

Minong Flowage Comprehensive Fisheries Survey 2023

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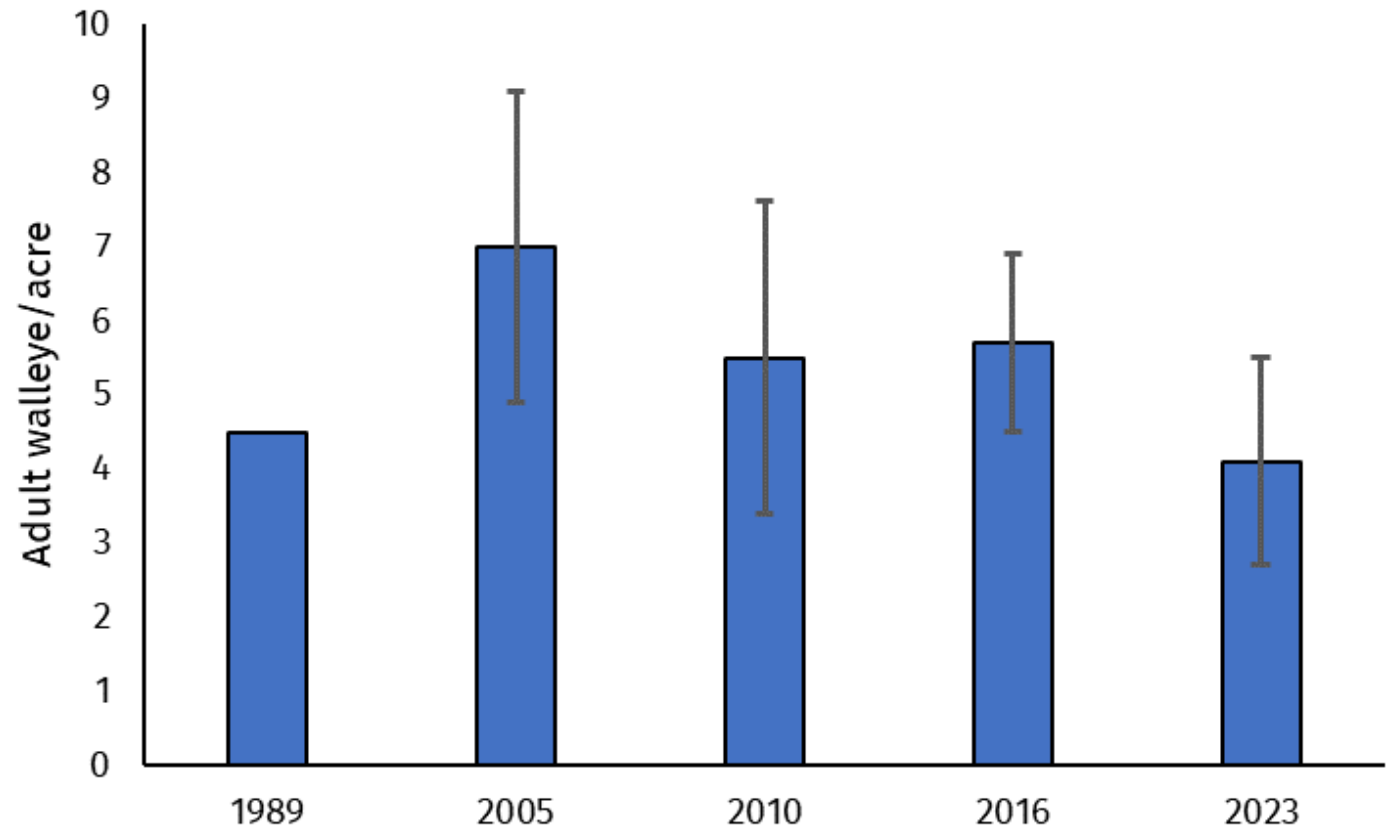
What We Did



- Netted for pike/walleye
- Electrofished the Totagatic River upstream for spawning walleye/Flowage later
- Electrofished the shoreline for bass and panfish
- Fall electrofished to check walleye reproduction
- **First Creel Survey**

