

Piney Reservoir - Fall Largemouth Bass Survey, 2022

On October 20 and 26, 2020, Freshwater Fisheries and Hatcheries Division (FFHD) staff completed night electrofishing surveys at four locations on Piney Reservoir in order to determine largemouth bass abundance and size distribution through a mark-recapture survey. The following is a brief summary of the results of that effort.

This report is being generated to present basic size distribution and abundance information for the fishery in order to help anglers plan their fishing trip to Piney Reservoir. More specific questions about the fishery or the management of individual fish species should be directed to the regional manager by emailing him at matt.sell@maryland.gov.

Key Terms:

Proportional Size Distribution (PSD) - A measure of the proportion of quality size and larger fish to the total fish in a population. Generally speaking, a higher PSD means that larger fish make up a higher percentage of the population and a lower PSD means that the fishery is dominated by smaller fish. Each species has a range of values that represent a balanced size structure.

Mark-Recapture Population Estimation - A technique used to estimate the abundance adult fish by marking fish with a fin clip or visible mark (eg. tag) and comparing the proportion of marked to un-nmarked fish on subsequent sampling efforts in the same locations.

Survey Results:

<i>Species</i>	<i>PSD</i>	<i>Abundance Estimate (Total Bass \geq 200 mm)</i>
<i>Largemouth Bass</i>	94 (87-101)	168 (90 - 399)

Largemouth Bass

The largemouth bass fishery in Piney Reservoir is characterized by a relatively low density and very high PSD. The results suggest that growth rates are sufficient to support a high-quality fishery, however, recruitment to stock size may be limited. Future investigations into reproductive success are warranted before alternative management strategies should be considered.

Tiger Muskellunge

Tiger Muskellunge are stocked into Piney Reservoir in order to help manage the abundance of panfish, while providing an additional fishery for anglers to pursue. No tiger muskellunge were collected during this survey, however, angler reports suggest that very large specimens are being caught and the fishery is growing in popularity.

Striped Bass

Striped Bass are stocked into Piney Reservoir to help manage the abundance of panfish, while providing an additional fishery for anglers to pursue. No striped bass were collected during this survey, but angler reports demonstrate that they are being caught by anglers, even while ice fishing.

Panfish

The most common panfish in Piney Reservoir are yellow perch, bluegill and white crappie. Other species commonly encountered include pumpkinseed, green sunfish and rock bass. Although this survey was focused on characterizing the largemouth bass fishery, all species of panfish were encountered commonly while electrofishing.