



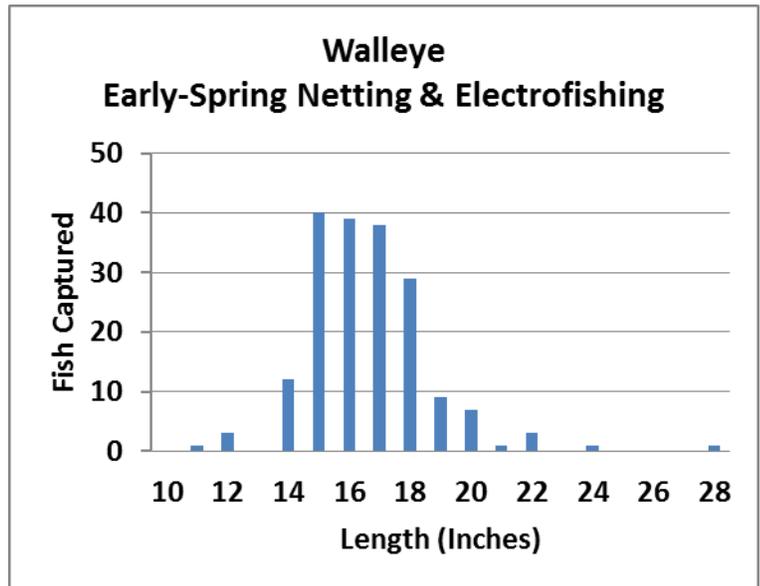
Summary of Fishery Surveys Randall Lake, Iron County, 2012

The Mercer DNR Fisheries Management Team conducted the following fishery surveys on Randall Lake in 2012: two early-spring fyke netting surveys (March 27 – April 3 and April 12 – April 18) to assess the walleye, musky, and northern pike populations; two early-spring electrofishing surveys (April 4 and April 6) to complete a walleye population estimate; a late-spring electrofishing survey (May 21) to assess the bass and panfish communities; and a summer fyke netting survey (June 4 – June 6) 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 = 3.2/acre	
Quality Size $\geq 15''$	91%
Preferred Size $\geq 20''$	7%
Memorable Size $\geq 25''$	1%

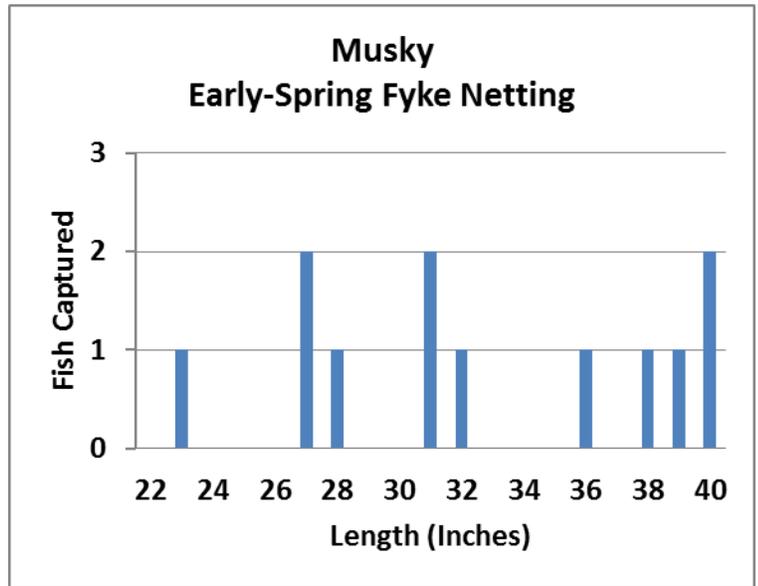


We captured 184 individual walleyes during the first early-spring netting period and the two early-spring electrofishing surveys at rates of 1.9/net-night, 52.0/mile, and 37.0/mile, respectively. Using mark-recapture techniques, the population estimate for adult walleye in 115-acre Randall Lake was 370 fish, or 3.2 fish per surface acre of water. The Randall Lake walleye population is sustained through natural reproduction; and the adult walleye density (3.2 fish per acre) is within northern Wisconsin averages for naturally-reproducing populations, which typically range between 2 and 5 fish per acre.

