



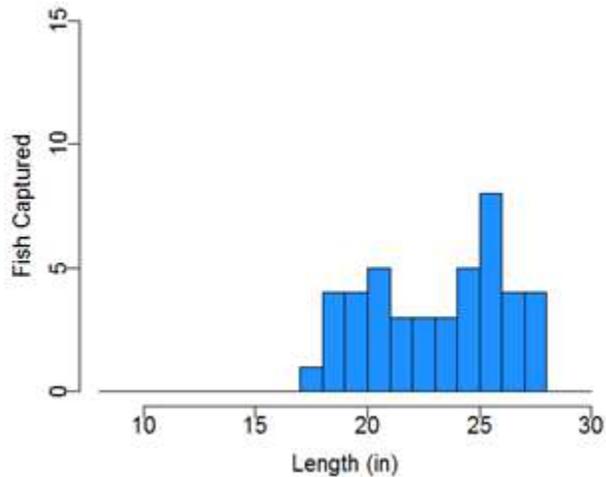
Spring Fisheries Survey Summary Lake Chetac, Sawyer County, 2013

The Hayward DNR Fisheries Management Team conducted a fyke netting survey on Lake Chetac on May 10, 2013 to assess the adult walleye, northern pike, yellow perch, and black crappie populations. Eight nets were set overnight for one night which resulted in eight total net-nights of effort. An electrofishing survey conducted on June 8, 2013 documented the status of largemouth bass, smallmouth bass, and bluegill. Eight miles were shocked throughout the lake (panfish were sampled for two miles). 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



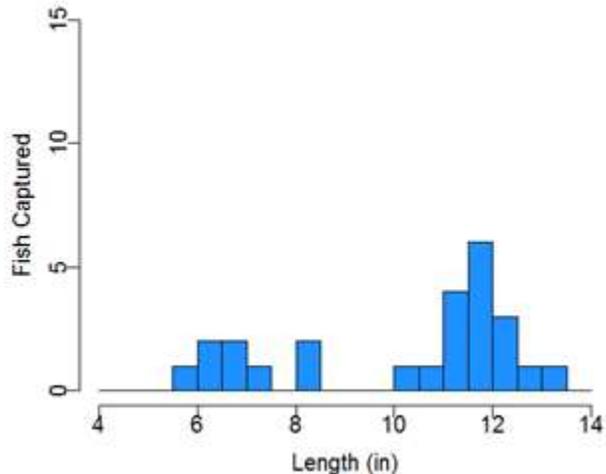
Captured 8.8 per net-night ≥ 10 inches	
Quality Size ≥ 15 "	100%
Preferred Size ≥ 20 "	80%



Walleye



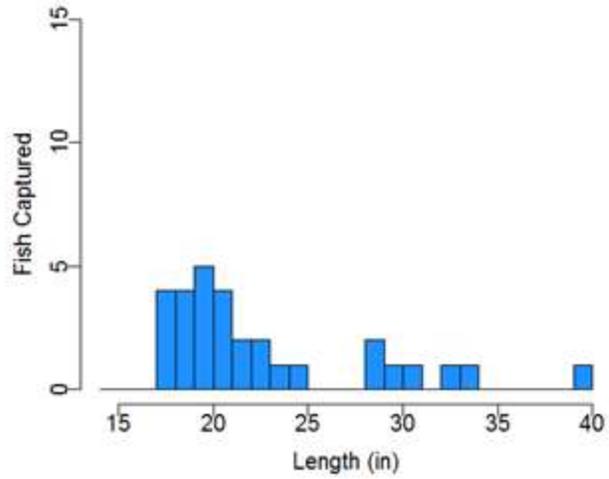
Captured 1 per mile ≤ 10 inches



Northern Pike



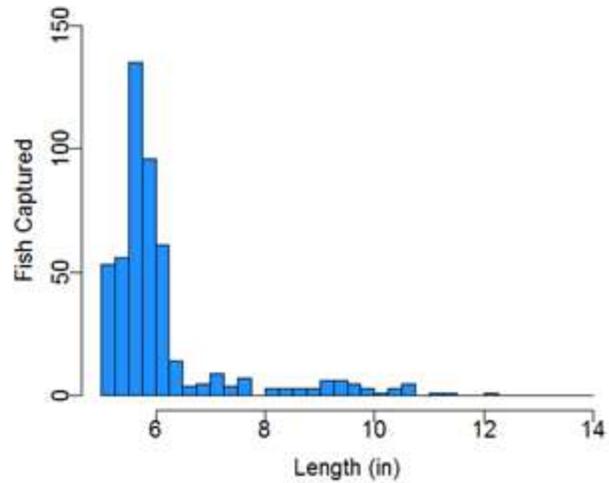
Captured 6 per net-night ≥ 14 inches	
Quality Size ≥ 21 "	43%
Preferred Size ≥ 28 "	23%



