

# **The Giving Pond**

## **Bucks County**

### **2014 Largemouth Bass Survey**

The Giving Pond is a 62 acre former sand-and-gravel quarry located in close proximity to the eastern bank of the Delaware River, 2 miles downstream from the village of Upper Black Eddy, Bucks County. The 155 acre property was sold by the Delaware Valley Concrete Company to the Pennsylvania Department of Conservation and Natural Resources (PADCNR), Bureau of State Parks after the cessation of quarry and related de-watering operations in 2002. As the quarry water level was allowed to rise, creating the pond, considerable stands of trees and shrubs were inundated, resulting in an abundance of complex, submerged habitat for fish populations. The pond is part of the Delaware Canal State Park and is accessible from State Route 32, River Road, which passes over the Giving Pond's outlet to the river.



*Aerial photo of The Giving Pond, Bucks County*

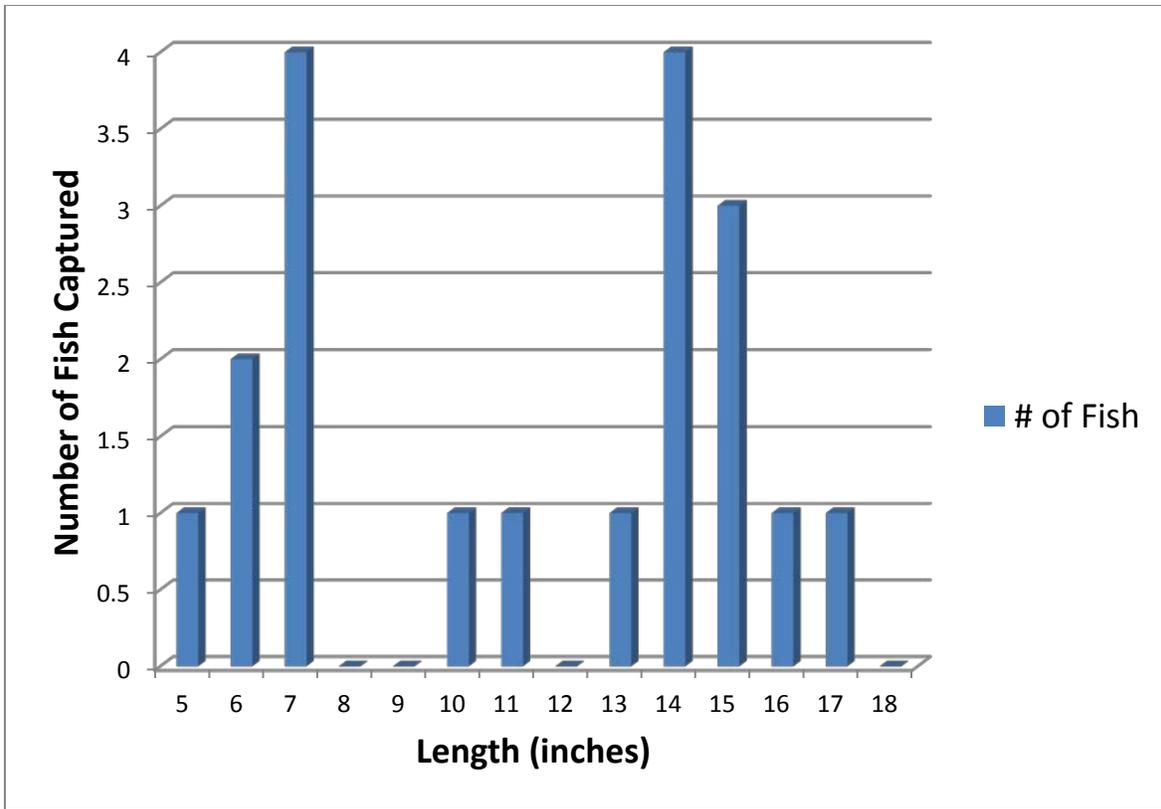
***Pennsylvania Fish and Boat Commission Biologist Report***

The [Pennsylvania Fish and Boat Commission \(PFBC\)](#) evaluated the relative abundance and size structure of the [Largemouth Bass](#) population on June 10 and 11, 2014. Additionally, other fish populations' characteristics were noted. This was the first fish population survey of any type following the initial stockings of this relatively new public fishing lake and fish populations continue to develop.

