



2022 SPRING FISHERIES SURVEY SUMMARY

MOOSE LAKE, SAWYER COUNTY

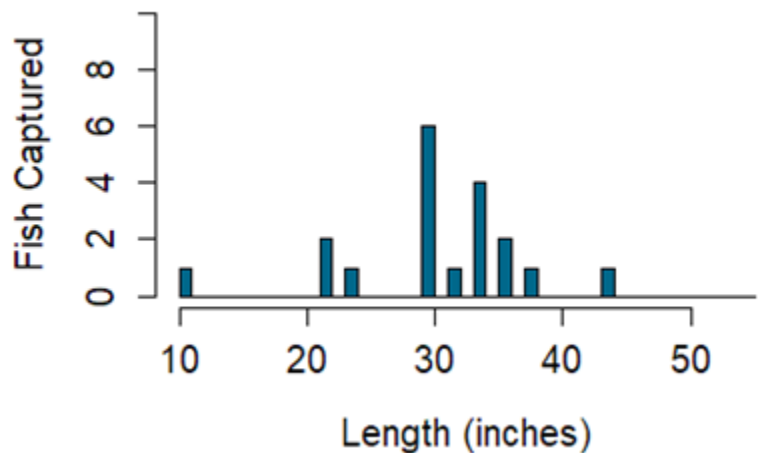
Report by Max Wolter

The Wisconsin Department of Natural Resources (DNR) Hayward Fisheries Management Team conducted a fyke netting survey on Moose Lake from May 11-13, 2022. The primary species targeted were Black Crappie and Muskellunge, but useful data were also gathered on Walleye, Smallmouth Bass and Yellow Perch. Eight nets were set overnight for two nights, which resulted in 15 total net-nights of effort (one net was compromised). This survey was also used as a field education opportunity for fisheries and wildlife students from Northland College, who assisted. Quality, preferred and memorable sizes referenced in this summary are based on standard proportions of world record lengths developed for each species by the American Fisheries Society.

MUSKELLUNGE



Captured 1.3 per net-night \geq 20 inches	
Quality Size \geq 30"	44%
Memorable Size \geq 42"	11%

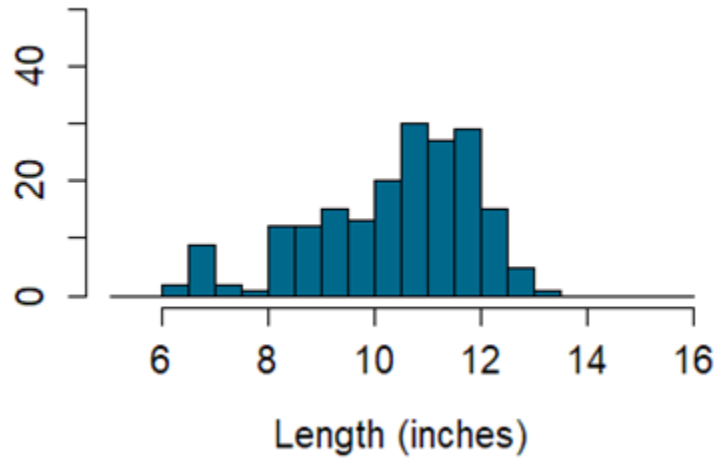


BLACK CRAPPIE



Captured 13 per net-night \geq 5 inches	
Quality Size \geq 8"	93%
Preferred Size \geq 10"	66%

