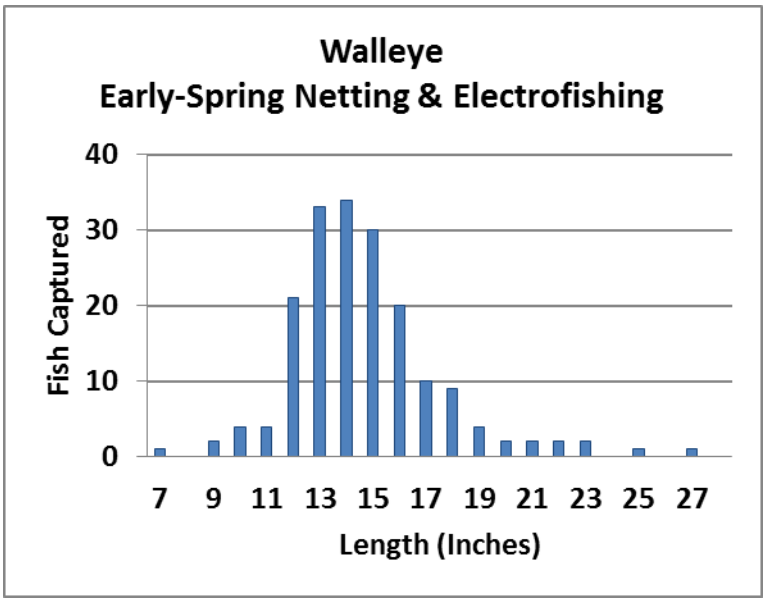
Summary of Fishery Surveys
Gordon Lake, Ashland County, 2012

The Mercer DNR Fisheries Management Team conducted the following fishery surveys on Gordon Lake in 2012: an early-spring fyke netting survey (March 21 – March 26) to assess the walleye and northern pike populations, two early-spring electrofishing surveys (March 26 and April 3) to complete a walleye population estimate, a late-spring electrofishing survey (May 23) to assess the bass and panfish communities, and a summer fyke netting survey (June 18 – June 19) to assess the panfish communities. 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

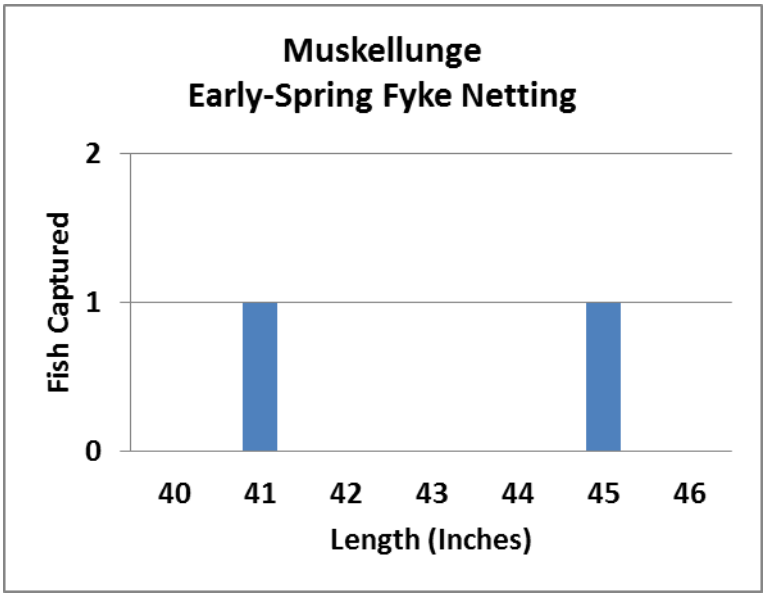
Adult Population Estimate = 1.8/acre	
Quality Size ≥ 15”	46%
Preferred Size ≥ 20”	6%
Memorable Size ≥ 25”	1%



We captured 182 individual walleyes during the first early-spring netting period and the two early-spring electrofishing surveys at rates of 6.6/net-night, 13.8/mile, and 12.2/mile, respectively. Using mark-recapture techniques (from all three surveys), the population of adult walleye in 142-acre Gordon Lake was estimated to be 258 fish, or 1.8 fish per surface acre of water. The Gordon Lake walleye population is sustained through natural reproduction; and adult density falls just below northern Wisconsin averages for naturally-reproducing populations, which typically range between 2 and 5 fish per acre.

