

A Comparison of Crappie Fishing Methods on Mississippi Flood Control Reservoirs: Management Implications

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Abstract: There has been a trend in recent years in an increasing proportion of crappie anglers fishing by trolling on Mississippi's flood control reservoirs. Perceived harvest inequities have precipitated several petitions and/or political pressure from single pole anglers calling for MDWFP to ban or regulate trolling. To obtain data suitable to support or refute such actions, crappie anglers were identified as single pole (pole) or multiple pole (troll) fishing while they were interviewed during routine roving creel surveys on Enid, Grenada, and Sardis lakes. Additionally, the total number of poles fished was recorded on Sardis Lake. Statistical analyses indicated party size was similar between the two groups. The proportions of the two groups varied seasonally and similarly on all lakes; pole anglers predominated in spring, and troll anglers predominated in summer and fall. Catch rate (crappie/h) varied from lake to lake, but trolling catch rate was constantly higher on all lakes. Catch rate also varied seasonally, but the differences between the two methods were consistent over months. Catch rate declined with party size for both groups, but trollers were more efficient at larger party sizes. Catch rate was directly related to the number of poles fished per person. We modeled different levels of trolling and potential pole limits to prognosticate likely effects on exploitation.

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