Black Crappie



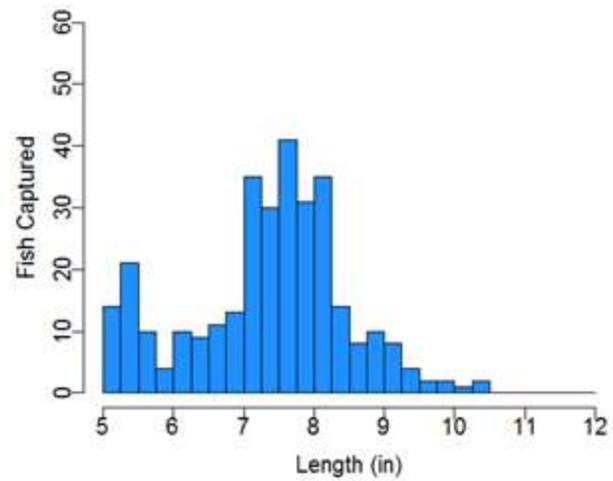
Captured 386 per net-night ≥ 5 inches	
Quality Size ≥ 8 "	9%
Preferred Size ≥ 10 "	2.5%



Yellow Perch



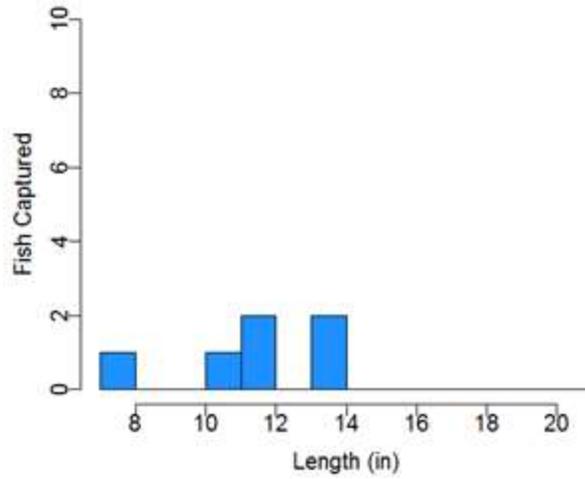
Captured 236 per net-night ≥ 5 inches	
Quality Size ≥ 8 "	27%
Preferred Size ≥ 10 "	1%



Smallmouth bass



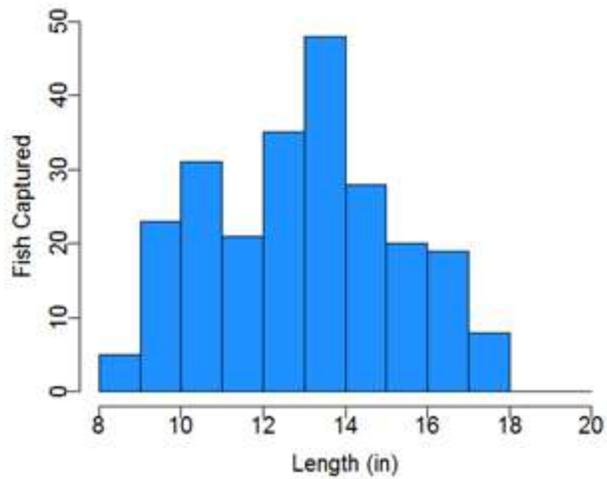
Captured 0.8 per mile ≥ 7 inches	
Quality Size ≥ 11 "	67%
Preferred Size ≥ 14 "	0
Memorable Size ≥ 17 "	0



Largemouth bass



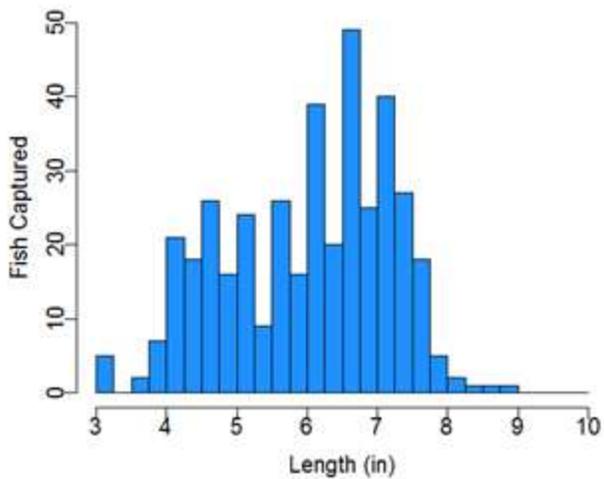
Captured 30 per mile ≥ 8 inches	
Quality Size ≥ 12 "	66%
Preferred Size ≥ 15 "	20%



