

Lake Habeeb/Rocky Gap - Spring Survey, 2022

During mid-May, Freshwater Fisheries and Hatcheries Division (FFHD) staff completed night electrofishing surveys at ten, randomly selected locations on Lake Habeeb. The following is a brief summary of the various gamefish and panfish data collected. 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 on Deep Creek Lake. 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.

Catch per Unit Effort (CPUE) - A measure of relative abundance that is reported as the number of fish caught per sampling effort. In this case, numbers are reported as a $CPUE_{60}$, which represents the number of fish per 60 minutes (1 hour) of electrofishing effort. It is important to understand that this is a measure of relative abundance, not actual abundance and is used to track population trends through time.

Survey Results:

<i>Species</i>	<i>PSD</i>	<i>CPUE₆₀</i>
<i>Largemouth Bass</i>	67.62 (58.67 - 76.57)	63 (38.19 - 87.81)
<i>Smallmouth Bass*</i>	50	2.4 (-2.30 - 7.10)
<i>Bluegill</i>	30.87 (23.45 - 38.29)	149 (77.44 - 220.56)**
<i>Yellow Perch</i>	18.02 (10.87 - 25.17)	111 (81.13 - 140.87)
<i>Black Crappie</i>	97.3 (92.07 - 102.52)	22.2 (-11.25 - 55.65)
<i>Redear Sunfish</i>	34.57 (24.21 - 44.93)	48.6 (42.17 - 55.03)

**Sample size insufficient to establish confidence intervals*

***CPUE Based on 6 survey sites*

Largemouth Bass:

Lake Habeeb is home to a robust and balanced largemouth bass population. The lake provides tournament anglers with some of the highest catch rates in the state for largemouth bass. Overall, the relative abundance and size structure of largemouth bass is sufficient to provide a quality fishery for anglers in terms of catch rate and trophy potential.

Smallmouth Bass:

Smallmouth bass were collected in low abundance during spring electrofishing efforts. Future monitoring will be conducted to further assess the smallmouth bass fishery.

Yellow Perch:

Yellow perch are very abundant in Lake Habeeb, second only to bluegill in terms of panfish abundance. Larger more desirable yellow perch inhabit the lake but the yellow perch population is generally composed of smaller size class fish. Continued monitoring of this fishery will be done in order to determine whether management actions need to be taken in order to provide a more balanced yellow perch fishery.

Bluegill/ Redear Sunfish:

Bluegill and redear sunfish provide anglers with a quality fishery, not only in terms of abundance, but also size structure. The balanced population of these two species throughout the lake and their contribution to the forage base result in a thriving panfish fishery that also supports the quality largemouth bass fishery. No changes to the management of these species are recommended at this time.

Black Crappie:

A quality crappie fishery is known to exist in this impoundment and future sampling efforts should incorporate alternative methodologies to more accurately characterize it. Nearly the entire sample of crappie for this survey was collected in one, very isolated location and is likely not indicative of the actual abundance and/or size structure of the crappie fishery in Lake Habeeb.