## Falls Township Park Lake Lower Bucks County

## April 2018 Trap Net and Night Electrofishing Surveys

Falls Township Park Lake is a 67-acre lake owned by the municipality of Falls Township, situated NE of Levittown. It is surrounded a public park. The lake is maintenance stocked with fingerling Walleye and fingerling Tiger Muskellunge by the Pennsylvania Fish and Boat Commission. It also supports naturally sustained populations of other warmwater and coolwater fish species.

The lake is open to the public. Non-powered boats are permitted to use the single boat ramp and shore fishing from some locations where emergent aquatic plants do not inhibit casting from shore is also possible. Ice fishing is not allowed.

Biologists from the Southeastern Pennsylvania Fisheries Management Office surveyed the lake in April 2018 to assess whether or not Walleye were successfully reproducing and to determine whether the abundance of Tiger Muskellunge met the standards established in the statewide Muskellunge Management Plan for continued stocking. The Walleye life stage targeted to document spawning success was yearlings that would have originated from 2017's reproduction. Sampling included 62 minutes of night boat electrofishing along the lake's shoreline and four overnight trap net sets to assess the lake's Walleye reproductive success and Tiger Muskellunge population abundance, respectively. Additionally, sample timing was such that Largemouth Bass population abundance could be assessed concurrently via electrofishing sampling.

Walleye sampling indicated that reproduction was not successful in 2017 and, as with many man-made lakes in Pennsylvania, successful annual reproduction may not occur. Sampling revealed once again, however, that fingerling Walleye stocking had been successful in the lake, as three adult Walleye were captured via electrofishing and 52 adult Walleye were captured via trap nets, well more than needed to meet the trap net catch requirement in the statewide Walleye Management Plan for continued stocking. All Walleye in the net catch were adults that were 15-20 inches long. Alternate year Walleye stocking will continue.

Despite limited stocking and limited trap netting effort, trap nets captured two Tiger Muskellunge that were 29 and 42 inches in total length. A few fish within this length range have also been reported by anglers. The trap net catch per hour of netting was twice that necessary to continue stocking and, as a result, Tiger Muskellunge stocking will occur on an alternate year basis consistent with statewide stocking rates and frequency.

Falls Township Park Lake supports a good Black Bass population comprised primarily of Largemouth Bass, with a minor population of Smallmouth Bass also present. Black bass electrofishing catch rates for the total number of fish, fish 12 inches and longer, and fish 15 inches and longer were 43, 15, and three fish per hour respectively. Electrofishing catch rates met or exceed the Big Bass Guidelines of 35, 7, and 2-3 fish per hour. The largest Black Bass captured was a 20-inch Smallmouth Bass.

Other species captured in the trap net sample included: Black Crappie, White Crappie, Yellow Perch, Bluegill, Brown Bullhead, White Catfish, White Sucker, and Gizzard Shad, which is a forage species. Also known to be present from past observation and stocking were Spotfin Shiners and Satinfin Shiners, which were introduced by the Pennsylvania Fish and Boat Commission to establish reproducing forage fish populations when the lake was first proposed to be opened to public fishing. See Table 1 below for the length ranges of sportfish that predominated in the trap net catch.

## Table 1. Length/frequency distribution of sampled fish from trap netting at Falls Township Park Lake.

Species	Number caught	Size range (inches)
Black Crappie	3	9 - 10
White Crappie	12	10-13
Yellow Perch	9	5 - 12
Bluegill	5	7 - 8
Brown Bullhead	2	12-13
White Catfish	2	16-18
Walleye	52	15-20
Tiger Muskellunge	2	29-42
Smallmouth Bass	3	13-14

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