).

Modelling Subcommittee will work to develop guiding principles that could be used to establish sideboards for setting harvest levels and developing a safe and equitable overage mechanism. Guiding principles should include processes for communicating concerns and considering action before allocations are reached. It may be useful to reconsider elements of previous overage plans.

The Modelling Subcommittee will share ideas with the full FTC sometime in September so State and Bands can discuss internally before the October meeting, and discuss jointly at October meeting. The goal is come to an agreement on a suite of best management practices and guiding principles that can be used at the January meeting to set the harvest level, conservation cap, and overage mechanism.

- b. Discuss harvest policy for next year (see above)
 - i. Single year or multi-year
 - ii. Overage mechanism

7. Update on Management and Research Activities

a. Yellow Perch research (Research Subcommittee)

Heinrich presented a summary of yellow perch historical data (attached).

- Perch harvest has declined since about 2000 with very little harvest occurring in recent years.
- Catches from inshore and offshore gill nets showed the same pattern. Gill net CPE and angler catch were poorly related in the 1980s (low gill net CPI when angler catch was high), but have shown similar patterns since mid-1990s.
- Fall gill net length-frequencies from 1995-2005 had lots of “age-1” sized fish with declining as numbers of larger fish. Starting in 2006, the catch of smaller perch declined with subsequent poor recruitment into larger size groups several years later.
- YOY yellow perch in forage nets varied by depth with the highest catch rates in shallower forage nets and the lowest catch rates in the deepest nets. When weighted by depth, forage nets show strong 2013, 2017, and 2020 perch year classes. Note that the forage net survey began in 2010 after perch abundance had already declined.
- The steep declines in yellow perch catches correspond with increases in zebra mussels and spiny water flea.
- Perch growth rates have not changed, but length at maturity has decreased.
- Data suggests that the decline in perch numbers is not the result of harvest.
- Surplus production models were fit to various time periods, but the models performed poorly. Previous attempts to fit an SCAA to perch data were also unsuccessful.
- State is collecting perch data monthly this summer using forage gill nets.

There was a discussion about whether or not a good perch index available. The fall assessment netting currently appears to be a useful index of perch abundance now, even though it hasn't always been.

It was recommended that the research group look into alternate methods for setting safe harvest levels for perch, such as Ontario's SPOF report using MEI or methods for data-limited systems. As an example, one method compares average catch over last three years to average catch over last six years, and adjusts the quota according to observed ratio. Another example was DCAC – depletion corrected average catch.

b. Cisco harvest level - deferred

c. Spring Northern Pike sampling (MnDNR)

A total of 238 northern pike were sampled this spring using trap nets set at several locations. No fish over 40 inches were observed with most fish 20 to 30 inches (attached)

d. Acoustic Tagging Study (Mille Lacs Band and GLIFWC)

Smallmouth and or muskellunge may be tagged this fall or next spring. They are currently working a manuscript and may be ready to share findings related to study objectives in January.

e. DNR management planning process for State's fishery (MnDNR)

Rewriting to address edits. Moving forward slowly.

f. Other

There was a discussion about the purpose of the northern pike PE. Cited purposes included to anchor and improve the surplus production model. Right now, the surplus production model suggests a population increase, while fall gill nets show a decrease.

Concerned about effort required to do both surveys in the same year. GLIFWC offered that they can probably provide at least as much assistance as in the past.

It was determined that the acoustic study might be able to provide information on northern pike movement that could aid in recapture sampling.

8. Summer and Fall 2021 Survey Plans

a. MnDNR Assessments in Mille Lacs and Other Lakes

Continuing summer forage netting. Fall assessment surveys will include the forage gill net survey, walleye electrofishing survey, and the standard gill net survey. Water and zooplankton samples are being collected monthly. Zebra mussel survey is scheduled for early August.

b. GLIFWC Assessments in Mille Lacs and Other Lakes

Fall electrofishing survey for walleye. Implanting acoustic tags in SMB and/or MUE.

No plans for other lakes at this time.

9. Planning for Mille Lacs Lake Data Exchange and 2021 Modeling

a. Identify Dates for Exchange of Modeling Data

First data exchange November 19, earlier if data is ready.

Final data exchange December 1.

First model exchange December 17.

Final model exchange January 12.

b. Identify Staff Contacts for Joint Mille Lacs Lake Walleye Modeling – same as previous

10. Next Meetings

Tuesday October 26. Fond du Lac. Can probably be in-person or hybrid.

January 19 & 20, 2022

Reggie requested that the FTC consider having the State and Bands share their proposed SHL several days in advance of January meeting. This will be discussed at the October meeting.

Attendance –

Tom Jones – MN DNR

Melissa Trembl

Brad Parsons

Brain Nerbonne

Tom Heinrich

Eric Jensen

Patrick Schmalz

Brian Borkholder – Fond du Lac

Thomas Howes

Reggie DeFoe

Joe Dan Rose – GLIFWC

Mark Luehring

Ben Michels

Aaron Schulz

Frank Bajenske

Savannah Obert-Pfeiffer

Kia Hmielewski

Kelly Applegate – Mille Lacs

Maria Costello

Carl Klimah

Lyle Chapman – Lac du Flambeau

John Hoenig – Consultant to the Bands

Senator Carrie Ruud