Bluegill



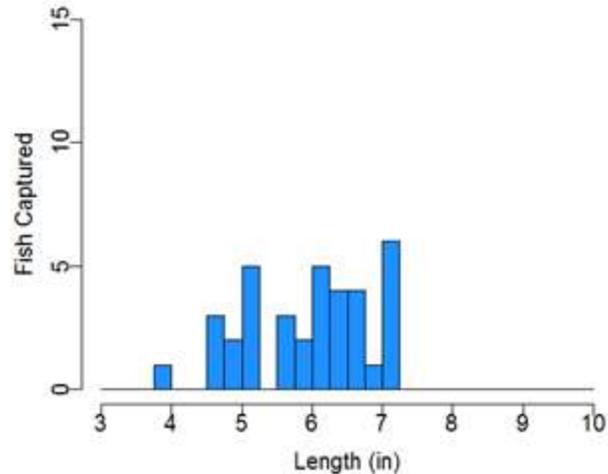
Captured 199 per mile ≥ 3 inches	
Quality Size ≥ 6 "	57%
Preferred Size ≥ 8 "	1.3%



Pumpkinseed



Captured 18 per mile \geq 3 inches	
Quality Size \geq 6"	34%
Preferred Size \geq 8"	0%



Summary of Results

Our netting survey of Lake Chetac caught the end of the walleye spawn and was also very effective in sampling black crappie and yellow perch that were in the shallows. The electrofishing survey provided a good look at bass, bluegill, and pumpkinseed.

Walleyes were captured during the May 10 netting survey at a moderate rate, but most were large, old fish. Chetac has had very poor walleye recruitment in recent years, as reflected by low young of year capture rates in fall surveys and a scarcity of fish in the 12-18 inch range. This lake has flipped to being a largemouth bass dominated system. But in 2014 Chetac will change from the statewide 15-inch minimum length limit to an 18-inch minimum length limit for walleye to protect smaller adults and build up the density of walleye in the system. The minimum length limit for largemouth bass is being removed, and we are encouraging harvest of small bass (<14 inches) that have become over-abundant. We are also requesting stocking of extended-growth walleye fingerlings at a density of 5 per acre in fall of 2013. We believe these three actions have a reasonable chance of restoring walleye as the dominant predator in this system. Our June 8 electrofishing survey revealed a low number of juvenile walleye that are likely the result of stockings by the Big Chetac Lake Association and the LCO Tribe, as well as a weak natural year class from 2012. But without marked fish it is not possible to know exactly how much stocking contributed to this year class.

A moderate number of northern pike were captured, but size of some individuals was exceptional. Chetac has long been known as a trophy pike destination, and the lake still has the potential to produce those fish. The forage base for pike is diverse and abundant.

Remarkably high numbers of yellow perch and small black crappies were captured in our netting survey. When walleye numbers are moderate to high (not currently the case in Chetac), they provide effective predatory control on panfish. Failed walleye year classes often lead to explosions in the number of panfish in the lake. Chetac is the most extreme example of this phenomenon that we have observed in Sawyer County. Catch rate for crappie in Lake Chetac was 12 times higher than the average for Sawyer County in this type of survey. Yellow perch catch Chetac is 5 times higher than the average for Sawyer County. Lake Chetac is very productive which makes it capable of supporting a large biomass of fish. But without some control over panfish numbers, competition for food will eventually limit growth rate and ultimately the size these fish are able to attain. Largemouth bass are abundant in Chetac right now, but they do not seem to be controlling numbers of crappie or perch, possibly because of lake size (large areas of open water) and relatively low water clarity due to high production by

algae. Pike are also ineffective at controlling crappie or bluegill under these conditions. Therefore, restoring the walleye population will be key to producing panfish of angler-preferred sizes (bluegills and yellow perch ≥ 8 inches and crappies ≥ 10 inches).

Largemouth bass numbers have been steadily increasing over the last several decades, and this species is now abundant in Lake Chetac. Because there is abundant forage, growth rates of largemouth bass in Chetac have not declined as dramatically as in other lakes with high-density bass populations. But growth rate is still below average, and Lake Chetac largemouth bass are not reaching their full size potential. Regulation changes taking effect in 2014 will allow anglers to harvest small largemouth bass (<14 inches) in hopes that selective harvest will thin this population, allowing faster growth of bass. The length limit is being removed for both bass species, but smallmouth bass are not abundant in Chetac and do not appear to have the same density-related growth issues as largemouth bass. Catch and release of smallmouth bass should continue to provide the occasional trophy smallmouth that Chetac has been known to produce.

Bluegills were moderately abundant, but size structure was satisfactory with many “keeper” size fish in our June 8 electrofishing sample. Bluegills in Lake Chetac benefit from the productivity of a system that creates a good forage base of invertebrates and zooplankton. There is also a 10 daily bag limit on bluegill which may be contributing to satisfactory size structure by protecting some of the larger fish. However, there are not as many preferred-size bluegills (≥ 8 inches) in Lake Chetac as in times past, and we remain concerned that insufficient predation by walleye could eventually result in a high-density population of bluegills that take much longer to reach preferred size.



Fisheries Technician Scott Braden with a small fraction of the panfish captured in this fyke net on May 10, 2013.

Report by Max Wolter – WDNR Fisheries Biologist, Sawyer County
Survey conducted by Max Wolter, Russ Warwick, and Scott Braden
Special thanks to volunteer Rich Manning

Reviewed/Approved by Dave Neuswanger – Fisheries Supervisor, Hayward Field Unit 10/1/13