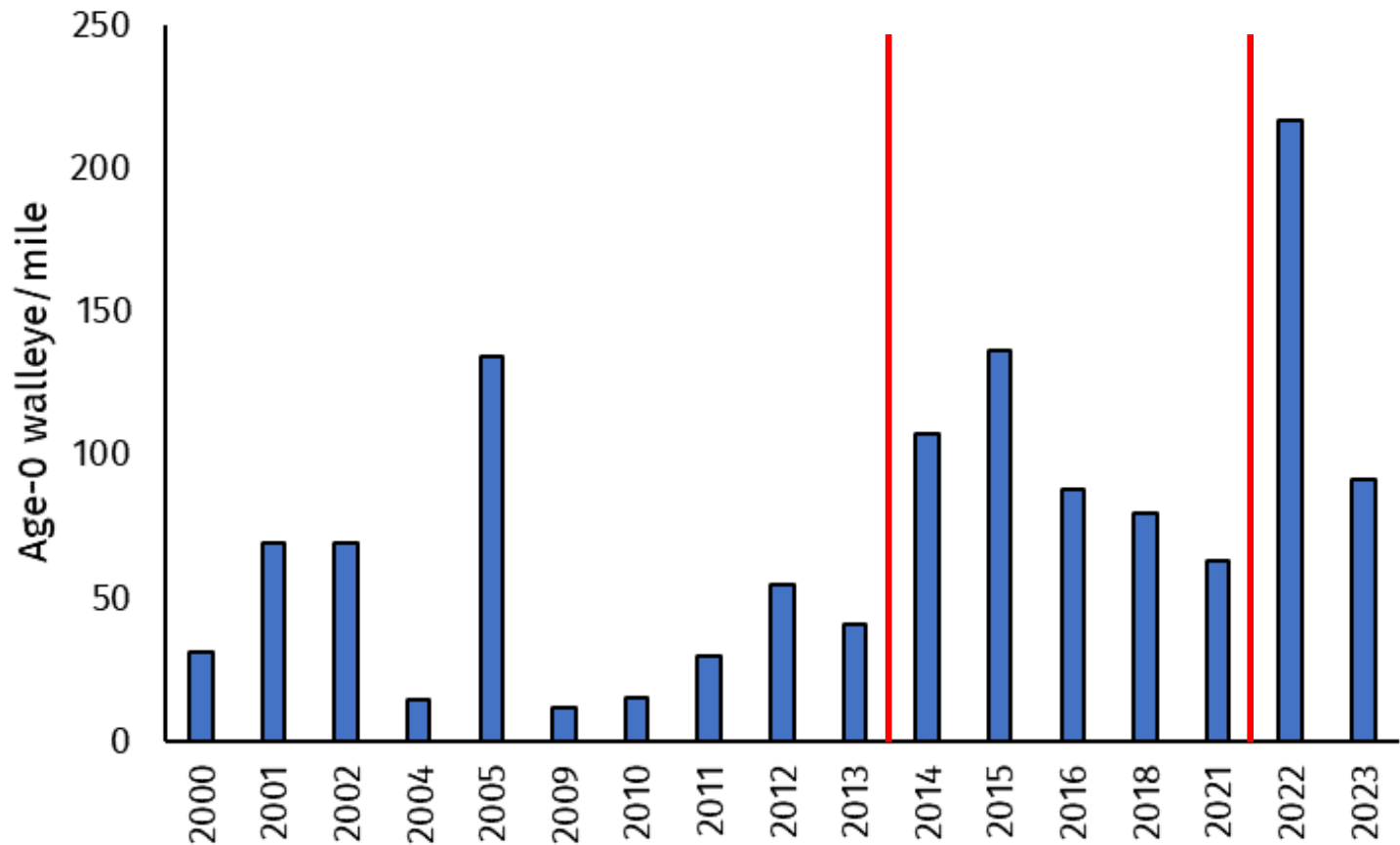
Walleye

- 4.1 adult walleye/acre
- Adult population was lower than 2016 survey (5.7 fish/acre)
- Average size was similar (14.7" vs 14.9")
- Still has great recruitment (next slide)
- Growth improved for some ages



