



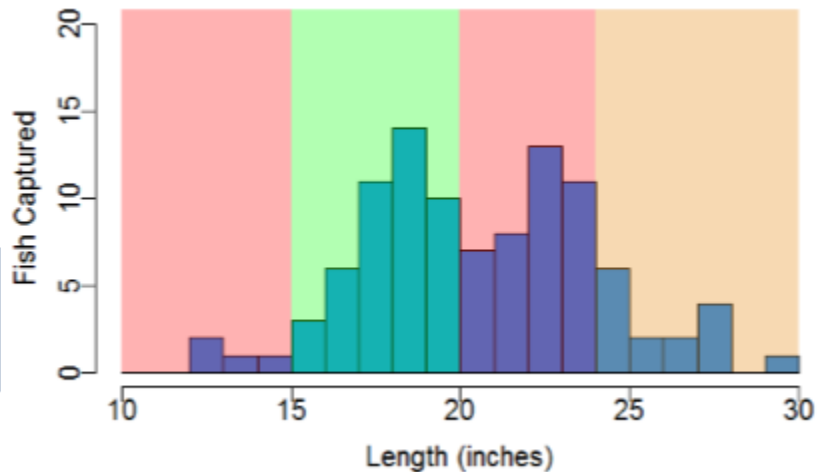
Spring Fisheries Survey Summary Lost Land Lake, Sawyer County, 2018

The Hayward DNR Fisheries Management Team (with the Governor Thompson Hatchery Team) conducted a fyke netting survey on Lost Land Lake from May 6-9, 2018 to assess the adult walleye, muskellunge, northern pike, yellow perch, and black crappie populations in the lake. An electrofishing survey conducted on May 22, 2018 documented the status of bluegill, smallmouth bass, largemouth bass, and non-game species but also provided information on juvenile walleye. Four miles of shoreline were shocked. 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.

Walleye (Adult)



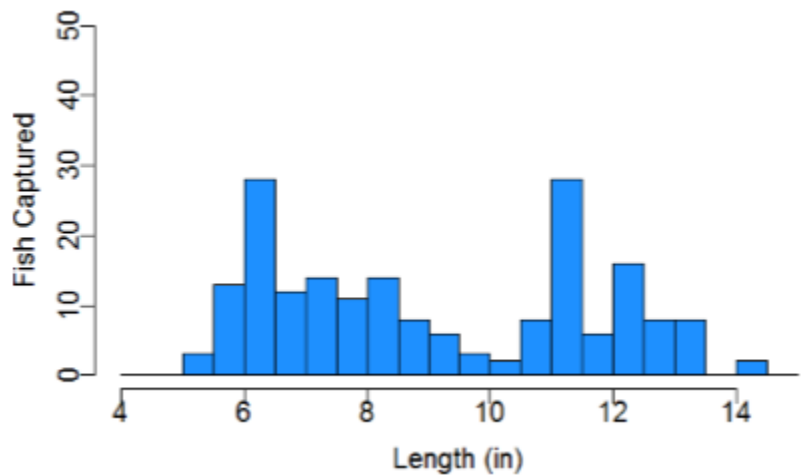
Captured 8 per net-night \geq 10 inches	
Quality Size \geq 15"	96%
Preferred Size \geq 20"	53%



Walleye (Juvenile)