Muskellunge



Captured 0.3 per net-night $\geq 20''$	
Quality Size $\geq 30''$	67%
Preferred Size $\geq 38''$	33%
Memorable Size $\geq 42''$	0%

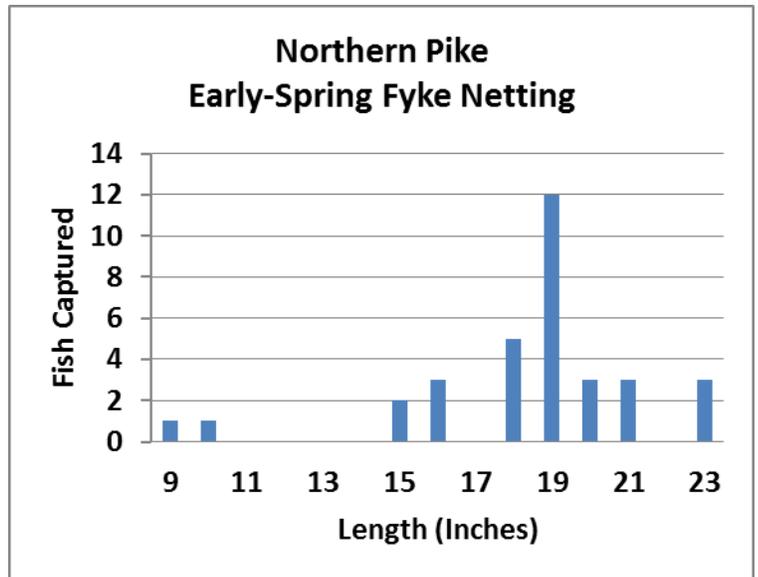


Muskellunge ≥ 20 inches were captured at a low to moderate rate (0.3 per net-night) during the early-spring netting surveys. Randall Lake is classified as a Class B muskellunge fishery, and the catch rate we observed is right around average when compared to other Class B fisheries. Size structure of the population sample is considered to be fair, with a good proportion of fish being of a desirable size to anglers.

Northern Pike



Captured 0.6 per net-night $\geq 14''$	
Quality Size $\geq 21''$	19%
Preferred Size $\geq 28''$	0%

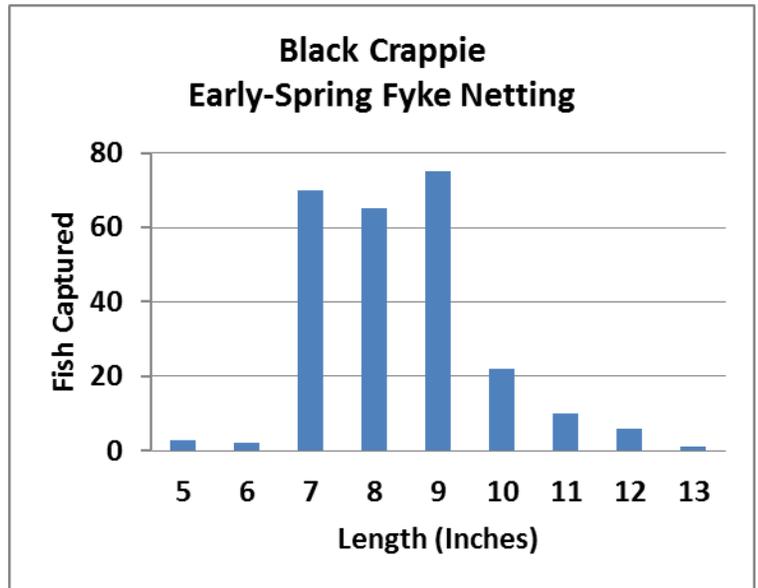


Although our nets were not set specifically to target northern pike, we caught them at a low rate during the early-spring netting surveys. Size distribution in our sample was only fair, as no larger-sized fish were observed. It should be noted that our catch rates may have been higher for northern pike if we had set our nets earlier (closer to the peak of pike spawning activity).