Young Walleye

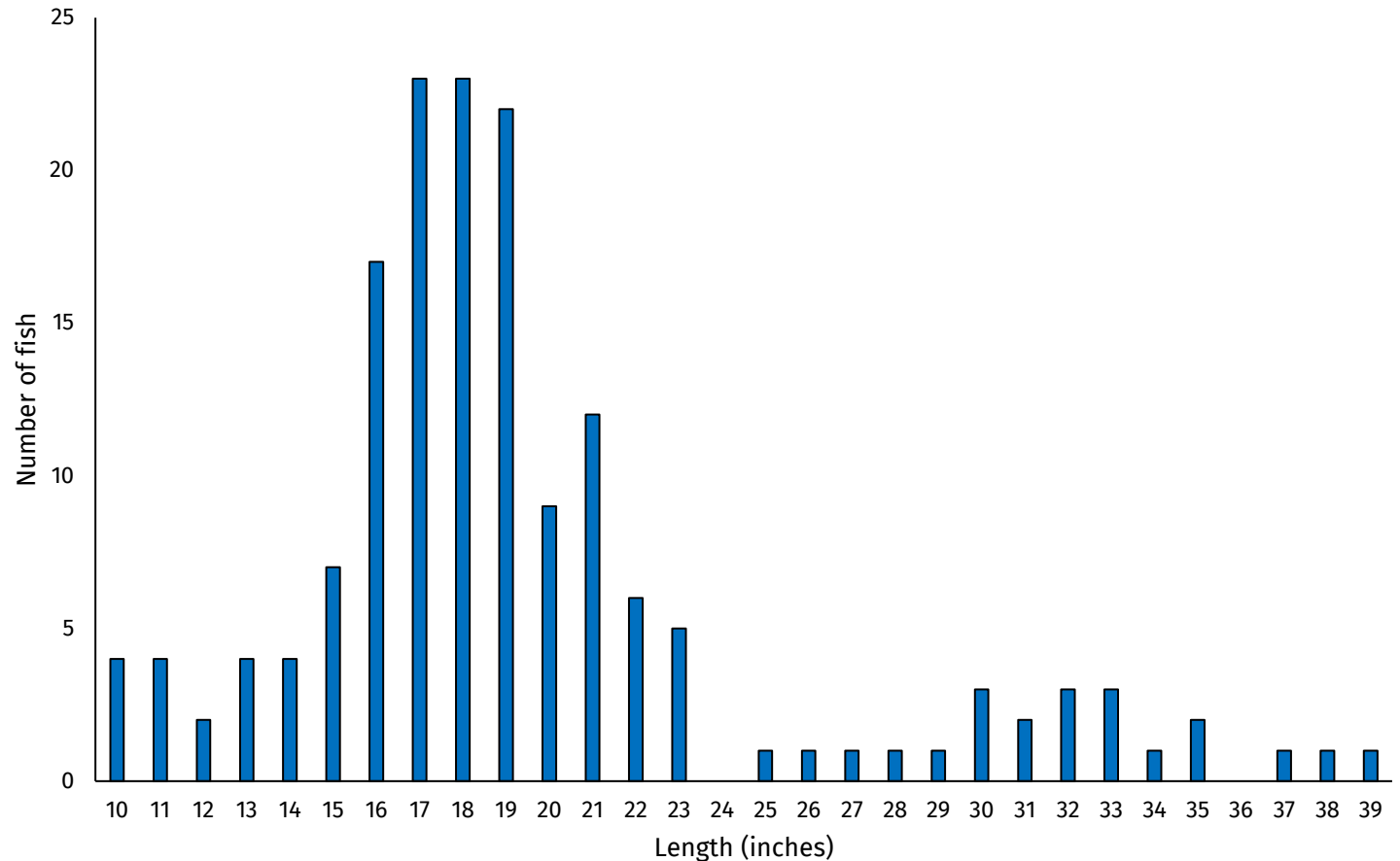
- Abundant young of year
- 2022 was the largest year class since 2000
- Best natural reproduction rates in the county
- Drawdowns appear to benefit young walleye recruitment
- Harvest creates more space for young walleye





