

Tuscarora Lake

Schuylkill County

2014 Walleye Survey

The [Pennsylvania Fish and Boat Commission \(PFBC\)](#) evaluated the [Walleye](#) population in Tuscarora Lake between April 15 and 17, 2014. The PFBC manages Walleye populations in many lakes and rivers across the Commonwealth. In southeastern Pennsylvania lakes, Walleye have limited natural reproduction and are dependent upon hatchery stockings of two to three inch fingerlings to provide desirable recreational fisheries. The objective of the 2014 survey was to examine abundance and size structure following stockings of Walleye fingerlings at Tuscarora Lake to determine if statewide benchmarks to qualify for continued stocking, established in the PFBC's Walleye management plan, were met. Walleye are caught by open water and ice anglers alike at Tuscarora Lake.



Area 6 Fisheries Biologist John Buzzar holding a post-spawn, female Walleye captured in Tuscarora Lake, Schuylkill County on April 17, 2014.

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Tuscarora Lake is a scenic, 96 acre impoundment nestled within the mountains of Schuylkill County in [Tuscarora State Park](#). The park is managed by the [Pennsylvania Department of Conservation and Natural Resources \(DCNR\)](#) and is located about three miles east of Tamaqua, Pennsylvania.

The PFBC has stocked over 70,000 Walleye fingerlings in Tuscarora Lake since 1977, including 3,850 in 2013 and 2,900 in 2014. Please visit the [PFBC's website](#) for additional stocking information on warmwater/coolwater and coldwater fish species at Tuscarora Lake, such as Muskellunge, tiger muskellunge, and Rainbow Trout.

Six Pennsylvania style trap nets were set between April 15 and 17. Three trap nets were set daily in water depths ranging from 4 to 19 feet and allowed to fish overnight (approximately 22 hours). All captured fish were counted, measured, and released.

Walleye trap net catches were very good at Tuscarora Lake in 2014. A total of 28 Walleyes, ranging from 9 to 27 inches, were captured. The total catch rate was 0.20 fish/hr or nearly five Walleyes per trap net set. This catch rate exceeded the post-spawn, statewide objective of 0.10 fish/hr established for medium size reservoirs (50 to 500 acres) and the regional average of 0.16 fish/hr established for southeastern Pennsylvania lakes.

The majority (93%) of Walleyes captured exceeded 15 inches in length, which is the minimum legal size for harvest. The catch rate of legal size Walleyes was 0.18 fish/hr. This catch rate exceeded the post-spawn, statewide objective of 0.075 fish/hr established for legal size Walleyes in medium size reservoirs and the regional average of 0.13 fish/hr established for legal size Walleyes in southeastern Pennsylvania lakes. The 2014 trap net catch rate for legal size Walleyes (0.18 fish/hr) also exceeded prior trap net catch rates for legal size Walleyes at Tuscarora Lake in 1992 (0.03 to 0.08 fish/hr) and 2001 (0.07 fish/hr).

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Nice size Bluegill, Black Crappie, and Yellow Perch captured in Tuscarora Lake, Schuylkill County in April, 2014.

Twelve other fish species were captured during the survey (see Table 1). Although Walleye was the target species and the survey timing and/or gear type were not appropriate for the evaluation of some species, several observations were made with respect to other species. Bluegills were the most abundant species captured and most (89%) were eight inches or longer. Black Crappies were the second most abundant species captured and most (96%) were nine inches or longer; however, no White Crappies from the 2010 or 2012 fingerling stockings were captured, indicating poor survival of those stockings. In addition to attempting to enhance the lake's Walleye population, over the past two decades PFBC biologists have been concentrating on enhancing the quality and abundance of panfish in the lake through the use of drawdowns timed to reduce the abundance of small Yellow Perch, through stockings of Black and White Crappies, and through the establishment of a reproducing Spottfin Shiner forage base.

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Yellow Perch and Chain Pickerel catches were relatively low due to this survey's timing, but nighttime boat electrofishing surveys conducted in April, 2013 yielded good numbers of both species. One very large Channel Catfish was captured and was likely remnant from prior PFBC fingerling stockings which last occurred in 2002.

Only two Largemouth Bass and one Smallmouth Bass were captured, which was expected since trap nets are not effective at capturing bass. Previous bass-specific surveys have shown black bass to be abundant.

No Muskellunge or tiger muskellunge were captured despite routine fingerling stockings by the PFBC through 2012 and advanced fingerling stockings by Muskies Inc. Chapter 50 in 2011 and 2013. Muskellunge and tiger muskellunge stockings will be terminated by the PFBC although a small population will remain for years. The lake has occasionally produced a large tiger or pure Muskellunge.

In addition to providing fall and winter fishing opportunities, the fall trout stockings at Tuscarora Lake may provide anglers with some trout fishing opportunities in spring. Four Rainbow Trout from the fall 2013 stocking were captured during the spring 2014 trap net survey. In addition, ten Rainbow Trout from the fall 2012 stocking were captured during the spring 2013 electrofishing survey. Survival of fall stocked Rainbow Trout throughout the fall and winter and into early spring, despite fall and winter angling pressure, has been seen consistently in the past few decades by PFBC staff while electrofishing in the spring. These "holdover" Rainbow Trout have the potential to provide a spring fishery for anglers wishing to escape more crowded, freshly stocked lakes, such as Locust Lake in near-by Locust Lake State Park. Often many more Rainbow Trout are seen than reported by the electrofishing crews, which are more focused on capturing target species.

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Table 1. Summary of fish species captured and released in Tuscarora Lake between April 15 and 17, 2014.

Fish Species	Number Captured	Size Range (inches)
Black Crappie	81	3-13
Bluegill	343	3-11
Brown Bullhead	67	11-16
Chain Pickerel	3	15-20
Channel Catfish	1	31
Golden Shiner	8	-
Largemouth Bass	2	14-16
Pumpkinseed	11	5-9
Rainbow Trout - Hatchery	4	-
Smallmouth Bass	1	17
Walleye	28	9-27
White Sucker	51	-
Yellow Perch	20	7-15

Notes:

Trap nets are not effective at capturing bass. Bass populations are evaluated by boat electrofishing.

If you plan on fishing Tuscarora Lake, please be advised that only electric motors are permitted. Please see [DCNR's website](#) for the full range of recreational activities offered at Tuscarora State Park.

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