

Morningside Lake Centrarchid Survey (Survey#: 322018)
Russell Berdan, Region 3 Fisheries

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Morningside Lake is a 126-acre lake in the town of Fallsburg in Sullivan County, NY. The lake has a mean depth of 4ft, and is easily accessed from Morningside Park off Rt-52/Seldon Rd. Shore access exists within the park and a car top boat launch is present. The town also has boat rentals for the public. The lake is currently stocked with black crappie (*Pomoxis nigromaculatus*), brown bullhead (*Ameiurus nebulosus*), fathead minnows (*Pimephales promelas*), largemouth bass (*Micropterus salmoides*), yellow perch (*Perca flavescens*), and walleye (*Sander vitreus*) by the Sullivan County Sportsman’s Federation and is managed under statewide fishing regulations.

No fisheries surveys have been conducted on this lake since 1988. At that time, American eel (*Anguilla rostrata*), black crappie, bluegill (*Lepomis macrochirus*), brown bullhead, chain pickerel (*Esox niger*), golden shiner (*Notemigonus crysoleucas*), largemouth bass, pumpkinseed (*Lepomis gibbosus*), redbreast sunfish (*Lepomis auratus*), white sucker (*Carostomus commersonii*) and yellow perch were present. This 2022 boat electrofishing survey was conducted to assess current centrarchid abundance and to determine the status of annual walleye stocking in the lake. The secondary goal of this survey was to give advice on whether walleye stocking should continue. Boat electrofishing was conducted on the night of 5/19/22 for 2.16 hours with 1.75 hours spent targeting gamefish only and 0.40 hours targeting all fish. The entirety of the shoreline was sampled during this survey.

A total of twelve fish species were collected or observed during this survey including American eel, black crappie, bluegill, brown bullhead, chain pickerel, common carp, golden shiner, largemouth bass, pumpkinseed, white sucker, walleye and yellow perch. One-hundred and ninety-one largemouth bass

were collected during the 2.16 hours of electrofishing (Table 1). The catch rate of quality size (≥ 12 inches) and preferred size (≥ 15 inches) largemouth bass were 35.2/h and 19.4/h, these values are above the NYS mean of 14/h and 5/h, respectfully. Most largemouth bass (64%) were 8-12 inches in length with the largest fish at 21.4 inches (Figure 1). Proportional Stock Density (PSD) for largemouth bass was 42 which is below the statewide mean of 57 and Relative Stock Density (RSD) for largemouth bass was 23 which is in line with the statewide mean of 24. This indicates a below average percentage of quality size fish (≥ 12 inches) and an average percentage of preferred size fish (≥ 15 inches).

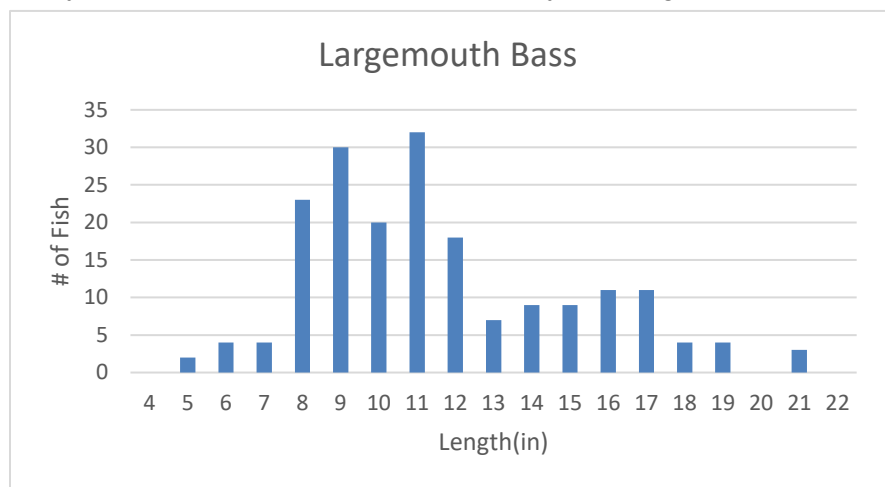


Figure 1. Length frequency distribution of largemouth bass

Bluegill, pumpkinseed, and yellow perch while abundant in numbers, leave lots of room for improvement when it comes to size of the fish. With a PSD value of 61, pumpkinseed is above the statewide mean of 42 for quality size fish (≥ 6 inches). While bluegill had a PSD value of 33 which is below the statewide mean of 38 for quality size fish (≥ 6 inches). Only 2% of the bluegill and pumpkinseed caught were over the



preferred size (≥ 8 inches). Yellow perch size was on the small side with only 22% of fish considered quality (≥ 8 inches) and zero fish collected in the preferred category (≥ 10 inches).

Black crappie had the best overall size with 31% of fish sampled at or above the state's minimum length of 10 inches. With a PSD of 80 which is very good compared to the statewide mean of 51, and an RSD of 32 which is double the statewide mean of 15. This would make the black crappie the best fish to target in this waterbody with a very high percentage of quality fish (≥ 8 inches) and a high percentage of preferred size fish (≥ 10 inches).

As for the walleye being stocked in Morningside Lake, the shallow nature of the lake doesn't provide the habitat needed to sustain a healthy population. Walleye prefer cold to cool temperature lakes, rivers, and reservoirs. This shallow lake has a max depth of 12 feet, reaches warmer than adequate temperatures, and develops dense aquatic vegetation in the summer and fall. In total five walleye were captured during the 2022 survey (Table 1) ranging from 7.9 inches to 14.6 inches in length.

Table 1: Total and catch/h of each size group of fish during 2.16 hours of electrofishing on 5/19/22

Species	Total	Total Catch/H	$\geq 6"$	$\geq 8"$	$\geq 10"$	$\geq 12"$	$\geq 15"$	$\geq 18"$	$\geq 20"$
Black Crappie	51	23.6	21.8	18.5	7.4	0.5	0.0	0.0	0.0
Bluegill	88	220.0	72.5	5.0	0.0	0.0	0.0	0.0	0.0
Chain Pickerel	19	8.8	8.8	8.8	6.0	5.6	4.2	0.9	0.0
Largemouth Bass	191	88.4	87.0	83.8	59.3	35.2	19.4	5.1	1.4
Pumpkinseed	61	152.5	92.5	2.5	0.0	0.0	0.0	0.0	0.0
Walleye	5	2.3	2.3	2.3	0.5	0.5	0.5	0.0	0.0
Yellow Perch	74	185.0	97.5	30.0	0.0	0.0	0.0	0.0	0.0

Literature Cited

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.