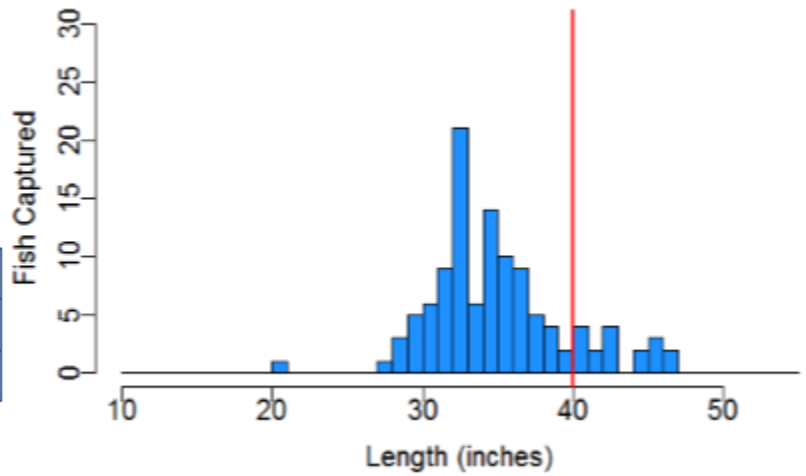
Captured 48 per mile \leq 15 inches



Muskellunge



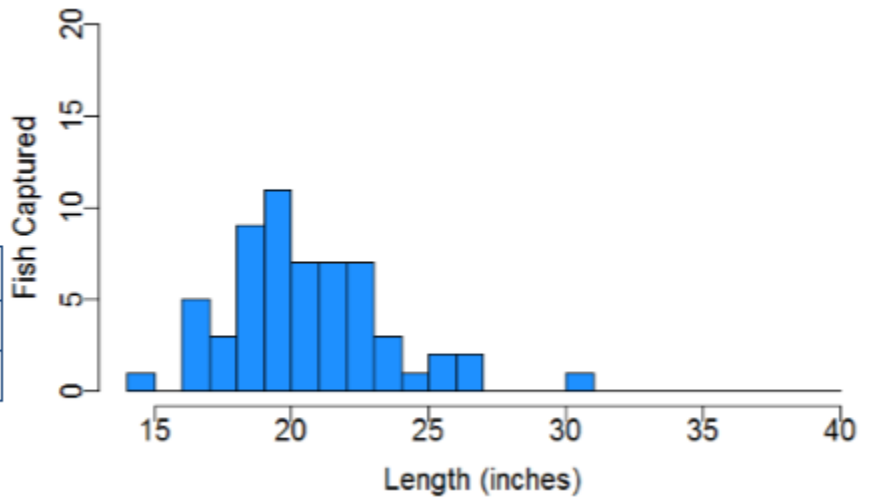
Captured 0.5 per net-night ≥ 20 inches	
Quality Size ≥ 30"	100%
Memorable Size ≥ 42"	10%



Northern Pike



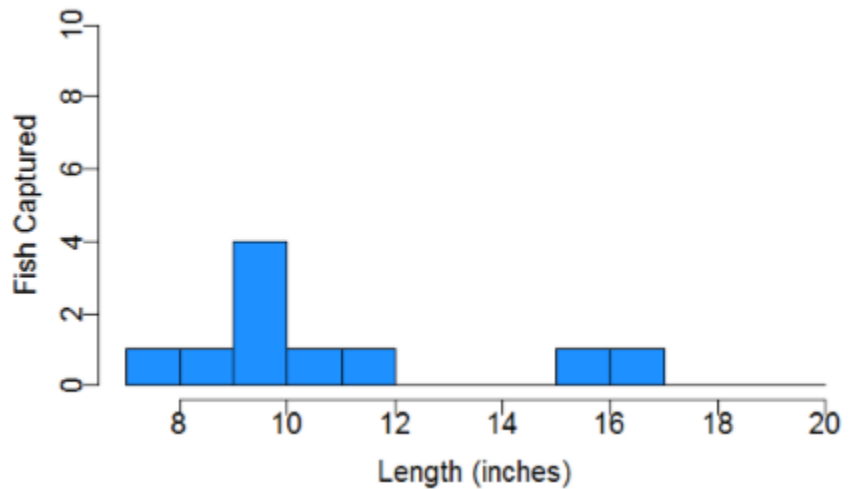
Captured 5 per net-night ≥ 14 inches	
Quality Size ≥ 21"	39%
Preferred Size ≥ 28"	2%



Smallmouth bass



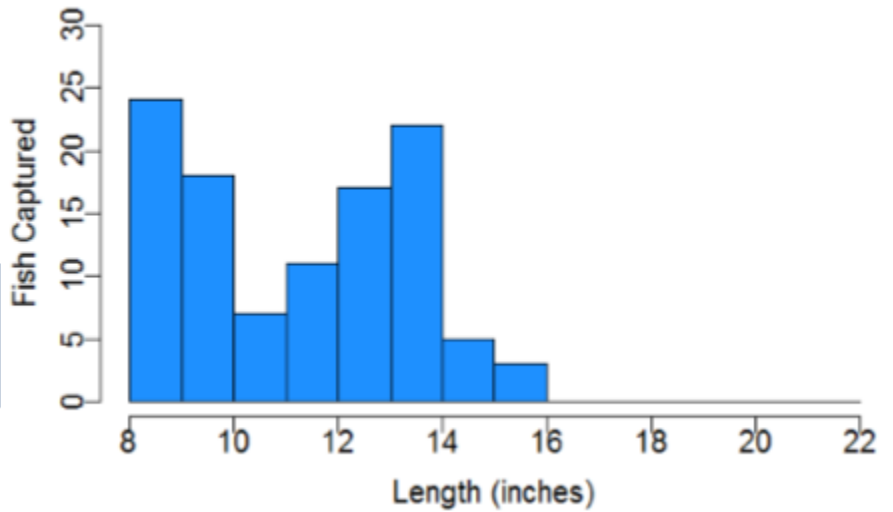
Captured 3 per mile ≥ 7 inches	
Quality Size ≥ 11"	30%
Preferred Size ≥ 14"	20%
Memorable Size ≥ 17"	0%