Northern Pike

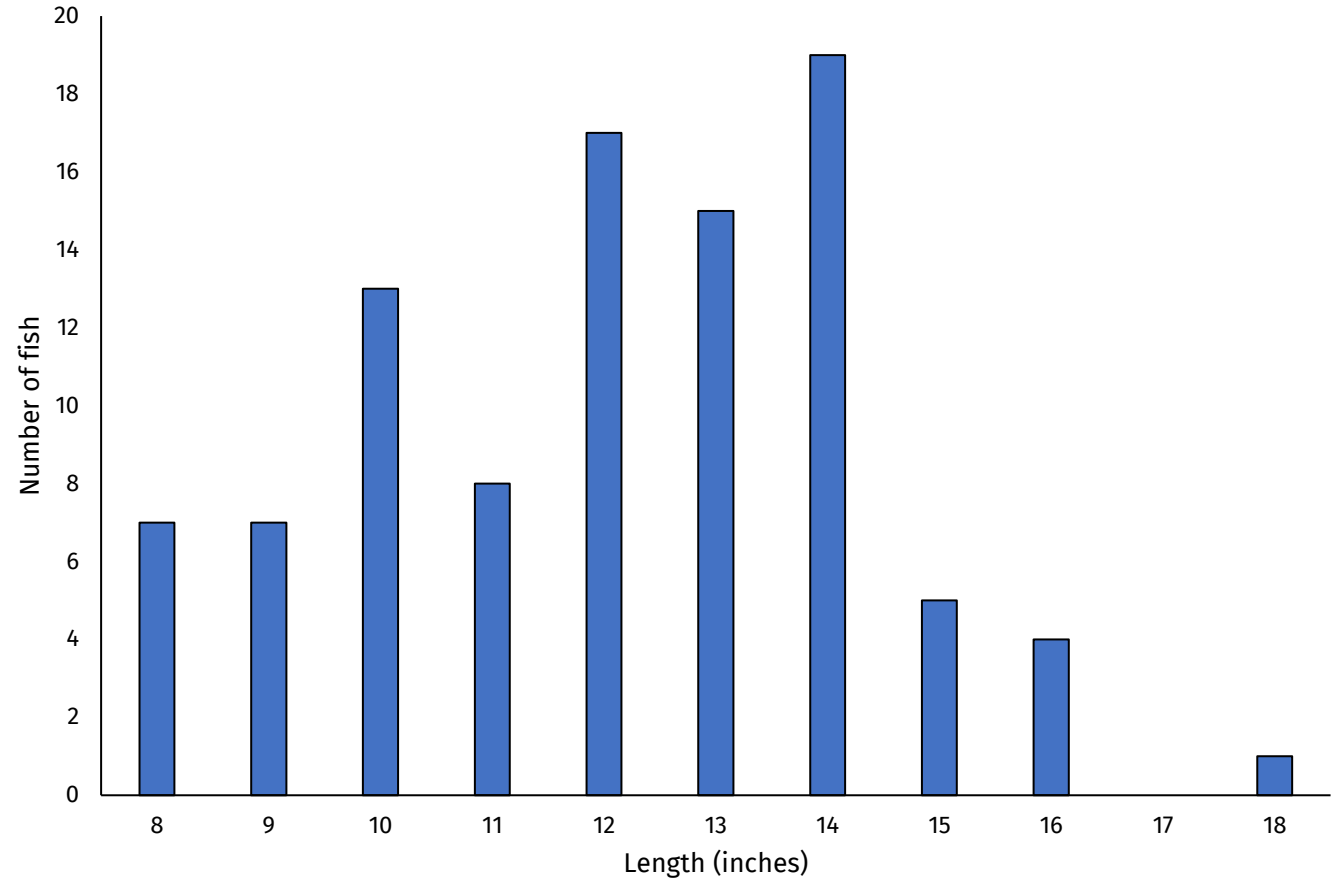
- 2016 avg = 19.7 inch
- 2023 avg = 19.6 inch
- Catch rate was similar to 2005
- Size structure similar to rest of lakes in the area



