Bureau of Fisheries Technical Brief #221003

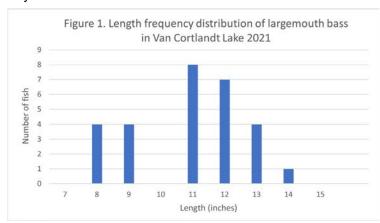


Van Cortlandt Lake Centrarchid Survey (Survey #: 221003) Gelyanne Rivera, Region 2 Fisheries

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Van Cortlandt Lake is popular for recreational fishing in the Bronx, NY. This 18-acre lake is part of the Lower Hudson Watershed and supports a diverse warmwater fish population including largemouth bass, brown bullhead, black crappie, golden shiner, yellow perch, common carp, white sucker, bluegill, and pumpkinseed sunfish. The lake's shoreline includes both flat grassy areas as well as wooded areas, accessible for anglers to fish. The perimeter of the shoreline extends for 0.81 miles and average lake depth is four to eight feet. New York City Freshwater Fishing Regulations are catch and release only. Catch and release allows for fish to live out their entire life and it gives other anglers opportunity to catch a bigger fish. NYS and NYC Parks regulations requires a fishing license if you are 16 years old or older.

NYSDEC Bureau of Fisheries performed a boat electrofishing survey of Van Cortlandt Lake on the evening of May 18th, 2021, following the DEC Black Bass and Sunfish Electrofishing Protocol for Lakes and Ponds (Brooking et al. 2018). The lake was surveyed over four runs, with each run lasting 10 minutes. Approximately 80% of the shoreline was covered. Aquatic vegetation prevented access to approximately 10% of the shoreline. An additional 5-10% of the shoreline was not accessible due to shallow depths.



A total of 197 fish were caught, accounting for nine different species (Table 1). There also were five common carp observed during the survey. Twenty-eight largemouth bass were caught, ranging from 8 to 14 inches in length (Figure 1). Largemouth bass made up 14% of all fish caught with a PSD of 35.7 and relative weight of 91.5. LMB relative weigh was below the optimal level (Wr=95-100). Most of these fish were stock size (8") and no age-1 fish were caught (Table 1). Bluegill made up majority of catch totals, with a PSD of 77.5 and Wr= 103.6, accounting for 38% of the total catch. Most of the bluegill caught were stock size (Table 1). This is indicative of a balanced prey to predator ratio in the lake. This survey confirms that Van Cortlandt Lake offers opportunities to catch larger fish, particularly panfish and is ideal for anglers to recreationally fish.

Table 1. Number of total catch and length categories for different species of fish caught by boat electrofishing in Van Cortlandt Lake in May 2021.

CPUE (fish/h; standard error)

Species	Total Catch	Time (h)	All sizes	Age-1	>=Stock	>=Quality	>=Preferred	≥Memorable
Black Crappie	17	0.68	24 (12)	0 (0)	0 (0)	12 (11.9)	5 (2.8)	0 (0)
Pumpkinseed	22	0.68	32 (17)	0 (0)	4 (17.1)	18 (14.1)	0 (0)	0 (0)
Largemouth Bass	28	0.68	41 (4.2)	0 (0)	41 (4.2)	15 (3.8)	0 (0)	0 (0)
Golden shiner	39	0.68	57 (12)	-	-	-	-	-
Bluegill	75	0.68	110 (25)	2 (1.7)	104 (23)	80 (22.4)	3(2.9)	0 (0)
White sucker	4	0.68	5.8 (4.2)	0 (0)	0 (0)	0 (0)	2 (4.2)	2 (2.9)
Brown bullhead	2	0.68	2.9 (1.7)	0 (0)	0 (0)	0 (0)	2 (1.7)	0 (0)
Yellow perch	5	0.68	7.4 (3.7)	0 (0)	0 (0)	3 (3.7)	2 (1.7)	0 (0)



Literature Cited