Largemouth bass



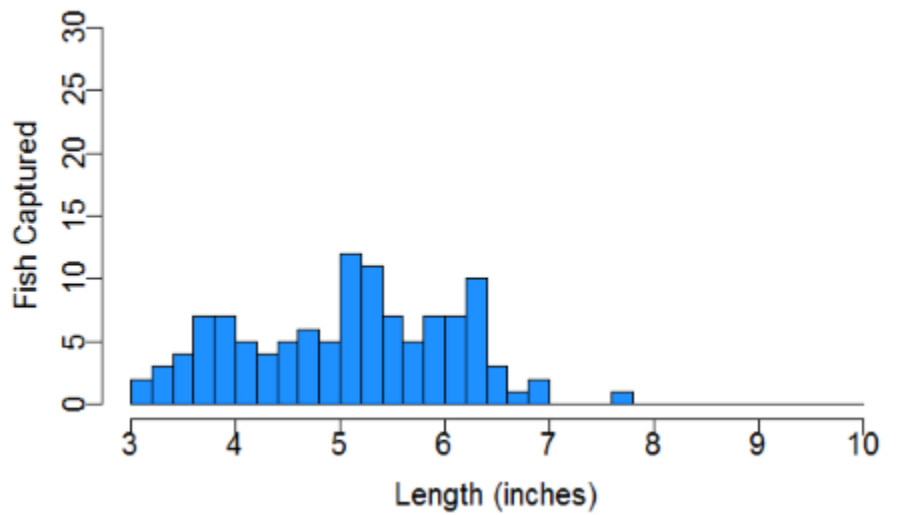
Captured 27 per mile \geq 8 inches	
Quality Size \geq 12"	44%
Preferred Size \geq 15"	3%



Bluegill



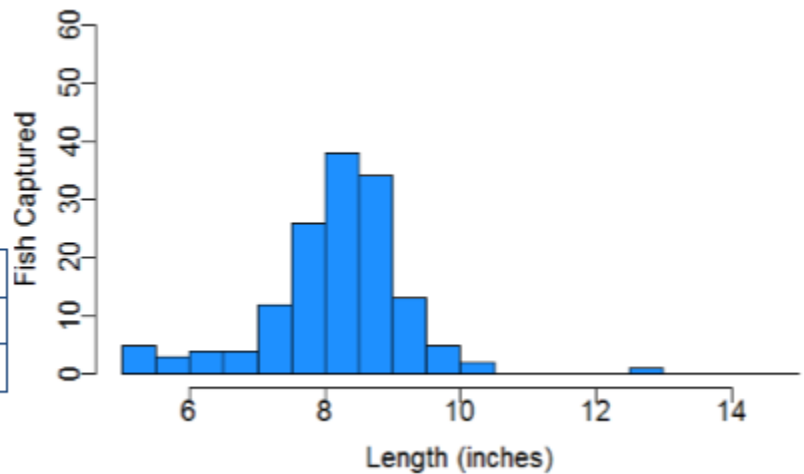
Captured 114 per mile \geq 3 inches	
Quality Size \geq 6"	21%
Preferred Size \geq 8"	0%