Smallmouth Bass



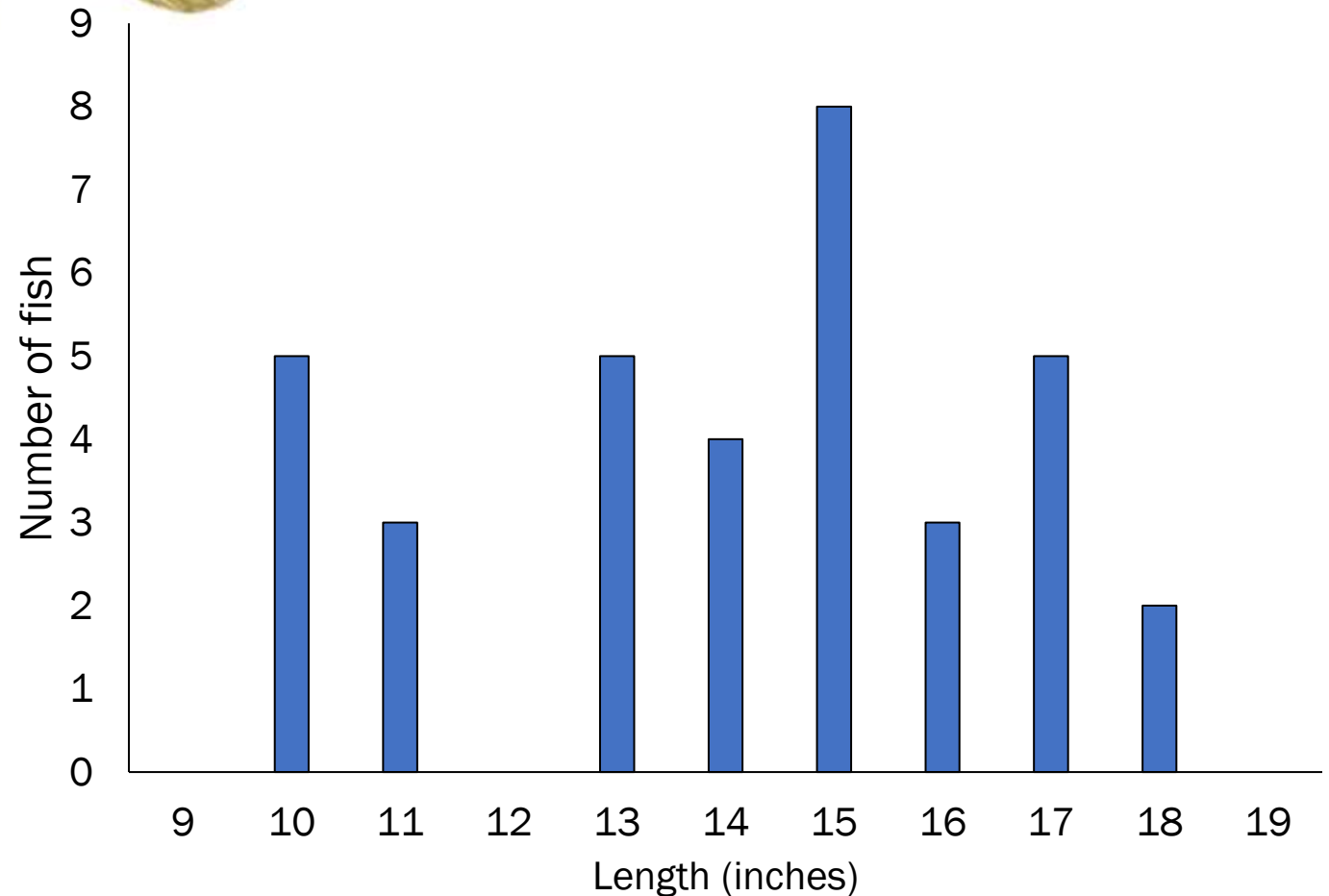
- Increased catch rate from 7.7 fish/mile to 16 fish/mile
- Average size increased from 11 inches to 12.3 inches
- Growth was above average for most ages