Muskellunge

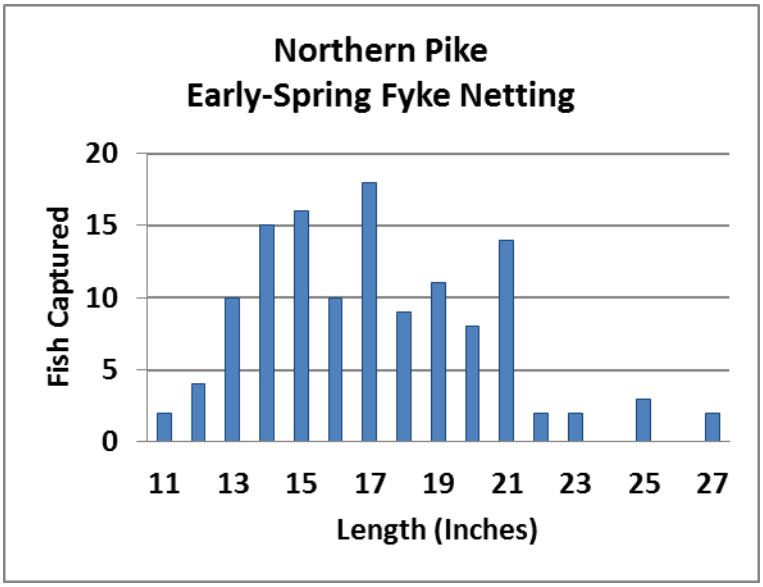
Captured 0.1 per net-night ≥ 20”	
Quality Size ≥ 30”	100%
Preferred Size ≥ 38”	100%
Memorable Size ≥ 42”	50%



Only two muskellunge were captured during the early-spring netting survey, indicative of a population at low abundance. However, it should be noted that our nets were not set to target muskellunge, and catch rates may have been higher if we had fished our nets a few weeks later (closer to the peak of muskellunge spawning activity).

Northern Pike

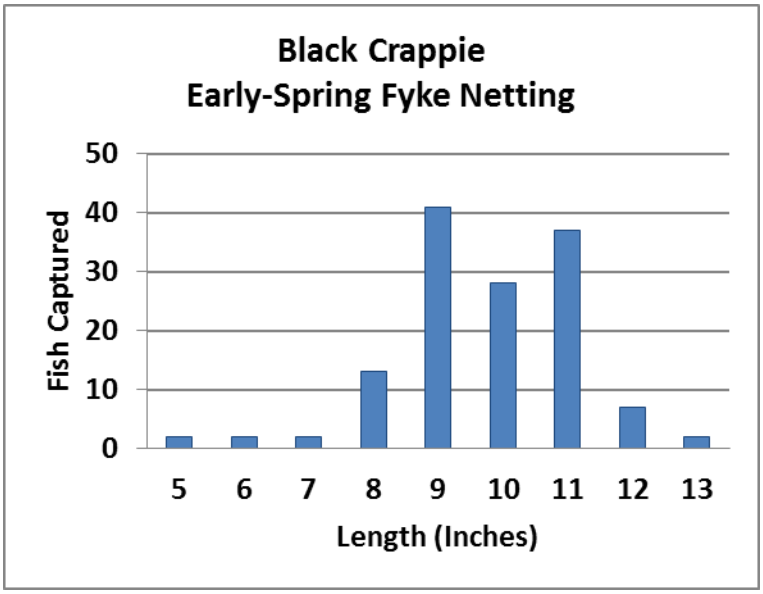
Captured 4.4 per net-night ≥ 14”	
Quality Size ≥ 21”	21%
Preferred Size ≥ 28”	0%



Although our nets were not set in locations that would specifically target northern pike, we caught them at a moderate rate (4.4 per net-night) during the early-spring netting survey. Size structure of the population sample is considered fair, but preferred-size fish were not observed.

Black Crappie

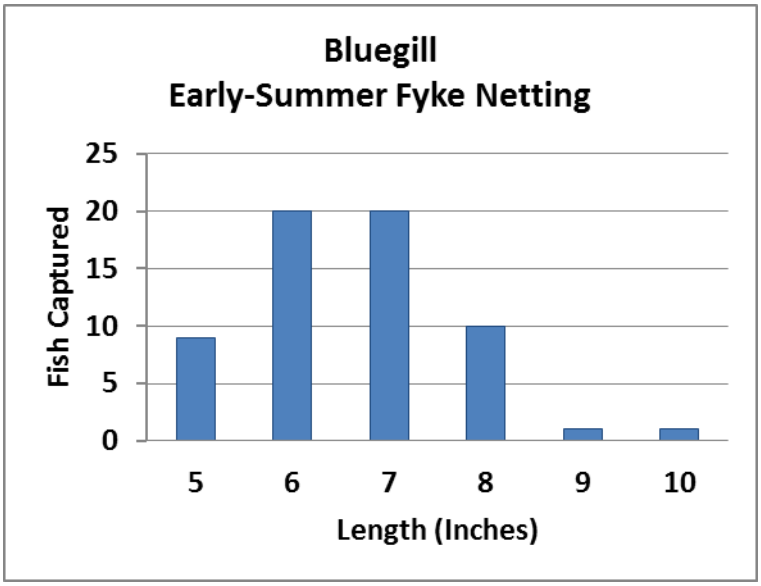
Captured 5.4 per net-night ≥ 5”	
Quality Size ≥ 8”	96%
Preferred Size ≥ 10”	55%
Memorable Size ≥ 12”	7%



Black crappies ≥ 5 inches were captured at a moderate rate of 5.4 per net-night during the early-spring fyke netting survey. Size structure of the population sample is considered good, with over half the fish sampled being of a preferred size to anglers.

