# **Chambers Lake**

## **Chester County**

### 2016 Largemouth Bass Survey

Chambers Lake is an 89 acre reservoir created in 1994 by the impoundment of Birch Run in Hibernia County Park, Chester County. Chambers Lake was opened to fishing in 1999 after preliminary stockings and subsequent evaluation of a quality sport fishery. This highly productive reservoir has an average depth of 14 feet with maximum depth reaching 38 feet. The Chester County Water Resources Authority and the City of Coatesville are joint owners of the dam.



Aerial photo of Chambers Lake, Chester County

The Pennsylvania Fish and Boat Commission (PFBC) evaluated the relative abundance and size structure of the Largemouth Bass population on June 16, 2016 following reports of an overabundance of small bass. Other fish populations' characteristics were also noted.

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Daytime boat electrofishing was conducted along two shoreline sites, which encompassed the southeastern and northern shores. All bass captured were measured for total length and released. Most were found under overhanging shoreline, terrestrial vegetation or emerged from under felled trees and stumps. The relative abundance of bass was determined using catch per hour of electrofishing for: (1) all bass, (2) bass ≥12 inches, and (3) bass ≥15 inches.

Largemouth Bass electrofishing catch rates were very good at Chambers Lake in 2016. A total of 162 bass were captured, ranging from 4 to 16 inches in length (see Figure 1). The catch per hour for all bass was 133.1 fish/hour and the catch rate of bass ≥12 inches was 36.9 fish/hour. The catch rates exceeded the Big Bass Program objectives of 35 total fish/hour, 7 fish/hour ≥12 inches and 2 fish/hour ≥15 inches (see Figure 2). Catch per hour for all bass and bass ≥12 inches exceeded the southeastern Pennsylvania lake averages of 49.9 bass per hour and 11.8 bass per hour, respectively. Catch rates of bass ≥15 inches fell just below the southeastern Pennsylvania lake average of 3.2 bass per hour of electrofishing (See Figure 2). These rates are commonly used to evaluate the quality of Largemouth Bass fisheries in Pennsylvania.

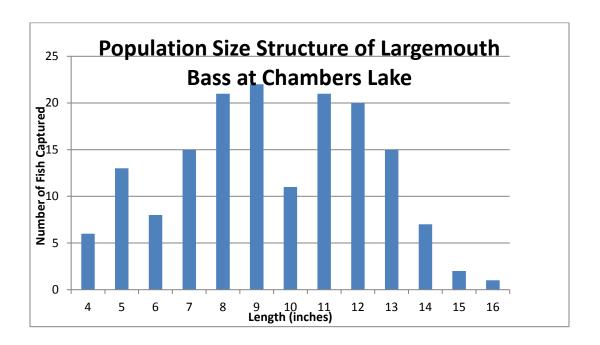


Figure 1. Length frequency distribution of Largemouth Bass collected in Chambers Lake on June 16, 2016.

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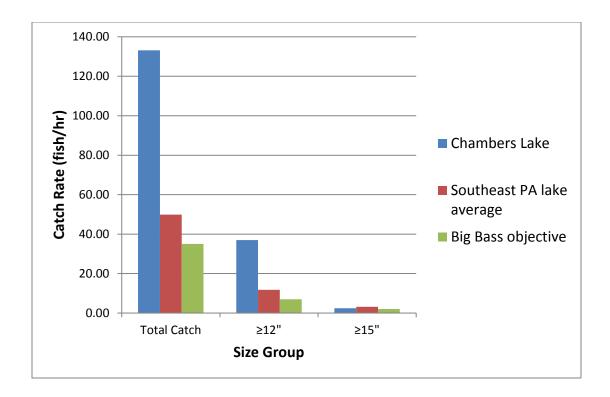


Figure 2. Catch rates of Largemouth Bass collected in Chambers Lake on June 16, 2016 compared to Big Bass Program objectives and average catch rates for southeastern Pennsylvania lakes.

Chambers Lake is a multiple use fishery with a variety of gamefish species for anglers to pursue. Nine other fish species were captured or observed during the electrofishing survey, including Yellow Perch, Bluegill, Pumpkinseed, hybrid sunfish, White Crappie, Black Crappie, Channel Catfish, Brown Bullhead and Golden Shiner. With respect to the bass population, Largemouth Bass are abundant with numerous fish under 15 inches being present. Anglers have the opportunity for high catch rates under ideal fishing conditions. It appears, however, that few, if any, of the formerly moderately abundant Smallmouth Bass remain in the lake.

Although Largemouth Bass was the target species, observations were made with respect to other species as well. Bluegill and Pumpkinseed were abundant, with many exceeding seven inches in length. Yellow Perch up to twelve inches were captured or observed during the survey,

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with an occasional White Crappie and Black Crappie exceeding ten inches. Chambers Lake is managed under Big Bass and Panfish Enhancement Regulations. Big bass regulations allow anglers to harvest 4 black bass per day at a minimum size of 15 inches. Panfish enhancement regulations allow the harvest of Yellow Perch, White Crappie and Black Crappie 9 inches and larger and sunfish (Bluegill, Pumpkinseed, Redear Sunfish) 7 inches and larger. Anglers are permitted to creel 20 fish of each species with the total number not to exceed 50.

Hibernia County Park is a 1,000 acre multi-use facility providing boating (electric motors only), picnicking, hiking, camping and bird watching. Fishing is permitted around the entire lake with the exception of April 1<sup>st</sup> through June 15<sup>th</sup> approximately 40% of the shoreline along the upper end of the lake is closed to fishing for wildlife protection.

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