A Comparison Between Anglers Using Live Bait and Artificial Lures for Largemouth Bass in Three Mississippi Lakes

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Abstract: Largemouth bass (Micropterus salmoides) are one of the most sought after species at the 19 state fishing lakes operated in Mississippi. Bass anglers fishing these lakes typically use artificial lures; however, anglers using live bait for catching largemouth bass have been reported on a limited number of lakes. These lakes were stocked during relatively the same time period and each lake is known for producing trophy size largemouth bass. Attitudes toward live bait use vary and some believe the practice can impact the fishery. Fisheries managers wanted to know if angler catch rates and sizes of fish caught differed among the two methods, and if harvest-release rates differed among anglers using the two methods. Surveys were conducted at Calling Panther Lake, Neshoba County Lake, and Lake Bill Waller during 2011 spring creel surveys. A total of 146 bass angler parties were interviewed consisting of 252 anglers. Angler catch rates were lower for those using live bait; however, size of fish harvested was significantly greater. Anglers fishing with artificial lures were more harvest oriented on average. Bass anglers using live bait made up only 16% of all anglers interviewed. The use of live bait was primarily practiced during the early spring with 79% occurring in March. Our results indicate both bait choices catch all sizes of fish, but larger bass are more likely to be caught with live bait. Our data suggests that anglers fishing with live bait are not negatively impacting bass populations in Mississippi lakes.