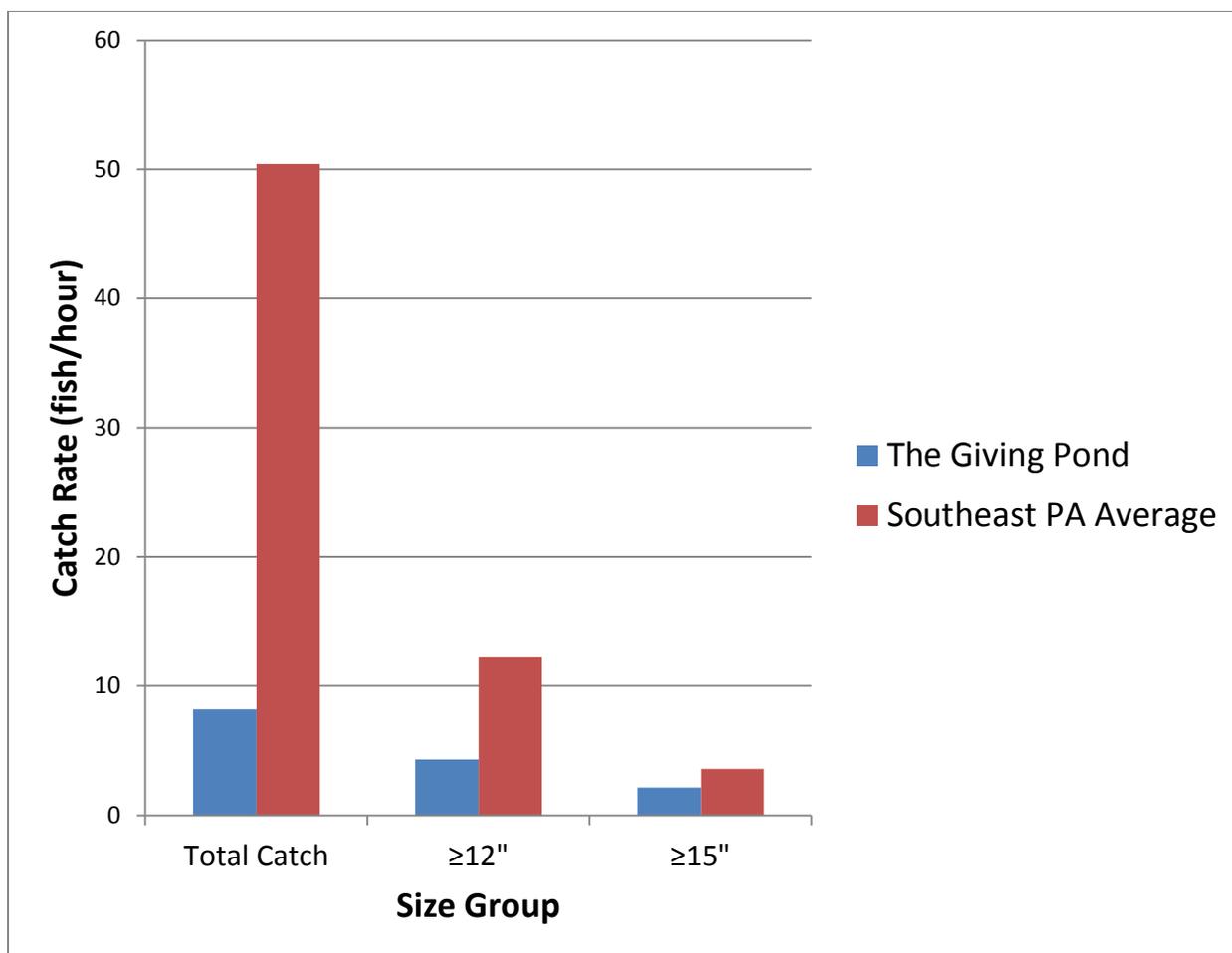
Daytime boat electrofishing was conducted along three shoreline sites, which encompassed the eastern and southern shores, the northern lagoon, and a subset of well-vegetated islands that are closest to the eastern shore. All bass captured were measured for total length and released. Most were found under overhanging shoreline terrestrial vegetation or emerged from beneath felled trees. The relative abundance of bass was determined using catch per hour of electrofishing for: (1) all bass, (2) bass  $\geq 12$  inches, and (3) bass  $\geq 15$  inches.