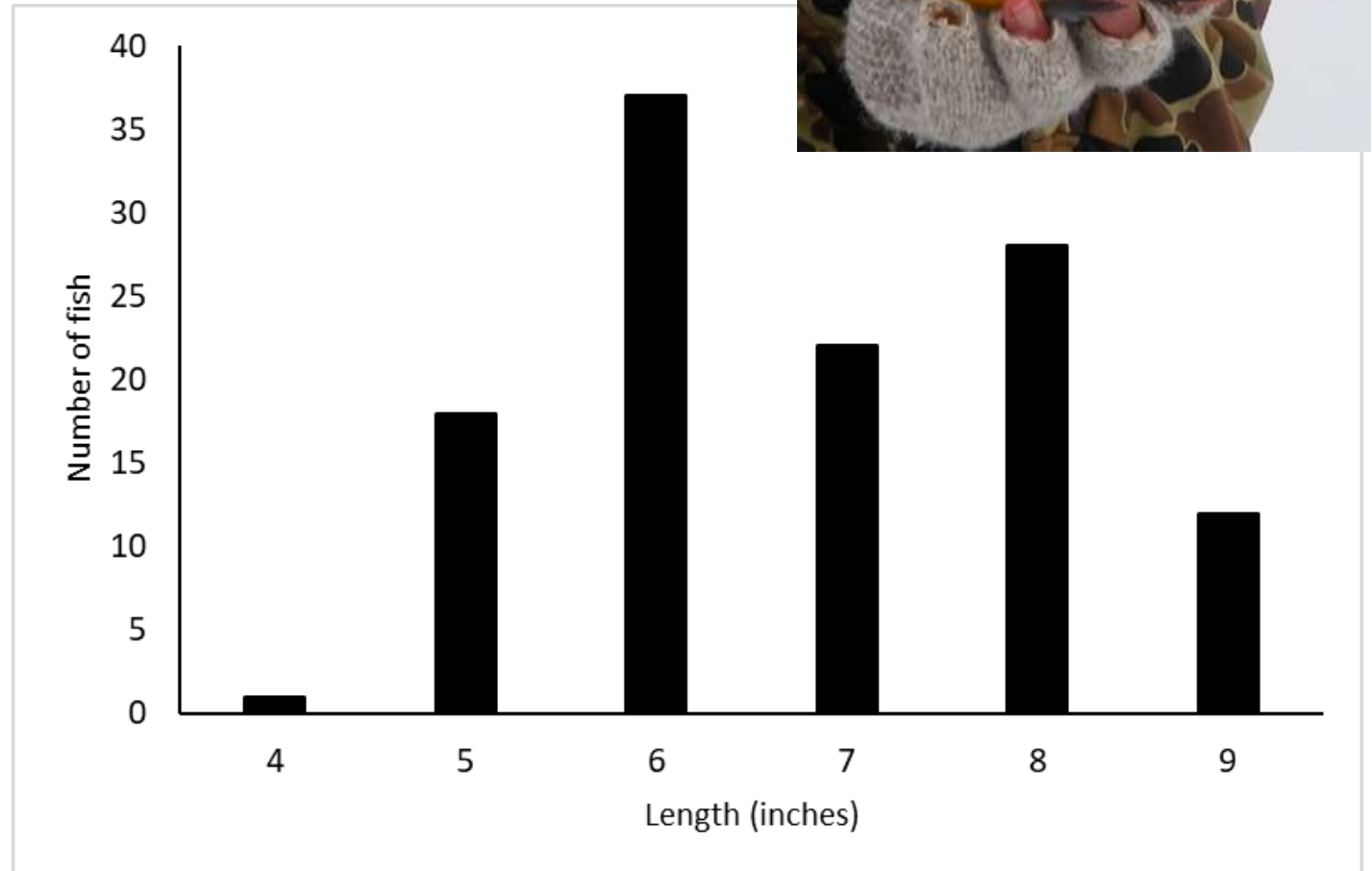
Largemouth Bass

- Low density remains in flowage
- Same rate as 2016 at 5.8 fish/mile
- Average size same – 14.4 inches
- Growth was good for Complex-Cool-Clear lakes in Wisconsin



Bluegill

- 7.2-inch average
- more abundant than 2016
- Catch rate increased to 79 fish/mile in 2023
- Growth is average to above average
- Likely benefit from abundant young walleye

