

# Rationale for Removing 254-mm Minimum Length Limit of Crappie at Okatibbee Reservoir, Mississippi

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*Abstract:* Okatibbee Reservoir is a 1,620-ha reservoir located in Lauderdale County, Mississippi. In 1993, a 254 mm minimum length limit was enacted to regulate crappie (*Pomoxis* spp.) harvest. In 2009, we reviewed available data to evaluate the impact of the regulation on the crappie population and the fishery. The mean angler catch rate for harvested crappie was 1.5 fish/h prior to implementation of the length limit and 1.2 fish/h after implementation. The angler catch rate of released crappie increased from 0.4 fish/h prior to the length limit to 1.3 fish/h after the length limit was in effect. High catch rates of released fish suggest that recruitment to catchable sizes has been adequate and some harvestable-sized fish are dying before they grow to legal size. Since 1998, the mean relative weight values of crappie  $\geq$  stock size (13 cm) collected during fall electrofishing have been below 80 every year except for one (2004). From 1991 to 1997 mean relative weight values were above 80 in four years and below 80 in three years. Growth of crappie at Okatibbee is slow with some 4-year-old fish being protected by the length limit. Removal of this regulation was recommended after this review.

Proc. Annu. Conf. Southeast. Assoc. Fish and Wildl. Agencies 64:194