# Angler Catch and Exploitation of Spotted Bass in Allatoona Reservoir, Georgia

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*Abstract:* Allatoona Reservoir is a 4799-ha impoundment located near Atlanta, Georgia. Spotted bass (*Micropterus punctulatus*) dominate (80%–90%) the black bass fishery—a fishery characterized by high angler catch rates of relatively small spotted bass. Angler catch and exploitation rates for spotted bass >256 mm were estimated during a two-year (2006–2007) tagging study to determine if angler exploitation was the reason for the relatively poor size quality of spotted bass in the reservoir. Un-adjusted annual catch rate estimates in 2006 and 2007 were 25.7% and 24.6%, respectively. Un-adjusted exploitation estimates in 2006 and 2007 were 6.4% and 3.8%, respectively. Defects in the internal tags used resulted in early and high rates of annual tag loss in both years (2006 = 32.4%, 2007 = 28.9%), consequently six-month catch and exploitation rate estimates were adjusted using historic Allatoona seasonal fishing pressure data to develop one-year estimates of exploitation. Angler non-reporting was estimated at 50% (range = 25%–70%) using three different methods of measure. Spotted bass annual catch rates, adjusted for tag loss and angler non-reporting was 93.4% in 2006 and 86.5% in 2007. Annual exploitation rates in 2006 were 20.1% and 12.7% in 2007. Angler exploitation estimates over the two-year study can be characterized as low to moderate. However, overall catch rates (predominately catch and release) both years were characterized as high. Consequently, catch and release mortality in combination with direct harvest mortality may be high enough to influence the spotted bass population size structure in Allatoona Reservoir.

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