Bluegill

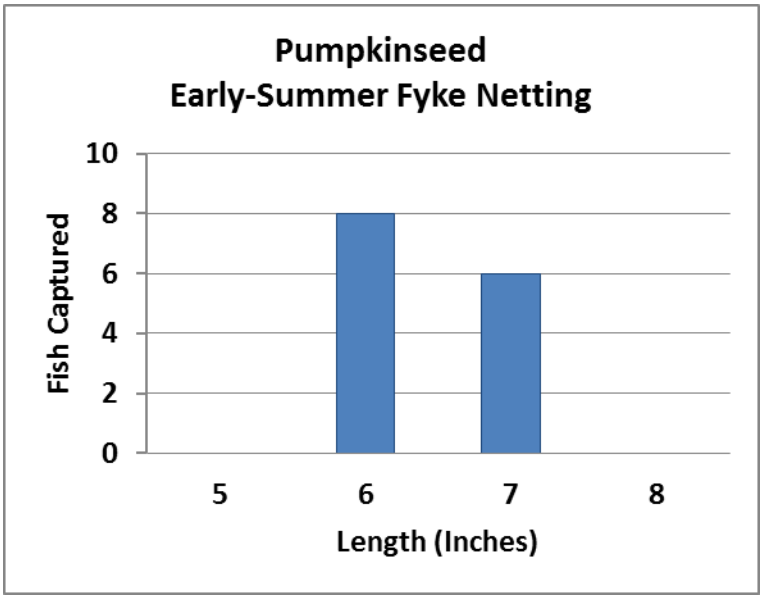
Captured 10.2 per net-night ≥ 3”	
Quality Size ≥ 6”	85%
Preferred Size ≥ 8”	20%
Memorable Size ≥ 10”	2%



Bluegills ≥ 3 inches were captured at a low rate of 10.2 per net-night during the early-summer fyke netting survey. The size structure of the population is considered good, with a good proportion of fish being of an acceptable size to anglers. In support of the early-summer fyke netting bluegill catch statistics, the early-spring electrofishing survey yielded a low capture rate (14 per mile ≥ 3”) and a good size structure (Quality Size ≥ 6” = 50%).

Pumpkinseed

Captured 2.3 per net-night ≥ 3”	
Quality Size ≥ 6”	100%
Preferred Size ≥ 8”	0%



Pumpkinseed ≥ 3 inches were captured at a low rate of 2.3 per net-night during the early-summer fyke netting survey. The size structure of the population is considered good, with a good proportion of fish being of an acceptable size to anglers. In support of the early-summer fyke netting pumpkinseed catch statistics, the early-spring electrofishing survey yielded a low capture rate (6 per mile ≥ 3”) and a good size structure (Quality Size ≥ 6” = 67%).

No largemouth or smallmouth bass were captured or observed during any survey in Gordon Lake during 2012, indicating either complete absence or populations at very low abundance levels. Yellow perch, rock bass, white sucker, creek chub, and golden shiner were also captured at low rates during our surveys.

Conclusions

Gordon Lake contains a relatively healthy fish community and associated fishery. It appears that walleye and northern pike are exhibiting a predatory dominance in the lake, and they are keeping panfish at relatively low levels. Maintaining low to moderate levels of panfish typically ensures that growth rates will be satisfactory, and that panfish will attain desirable sizes. This appears to be the current situation in Gordon Lake (as evident in the size distributions above), although age and growth analyses would be needed to confirm this assessment.

Walleyes are recruiting naturally in Gordon Lake and have not been stocked since 1964. Although the adult walleye population estimate is slightly below the range among naturally-reproducing populations, it appears that Gordon Lake walleyes are presently in balance with their prey. Therefore, no management action is warranted at this time. Unnecessary stocking can be counterproductive to not only the walleye population in question, but also to other fish species that may be negatively affected (e.g., panfish through increased and potentially excessive predation). Currently, there is no minimum length limit and a daily bag limit of 5 for walleyes on Gordon Lake, but anglers may harvest only one fish daily that is over 14 inches long.

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