



Late-Spring Electrofishing Survey Summary Moose Lake, Sawyer County, 2009

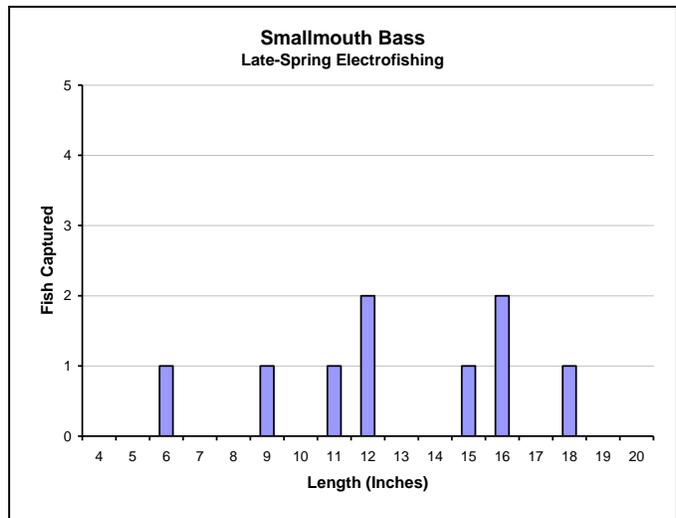
The Hayward DNR Fisheries Management Team conducted an electrofishing survey at Moose Lake on June 3, 2009 (scheduled every four years). The main purpose of this survey was to provide information on smallmouth bass and panfish. We also obtained useful information about the status of juvenile walleye, but most adult walleye were offshore and not vulnerable to capture by our shallow-water electrofishing method. A netting survey conducted by our team earlier this spring documented the status of adult walleye and muskellunge populations (separate summary).

Smallmouth Bass



Catch Per Mile (5.25 miles total)

Fish $\geq 7''$	1.5
Fish $\geq 11''$	1.3 (88%)
Fish $\geq 14''$	0.8 (50%)

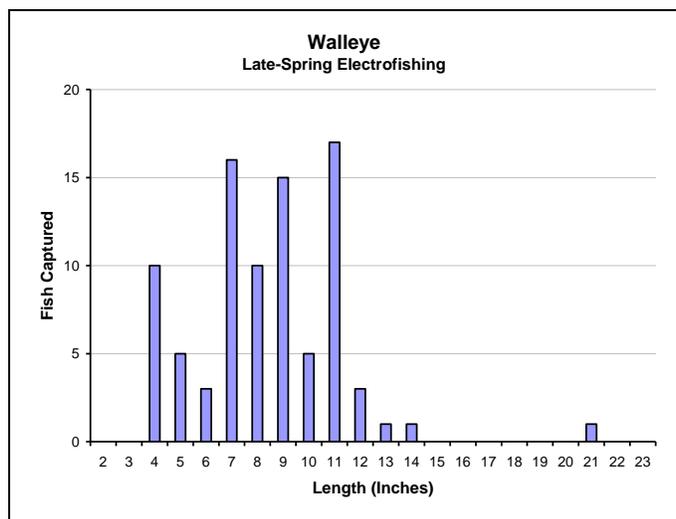


Walleye



Catch Per Mile (5.25 miles total)

Total	17
Fish $< 10''$	11



Survey Conditions: A full reservoir and water temperature in the low 60s in early June probably corresponded well with smallmouth bass spawning activity, thus allowing an accurate assessment of the relative abundance and size distribution of smallmouths in the lake at that time. We do not know what proportion of the adult smallmouth bass population in Moose Lake migrates up the West Fork Chippewa River and other tributary streams to spawn. Therefore, summertime abundance of adult smallmouths in the lake may be slightly higher than reflected by these spawning season survey results. Most species and sizes of panfish should have been vulnerable to capture by our electrofishing gear during this survey.

Survey Results: Our capture rate of smallmouth bass was relatively low, and half the fish in our sample were of legal size (14 inches and longer). Capture rate of non-migratory juvenile smallmouths was very low. Low recruitment (survival of juveniles to a length of 7 inches) may be the main reason we captured so few adults.

We captured juvenile walleyes (fish < 10 inches long) at a moderate rate of 11 per mile of shoreline. These recruits were entirely the result of natural reproduction (no recent stocking). We captured too few small panfish for meaningful length-frequency analysis. This is typical of lakes with many walleyes, few aquatic macrophytes, and annual fall/winter drawdowns (5 feet at Moose Lake) that concentrate young panfish away from littoral zone cover, rendering them highly vulnerable to predation by walleye. (This also may partially explain low recruitment of smallmouth bass.) We captured low numbers of yellow perch, black crappie, rock bass, and pumpkinseed. Redhorse suckers (shorthead, golden, and silver) were common and occurred at a range of sizes that should provide excellent prey for adult muskellunge.

Five muskellunge 14 to 33 inches long were captured in the 5.25-mile gamefish station. A few white sucker, trout-perch, blacknose shiner, and common shiner were captured in the 2.0-mile index station.

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