Fish Captured

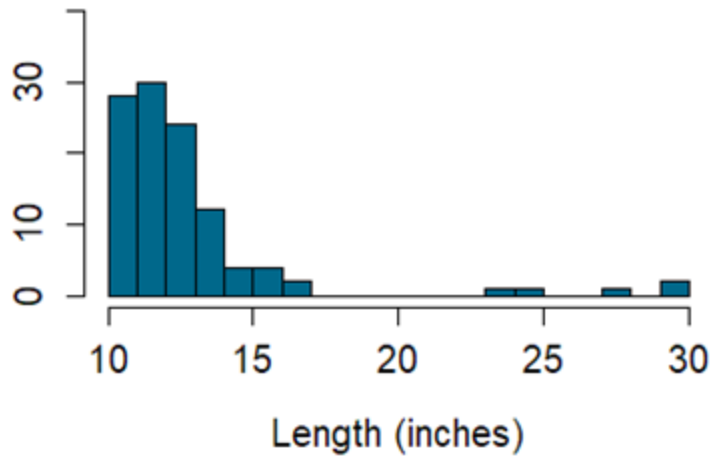


WALLEYE



Captured 9 per net-night \geq 10 inches	
Quality Size \geq 15"	10%
Preferred Size \geq 20"	5%

Fish Captured

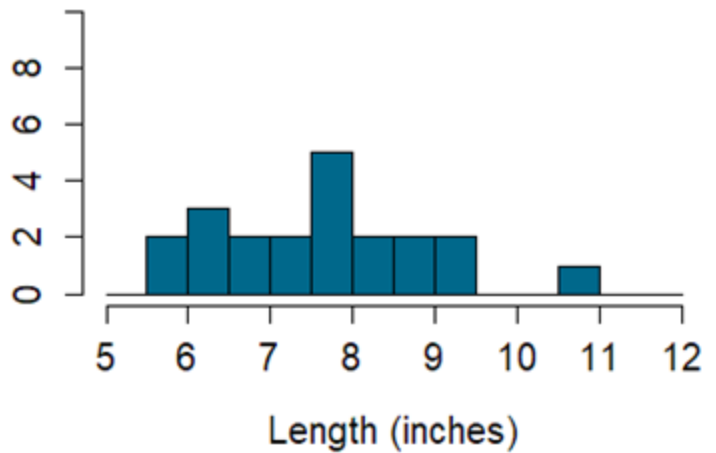


YELLOW PERCH



Captured 1.4 per net-night \geq 5 inches	
Quality Size \geq 8"	33%
Preferred Size \geq 10"	5%

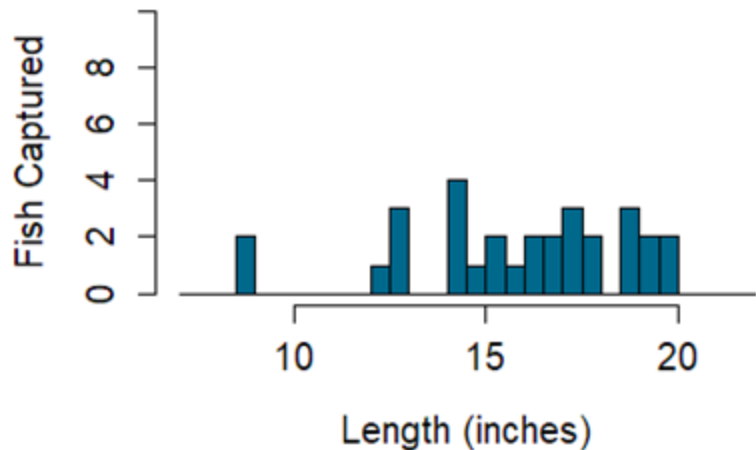
Fish Captured



SMALLMOUTH BASS



Captured 2.0 per net mile \geq 7 inches	
Quality Size \geq 11"	93%
Preferred Size \geq 14"	80%
Memorable Size \geq 17"	40%



SUMMARY OF RESULTS

This netting survey was well-timed for crappie, Yellow Perch and Muskellunge. Nets were set as the water warmed, and these species were moving into shallow areas. Net locations were consistent with those used in the past and covered a variety of habitat types. Water temperature was above the ideal range for capturing Walleye, but results are still included in this report. Smallmouth Bass are typically not surveyed with fyke nets, but data collected in this survey is still informative. Moose Lake is a “Complex-Cool-Dark” lake based on the DNR Fisheries lake class system. “Complex” refers to the number of gamefish present in the fish community. “Cool” refers to the lake being cooler than average, and “Dark” refers to the water clarity or turbidity. This report will compare catch rates from Moose Lake in 2022 to other lakes of this same type and past surveys.

