

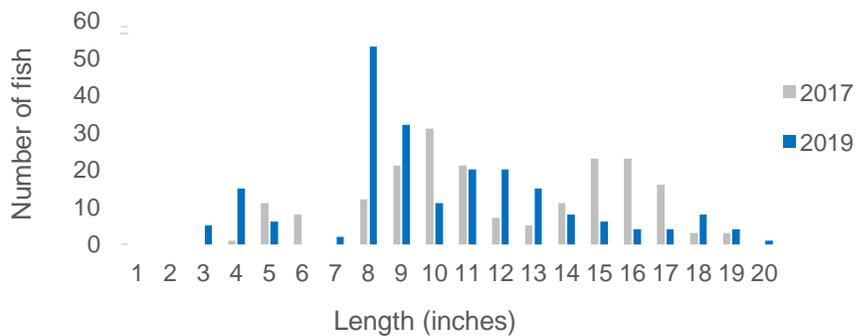
Prospect Park Lake (Survey #:219007)
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Prospect Park Lake, part of the Long Island Sound watershed, is a 55-acre lake in Prospect Park located in Kings County (Brooklyn). As one of New York City’s larger freshwater lakes, Prospect Park Lake has ample fishing access points along its shoreline and features a variety of natural and man-made structures that create ideal habitats for fish. Fishing is permitted in most areas of the lake, but is prohibited north of the waterfall at the park’s Audubon Center. As in all New York City parks, catch and release is required by city and state regulations.

A boat electrofishing survey was conducted over a two-night period in October 2019 to assess the lake’s fish population, following the Black Bass and Sunfish Electrofishing Protocol for Lakes and Ponds (Brooking et al 2018). Relatively low amounts of duckweed in the Lullwater section allowed the fisheries team to reach areas that had been difficult to survey in recent years.

Figure 1. Length frequency distribution of largemouth bass



A total of 780 fish from 7 species were collected, and 3 American eel and 13 carp were observed. Two hundred fifteen largemouth bass were collected, ranging from 3.8-20.1 inches, including one largemouth bass of memorable length (≥ 21.1 inches). Since 1997, only two other surveys conducted at Prospect Park Lake have contained bass in this length category. The average relative weight of largemouth bass (83) was lower than the ideal range of 95-105. Compared statewide, the catch rate of largemouth bass was in the top 10% of lakes of similar size, the top 2% for stock and quality length categories (≥ 7.9 inches and ≥ 11.8 inches, respectively) and the top percentile for preferred length (≥ 15 inches). A particularly strong year class in the 8 to 9-inch range (Figure 1) could suggest a trend toward larger bass in Prospect Park Lake in the near future.

Table 1. Number collected and length category catch rates for species captured during a boat electrofishing survey of Prospect Park Lake.

Species	Total catch	Time (h)	Catch rates (fish/h; standard error)				
			All sizes	Age-1	\geq Stock	\geq Quality	\geq Preferred
Largemouth bass	215	2.2	98 (8)	13 (4)	85 (8)	33 (6)	12 (3)
Bluegill	402	0.69	583 (120)	62 (18)	520 (110)	197 (33)	0
Pumpkinseed	127	0.69	184 (53)	7 (3)	177 (51)	61 (20)	0
Black crappie	15	0.69	22 (8)	0	22 (8)	22 (8)	1 (2)
Yellow perch	16	0.69	23 (13)	0	23 (13)	13 (10)	0



Five hundred twenty-eight bluegill and pumpkinseeds accounted for nearly 70% of total catches, showing a high proportion of panfish to other species. The largemouth bass (PSD¹=39) and bluegill (PSD=39) relationship indicated a balanced population. PSD for several species increased since 2017, such as yellow perch (75) and black crappie (100), though sample sizes for these species were low (n=16 and n=15, respectively). Of note, a brown bullhead in the trophy size category (≥ 16.9 inches) was collected, measuring 17.5 inches.

Based on these survey results, Prospect Park Lake should provide quality fishing opportunities for a variety of species, particularly largemouth bass, bluegill and pumpkinseed. The high proportion of panfish would be advantageous for beginner anglers, and positive trends in fish size may appeal to seasoned anglers.

Literature Cited

Brooking, T., Loukmas, J., Jackson, R., VanDeValk, T. 2018. Black bass and sunfish electrofishing protocol for lakes and ponds. New York State Department of Environmental Conservation, Federal Aid in Sport Fish Restoration, F-63-R, Study 2, Job 2-2.3, Albany, New York.

¹PSD (Proportional Stock Density) is an index that allows for standardized comparison of size classes of fish and provides a measure of fish population balance. PSD is the percent of the stock-sized population that are quality size.