

Wickham Lake Centrarchid Survey (Survey #: 318003)

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Wickham Lake is a 166-acre lake in the Town of Warwick in Orange County, NY. The lake has a drainage area of five square miles and has plenty of public access provided by Wickham Woodlands Town Park located off State School Road. Shore access exists within the park and a car top boat launch is present. The lake is currently un-stocked and is managed under statewide fishing regulations. No fisheries surveys have been conducted since 1936. At that time, American eel (*Anguilla rostrata*), banded killifish (*Fundulus diaphanus*), black crappie (*Pomoxis nigromaculatus*), brown bullhead (*Ameiurus nebulosus*), chain pickerel (*Esox niger*), common carp (*Cyprinus carpio*), largemouth bass (*Micropterus salmoides*), pumpkinseed (*Lepomis gibbosus*), walleye (*Sander vitreus*), white sucker (*Carostomus commersonii*) and yellow perch (*Perca flavescens*) were present. This 2018 boat electrofishing survey was conducted to assess current centrarchid abundance and to determine the current fish community. Additionally, a request was made for walleye to be stocked in the lake, so the secondary goal of this survey was to determine if this action is appropriate here. Boat electrofishing was conducted on the night of 5/8/18 for 1.83 hours with 1.15 hours spent targeting gamefish only and 0.68 hours targeting all fish. The entirety of the shoreline was sampled during this survey.

A total of twelve fish species were collected during this survey including black crappie, bluegill (*Lepomis macrochirus*), brown bullhead, chain pickerel, common carp, golden shiner (*Notemigonus crysoleucus*), largemouth bass, pumpkinseed, white perch (*Marone americana*), white sucker, yellow bullhead (*Ameiurus natalus*) and yellow perch. One-hundred and eighty-seven largemouth bass were collected during the 1.83 hours of electrofishing (Table 1). The catch rate of quality size (≥ 12 inches) and preferred size (≥ 15 inches) largemouth bass was 74.9/h and 53.6/h which is well above the NYS mean of 14/h and 5/h. Most largemouth (38%) were 14-16 inches in length with the largest fish at 22.2 inches (Figure 1). Largemouth bass were in good condition with nine fish caught weighing over four pounds and one fish weighing just over six pounds. Proportional Stock Density (PSD) and Relative Stock Density (RSD) for largemouth bass was 77 and 55 indicating a high percentage of quality size fish (≥ 12 inches) and preferred size fish (≥ 15 inches). Overall, the results of this survey indicate a very strong largemouth bass population with plenty of quality and preferred size fish present.

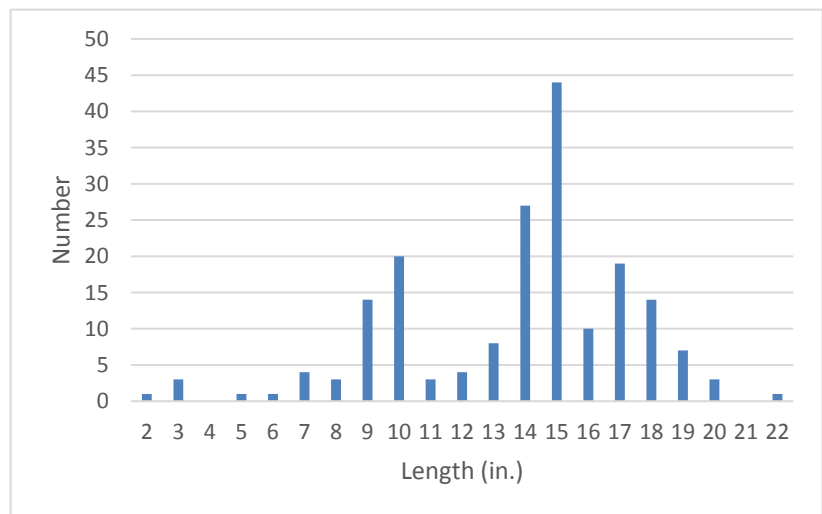


Figure 1. Length frequency distribution of largemouth bass

Yellow perch were the most abundant fish caught during this survey at 223.5/h. A total of 50 yellow perch were ≥ 8 inches and 20 were ≥ 10 inches. Yellow perch appear to be abundant with quality size (≥ 8 inches) fish caught. Bluegill were the second most abundant species caught at 136.8/h which was above the statewide mean of 91/h. Catch/h of quality (≥ 6 inches) and preferred size (≥ 8 inches) bluegill was



22.1 and 5.9 which is near the statewide mean of 33 and 6. PSD of bluegill was 22 indicating an unbalanced population of smaller (≤ 6 inch) size bluegill. While mostly on the small size, bluegill should still provide anglers with decent fishing opportunities due to their abundance and decent catch rates of ≥ 8 -inch fish. Black crappie were caught at 42.6/h which is well above the statewide mean of 11/h. Catch rates of ≥ 9 inch (minimum statewide creel limit) and ≥ 12 inches was 23.5/h and 6/h indicating good abundance of keeper size and “memorable” size fish.

Overall, bluegill, yellow perch and black crappie should all be providing quality fishing in Wickham Lake. Additionally, catch rates of largemouth of any size, preferred size and quality size ranked as some of the best in the state, and fishing for largemouth should be excellent. Wickham Lake should continue to be managed under the statewide fishing regulations, and the stocking of walleye is not recommended at this time due to the presence of an abundant bass population and quality panfish opportunities.

Table 1. Number collected and length category catch rates of sportfish and panfish collected during electrofishing (1.83 hours for largemouth bass and black crappie and 0.68 hours for bluegill and yellow perch).

	Number Collected	Total Catch/H	≥ 6 inches	≥ 8 inches	≥ 10 inches	≥ 12 inches	≥ 15 inches	≥ 18 inches
Largemouth Bass	178	102.2	99.5	96.7	87.4	74.9	53.6	14.8
Black Crappie	78	42.6	24.0	23.0	21.9	6.0	0.0	0.0
Bluegill	93	136.8	22.1	5.9	0.0	0.0	0.0	0.0
Yellow Perch	188	223.5	83.8	73.5	29.4	0.0	0.0	0.0

Brooking, T., Loukmas, J., Jackson, R., VanDevalk, T. 2018. Black bass and sunfish sampling manual for lakes and ponds. New York State Department of Environmental Conservation, Federal Aid in Sportfish Restoration, F-63-R, Study 2, Job 2-2.3, Albany, New York.