MUSKELLUNGE

Muskellunge are a featured species in Moose Lake, and the waterbody has a reputation as an “action” fishery with a lower average size. This survey found that status to be largely unchanged. Muskellunge were captured at a high rate compared to other lakes within this class (greater than the 75th percentile). The large majority of Muskellunge captured were less than 40 inches in length, which is typical of Moose Lake. However, one 43-inch Muskellunge was captured, which is one of the largest Muskellunge ever captured in a survey of Moose Lake. Still, anglers should expect smaller, yet abundant, Muskellunge in this waterbody. One “Tiger Muskellunge” was captured during this survey. Tiger Muskellunge are the naturally-occurring hybrid between Muskellunge and Northern Pike. Northern Pike are a relatively new component of the fishery. Muskellunge are managed with a 40-inch minimum length limit and 1-fish daily bag limit.

BLACK CRAPPIE

The Black Crappie catch rate was greater than the 75th percentile for lakes in this class and was comparable to recent past surveys of Moose Lake. The size of Black Crappie was excellent, with most being over 10 inches and some even eclipsing 12 inches. The daily bag limit for panfish on Moose Lake is 10 (for all panfish species combined).

WALLEYE

This survey was not ideally timed for Walleye, yet many were captured. This finding matches Moose Lake's history as having a high-density Walleye population. Most of the Walleye captured were less than 15 inches, which is also characteristic of Moose Lake. However, a few very large Walleye appeared in the survey and may give anglers hope that a trophy Walleye could be caught in Moose Lake. There is no minimum length limit for Walleye in Moose Lake, but only one Walleye over 14 inches may be kept, and the daily bag limit is three.

YELLOW PERCH

Yellow Perch were captured at a low rate and with moderate size. The daily bag limit for panfish on Moose Lake is 10 (for all panfish species combined).

SMALLMOUTH BASS

Smallmouth Bass are not a typical target in DNR netting surveys. However, enough were captured in this survey to provide at least some information about the population. This is important because DNR electrofishing surveys (the usual method for targeting Smallmouth and Largemouth Bass) are very uncommon on Moose Lake due to the extremely dark stained water and boating hazards near shore. Moose Lake Smallmouth Bass collected in this survey demonstrated exceptional size, with a large majority of those captured being larger than 14 inches. Smallmouth Bass in Moose Lake likely benefit from access to the rivers that feed into the lake and may use these habitats at different points in the year. There is a 14-inch minimum length limit for bass and a five fish daily bag limit.



A student holds a Muskellunge during the 2022 fisheries survey on Moose Lake as DNR Fisheries Technician, Evan Sniadajewski, looks on. Students from Northland College and lake association volunteers assisted DNR with this survey. Photo courtesy of Northland College

OTHER SPECIES

Sixteen total species were captured in this survey, including those described above. Other species captured included Black Bullhead, Bluegill, Largemouth Bass, Northern Pike, Pumpkinseed, Rock Bass, Shorthead Redhorse and Yellow Bullhead. Some of these species are of interest to anglers, but not enough were captured to provide meaningful insights (e.g., only eight Bluegill and six Largemouth Bass were captured). The capture of a Northern Pike was of interest. This is the first DNR survey in Moose Lake where a Northern Pike was caught. Pike have been present farther up in the watershed but have taken longer to fully establish themselves in the dark water of Moose Lake. This survey provides some evidence that may be changing.

Survey Crew: Max Wolter, Scott Braden and Evan Sniadajewski, with volunteers Jim Onarheim, Joel Miller and students from Northland College.

Reviewed and approved by Aaron Cole