Black Crappie



Captured 8 per net-night $\geq 5''$	
Quality Size $\geq 8''$	77%
Preferred Size $\geq 10''$	15%

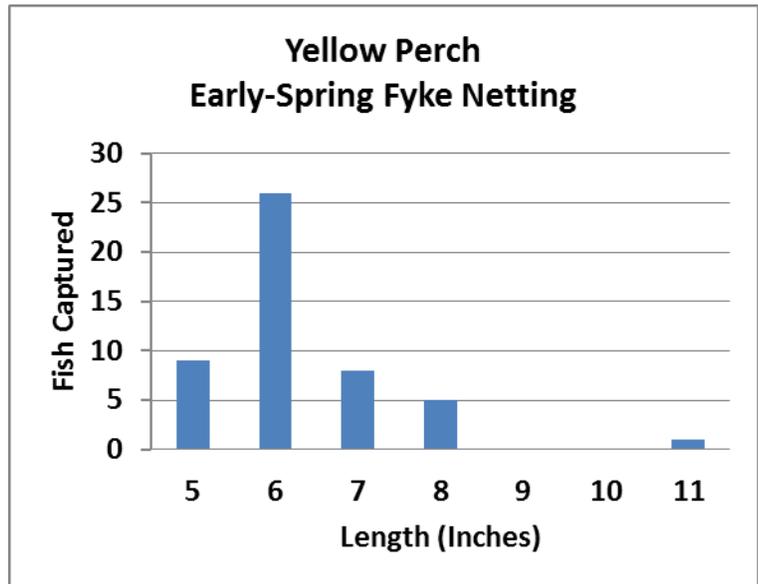


Early-spring netting is likely not the most appropriate time to obtain a representative sample of the crappie population, but our sample does reveal there are some crappies in Randall Lake of an acceptable size to anglers.

Yellow Perch



Captured 3 per net-night $\geq 5''$	
Quality Size $\geq 8''$	12%
Preferred Size $\geq 10''$	2%

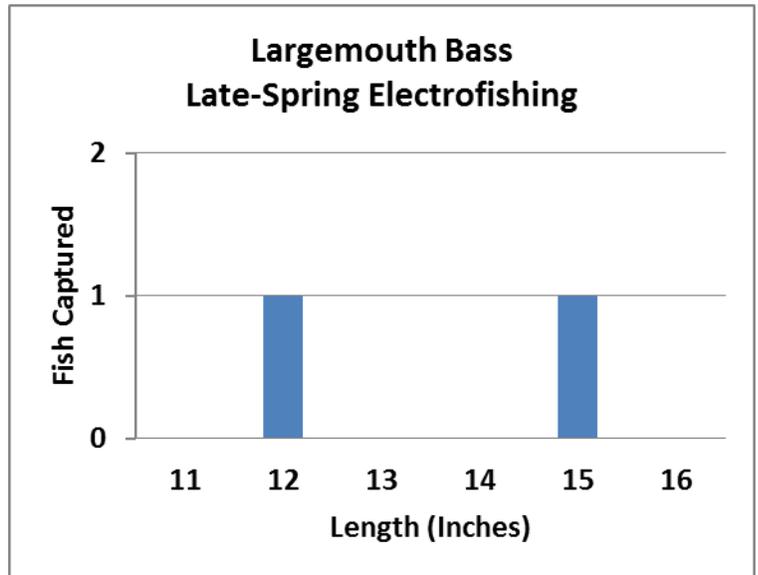


Yellow perch ≥ 5 inches were captured at a low rate of 3 per net-night during the early-spring fyke netting surveys. Size structure of the population sample is considered poor, with a low proportion of quality-size fish.

