

2020 Bass Regulation Review for Blackwater Lake (DOW 11-0274), Cass County

Background: A catch-and-release (C&R) regulation was implemented on largemouth and smallmouth bass in 2004 with majority public support. The regulation was reviewed in 2009 and modified to a 12-inch maximum, which was reviewed in 2015 and modified to a 14-20 inch protected slot limit (PSL; 1 over 20 inches allowed in possession). The regulation is being reviewed as part of the commitment made in 2004 when experimental regulations were first implemented.

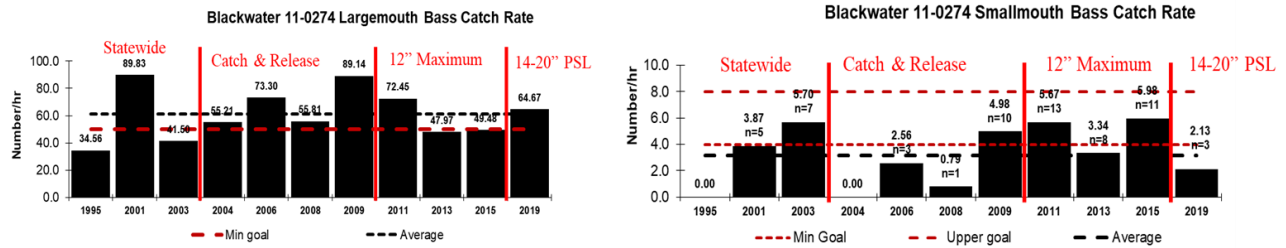


Figure 1. Spring electrofishing catch rates by regulation type of largemouth (left) and smallmouth (right) bass in Blackwater Lake, 1995-2019.

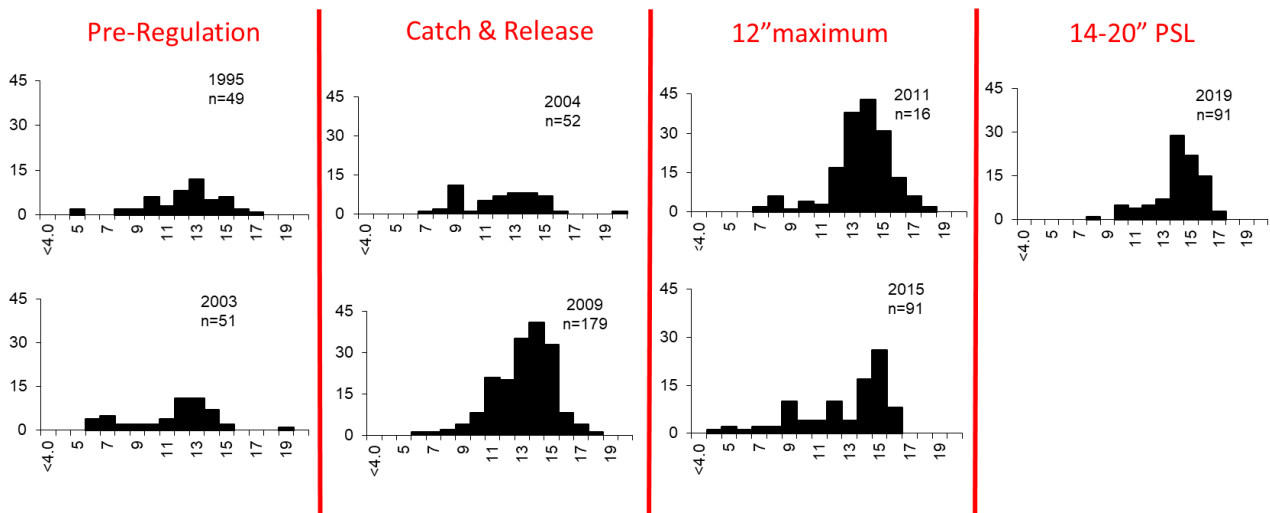


Figure 2. Selected length distributions sampled during various bass regulations on Blackwater Lake. Sampling for 2020 was cancelled due to the COVID-19 pandemic. Bass size structure has improved considerably since special regulations were first implemented in 2004 and improvements have continued to be maintained through 2019 under the 14-20 inch protected slot limit. *Note: Not enough smallmouth bass are sampled within each sampling event to effectively compare length distributions.*