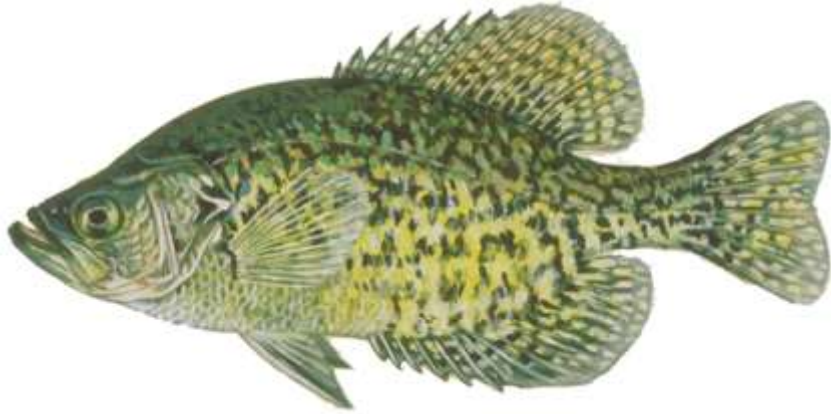


Muskellunge

- In 2023, no muskie were captured, but one was observed during fall electrofishing >30 inches.



Other species



- Only 2 common carp were observed during the survey
- Other panfish included: black crappie, yellow perch, rock bass

2023-24 Creel Survey

- 11.5 hours/acre
- Less than Washburn County (28.3 hrs/acre) and Ceded Territory (32.0 hrs/acre)
- Most Angling occurred in May/June
- 1st - Walleye (48%)
- 2nd - Crappie (20%)
- 3rd - Bluegill (14%)
- Northern Pike, Largemouth Bass, and Smallmouth Bass



Average size of harvest

- Walleye-13.8 inches
- Black Crappie – 10.7 inches
- Bluegill – 7.5 inches
- Northern Pike – 21.2 inches
- Largemouth Bass – 15.8 inches
- Smallmouth Bass – 14.1 inches



Drawdown

- Walleye and smallmouth bass still seem to benefit
- Northern pike, largemouth bass, and bluegill did not show that they were impacted by winter only drawdown



No vegetation management

IF EXTREMELY HIGH LEVELS of EWM/aquatic vegetation occur

- Favors Largemouth Bass, Bluegill, and Northern Pike
- Largemouth Bass populations could take off
- This hasn't occurred on the flowage, even when EWM was abundant

Using frequent drawdowns

IF DRAWDOWNS ARE USED FREQUENTLY

- Favors Walleye, Smallmouth Bass, other riverine fish species
- Potential long term impacts on bluegill and largemouth bass (depending on frequency)
- May create a window for carp
- Timing of the drawdown is important

Fisheries management recommendations

- No regulation changes are recommended
- Continued monitoring of fish populations
- Give input on future drawdowns especially related to timing/frequency
- Continue fish sticks work and habitat

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"WILD WISCONSIN:
OFF THE RECORD"

Balancing Waterfowl and Wild Rice: Assessing the Impacts of Goose and Swan Herbivory

Funding: Pittman-Robertson Federal Aid in Wildlife Restoration

Wisconsin DNR Office of Applied Science



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Background

- Wild rice (*Zizania palustris*; *manoomin*) is a culturally, economically, and ecologically important native plant species in the Great Lakes Region
- Wild rice has declined in distribution and abundance due to wetland loss, climate change, water quality degradation, and other factors
- Wild rice and waterfowl have long co-existed, and rice seeds are an important food source for migrating waterfowl. However, resident Canada Goose populations have increased, and efforts to restore Trumpeter Swan populations have been very successful.
- There is increasing concern that intense grazing or herbivory by geese and swans is negatively impacting wild rice and restoration efforts.
- Collaborative restoration efforts in the St. Louis River Estuary by tribal and state agencies have been successful in reducing goose grazing through the use of exclosures and targeted goose removals.
- While there are growing concerns about overgrazing, and mitigation projects are underway, the impacts of goose and swan grazing on wild rice have not been directly measured.



Image of 10 ft by 100 ft enclosures in the St. Louis River Estuary, demonstrating how herbivory by geese outside of the enclosures can be severe.



Deploying a 10 ft by 10 ft floating enclosure with another enclosure visible in the background



Deploying a 10ft by 10ft floating enclosure with another enclosure visible in the background

Walleye Spearing Harvest Numbers