Largemouth Bass



Captured 1 per mile $\geq 8''$	
Quality Size $\geq 12''$	100%
Preferred Size $\geq 15''$	50%

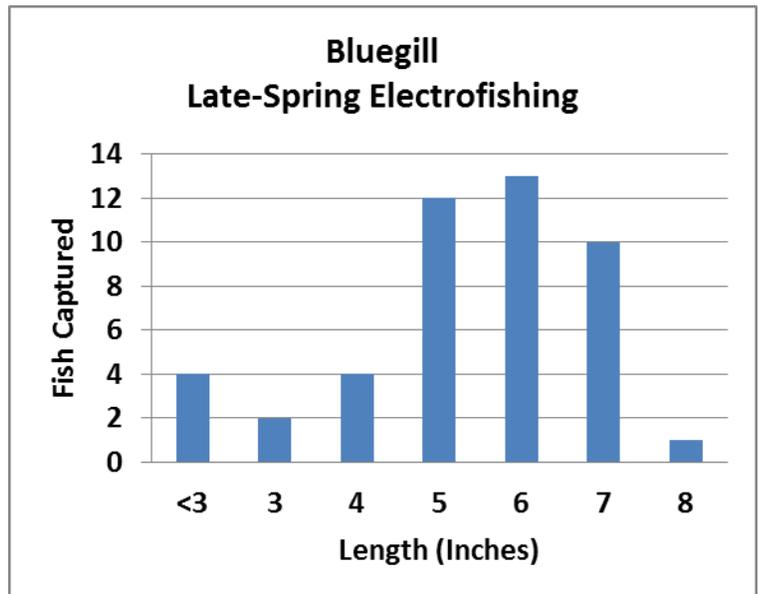


Only two largemouth bass were captured during the late-spring electrofishing survey, indicative of a population at low abundance levels. No smallmouth bass were observed during any survey in Randall Lake.

Bluegill



Captured 42 per mile $\geq 3''$	
Quality Size $\geq 6''$	57%
Preferred Size $\geq 8''$	2%



Bluegill ≥ 3 inches were captured at a low to moderate rate of 42 per mile during the late-spring electrofishing 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 late-spring electrofishing bluegill catch statistics, the summer fyke netting survey yielded similar results.

Conclusions

Randall Lake contains a relatively healthy fish community and associated fishery. It appears that walleyes are exhibiting predatory dominance in the lake, and they are keeping panfish abundances at relatively low levels. (Walleyes are extremely effective predators on young panfish.)

Maintaining low to moderate levels of panfish typically ensures that slow growth rates (i.e., stunting) won't be a problem amongst the respective panfish populations. In return, desirable-size panfish will be available; this appears to be the current situation in Randall Lake, although age and growth analyses would need to be completed to validate this assumption.

Walleye are naturally recruiting in Randall Lake and have not been stocked since 1994. Although a healthy population of adult walleye exists in Randall Lake, it appears that natural recruitment during the past few years may have been low. This phenomenon (a good walleye year-class followed by a poor year-class or two) is common even amongst healthy walleye populations, and therefore, there is no cause for immediate concern. However, anglers may not find as many fish less than 14 inches as they have in the past. Currently there is no minimum length limit and a daily bag limit of 5 for walleyes on Randall Lake, but anglers may harvest only one fish daily that is over 14 inches long.

Muskellunge recruitment in Randall Lake is assumed to be low, and the population is supplemented with alternate-year stockings at a low rate. This management strategy seems to be appropriate for maintaining the muskellunge fishery at a Class B classification.

Pumpkinseed, rock bass, grass pickerel, black and yellow bullheads, creek chub, and white sucker were also captured at low rates during our surveys.

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