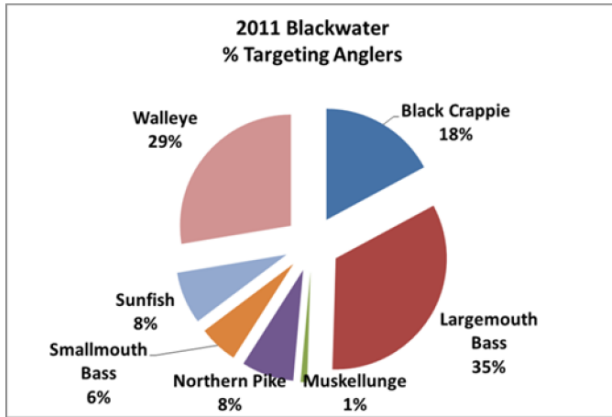


Figure 3. Creel survey results from 2011 showed 41% of Blackwater Lake anglers targeted largemouth and smallmouth bass, 29% targeted walleye, and 8% target northern pike

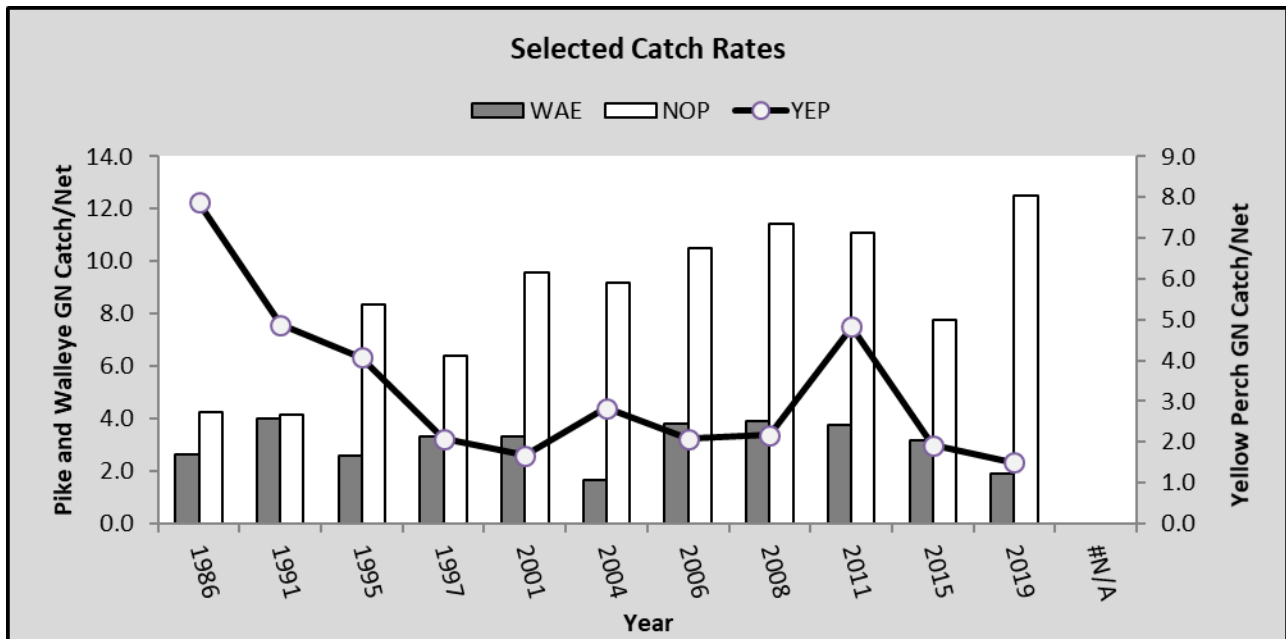


Figure 4. Gill net catch rates of walleye (shaded bars), northern pike (open bars) and yellow perch (dot and line) in Blackwater Lake, 1986-2019. The walleye gill net catch rate has remained below the goal of 4.0 fish per net since 1991 despite considerable stocking of various life stages. Yellow perch catch rates have been at or near record lows the previous two surveys and northern pike abundance remains above the goal of 8 fish per net and continues to be dominated by small fish. Special regulations for bass were first implemented in 2004 and have had no evident effect on walleye, northern pike, or yellow perch in Blackwater Lake.

Recommendation: Continue with the 14-20" protected slot limit (1 over 20" allowed in possession) for Largemouth and Smallmouth Bass, as these regulations have successfully improved and maintained size quality.

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