Largemouth Bass electrofishing catch rates were poor at The Giving Pond in 2014. A total of 19 bass were captured, ranging from 5 to 17 inches in length (see Figure 1). The catch per hour for all bass was less than 10 fish/hr and the catch rate of bass  $\geq 12$  inches was 4.3 fish/hr, both well below the southeastern Pennsylvania lake average catch per hour for all bass (50.4 fish/hr) and bass  $\geq 12$  inches (12.3 fish/hr). The catch rate of bass  $\geq 15$  inches (2.2 fish/hr) met the minimum statewide objective of 2.0 fish/hr, but did not approach the average catch rate of 3.6 fish/hr for southeastern Pennsylvania lakes (see Figure 2). Catch rates may have improved via night electrofishing, but it is unlikely that the improvement would have been substantial given the excellent habitat and cover that was electrofished in daylight during overcast and drizzling conditions. The bass population appeared to be limited by a lack of reproductive success.

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**Figure 1. Length frequency distribution of Largemouth Bass collected in The Giving Pond on June 10 and 11, 2014.**



**Figure 2. Catch rates of Largemouth Bass collected in The Giving Pond on June 10 and 11, 2014 compared to average catch rates for southeastern Pennsylvania lakes.**

The Giving Pond is managed as a multiple use fishery with a variety of gamefish species for anglers to pursue. Fifteen other fish species were captured or observed during the electrofishing survey, including Smallmouth Bass, Yellow Perch, Bluegill, Pumpkinseed, Green Sunfish, hybrid sunfish, White Crappie, Black Crappie, Common Carp, Channel Catfish, Yellow Bullhead, Brown Bullhead, Spottfin Shiner, Creek Chubsucker, and American Eel. There are also occasional angler reports of Chain Pickerel having been caught, however we encountered none.

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Although Largemouth Bass was the target species, observations were made with respect to other species as well. Bluegills were abundant, but most were less than six inches in length. Bluegill in The Giving Pond produce adequate young, are overly abundant, and apparently stunted. With a maximum depth of approximately 25 feet, the predominant limiting factor is the lack of shallow habitat due to the steep sided nature of the banks along this former quarry. This inhibits the growth of vascular aquatic plants most likely resulting in less-than-adequate aquatic macroinvertebrate forage for Bluegill. Very sparse patches of Eurasian Watermilfoil (*Myriophyllum spicatum*) and Curly-Leafed Pondweed (*Potamogeton crispus*) are present. Limited predation by Largemouth Bass on Bluegill may also be a contributing factor to the poor Bluegill size distribution as Largemouth Bass, a primary predator of Bluegill, are not abundant. Additionally, with limited shallows there may be considerable bass and Bluegill spawning and nursery habitat overlap, resulting in heavy predation by Bluegill on bass fry.

Surveys conducted in 2003, showed only Brown Bullhead, Pumpkinseed and Green Sunfish present in the impoundment. In 2004 and 2005 fingerling stockings of Channel Catfish, Largemouth Bass, Smallmouth Bass, Chain Pickerel, Bluegill, White Crappie and Golden Shiner took place in order to develop a sport fishery. Subsequent stocking of White Crappie occurred in 2006, 2007 and 2010, while Channel Catfish stocking took place yearly until 2014. Although several quality size Channel Catfish were captured between 18 and 26 inches in length during the course of the 2014 electrofishing survey. Channel Catfish stocking will be discontinued in future years due to the belief that catfish can populate The Giving Pond via an overflow channel to the Delaware River, which provides fish passage into the pond under the moderately high river flows that occur each spring.

Walleye fingerling stocking will be requested for 2015 and beyond in an effort to create a future fishery as well as exert predatory pressure on the Bluegill population. Walleye stockings have been quite successful in [Falls Township Community Park Lake](#), another former gravel pit in lower Bucks County.

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For the best fishing opportunities, catfish and panfish anglers should target the eastern and southern shores where rock and wood habitat exists, as well as the many small islands. Power boaters planning to fish The Giving Pond should be aware that propulsion is limited to electric motors only and the only boat ramp is located at the northeastern corner. Kayaking is a popular boating activity within the maze of islands on this lake.

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