Black Crappie



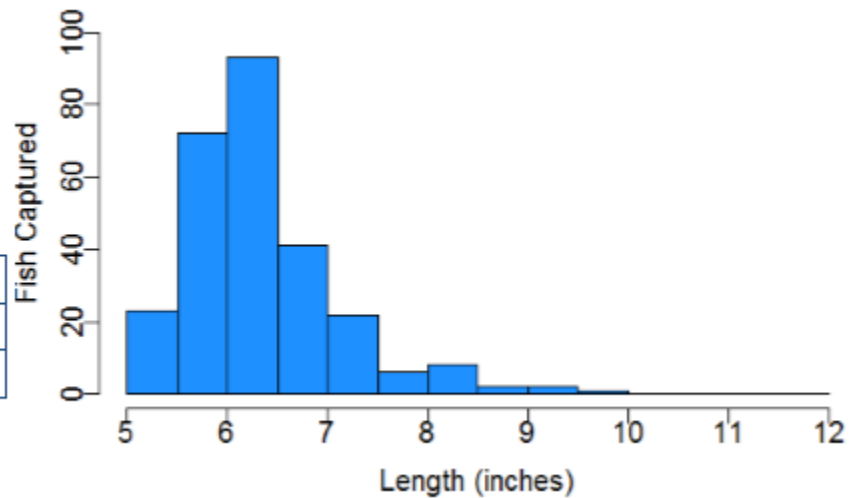
Captured 11 per net-night \geq 5 inches	
Quality Size \geq 8"	63%
Preferred Size \geq 10"	2%



Yellow Perch



Captured 22 per net-night \geq 5 inches	
Quality Size \geq 8"	5%
Preferred Size \geq 10"	0%



Summary of Results

The netting portion of this survey coincided with muskellunge egg collection activities being conducted by hatchery staff. As a result, the timing and net locations during our netting efforts were slightly more favorable for muskellunge and crappie compared to walleye. Still, adequate numbers of each species were captured to characterize size and abundance.

Adult walleye were captured at a moderate rate of 8 per net night with many large females present (53% of all walleye captured were females over 20 inches). This catch rate is a slight improvement over 2010 (4 per net night). Male walleye were rare in this survey, for reasons we do not fully understand. Walleye reproduction on Lost Land Lake has been poor in recent years and the population is largely supported by every-other-year stocking events (odd years). The shocking portion of this survey found good catch rates for juvenile walleye, indicating that stocked fish are surviving and contributing to the fishery.

Muskellunge were the main target of our netting effort. The muskellunge population in Lost Land Lake is supported by a mix of stocking and natural reproduction. In 2012, 1,300 muskellunge were stocked into Lost Land with implanted radio frequency tags. That 2012 year class now makes up a significant proportion of the muskellunge population, including about 40% of the muskellunge appearing in this survey. The fish stocked in 2012, now six years old, range between 26-37 inches. The largest muskellunge observed in this survey were in the mid-40 inch range. Muskellunge over 50 inches of length are rare in Lost Land Lake, which is not uncommon in smaller lakes with higher density populations. Lost Land is considered to be more of an "action" muskellunge fishery that supports high angler catch rates.

Northern pike were captured at a moderate to low rate with generally poor size. Northern pike may compete with muskellunge in Lost Land Lake to some extent, but pike abundance appears to be mostly stable compared to past surveys. Even so, anglers are encouraged to harvest small northern pike if they desire.

Smallmouth bass capture rates were low and similar to past surveys. Habitat in Lost Land Lake is not ideal for smallmouth bass, which prefer deep, rockier lakes. Largemouth bass were captured at a much higher rate and with poor size. The minimum length limit for largemouth bass in Lost Land Lake was removed in 2016 to create a harvest opportunity for anglers. Harvest of small largemouth bass is encouraged.

Panfish size in Lost Land Lake is generally poor for all three major panfish species (bluegill, black crappie, and yellow perch). Several strategies are in place to try to improve panfish size, including the implementation of a reduced panfish bag limit in 2016 and continued walleye stocking efforts that may reduce panfish abundance and increase growth. It may take time for these strategies to show positive effects.



Large female walleye like this one being held by fish technician Scott Braden were a common sight in Lost Land Lake in spring of 2018. Photo by Max Wolter.

Report by Max Wolter – Fisheries Biologist, Sawyer County
Survey conducted by Max Wolter, Scott Braden, and Evan Sniadajewski, along with staff from Governor Thompson Hatchery
Special thanks to volunteers Bryan Neuswanger, Dan Richards, John Grady, Steve Fiala, John Gouze, Jim Dooley, and Dave Neuswanger
Reviewed and Approved by Jeff Kampa – Area Fisheries Supervisor