

Wolfe’s Pond (SI-4-A-P1053) Trap Net Survey (#223003)
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Wolfe’s Pond is a 16-acre pond in southwest Staten Island, in the Lower Hudson Watershed. A sand berm separating Wolfe’s from Raritan Bay experienced significant breaches in both the early 1990’s and 2011, allowing saltwater to infiltrate the pond while freshwater resources exited to the bay. The 2011 breach was large enough to allow regular tidal movement and sediment deposition over several years. In response, the New York City Department of Parks and Recreation reconstructed the freshwater pond through dredging, replacement of the berm with steel sheathing, and stocking of freshwater fish.

Most shoreline fishing exists along the western shoreline of Wolfe’s Pond, along Holten Avenue, and the eastern shoreline near the Parks building and picnic tables. New York State and NYC recreational fishing regulations require catch-and-release, only. NYC regulations also require use of barbless hooks and prohibit lead weights less than 0.5 ounce.

DEC Fisheries performed boat electrofishing surveys of Wolfe’s Pond in 2008, 2011, 2021 and 2023 but this was the first trap net survey. Survey protocols followed those of the New York Sunfish and Crappie Trap Netting Protocol (Loukmas, 2021). One of the objectives was to compare panfish sizes with those of fish captured during an electrofishing survey approximately two weeks later, to determine if one method may provide different results, adding to knowledge of this fishery.

Three standard community survey fyke nets were set over four nights for a total of twelve net nights. Two of these yielded no fish for unknown reasons. A total of 111 black crappie, 154 bluegill and 37 pumpkinseed were captured and processed for lengths, weights and scales. These and other species fish captured are shown in Table 1.

Table 1. Numbers and catch rates for fish collected from Wolfe's Pond by trap nets, April 2023

Species	Number collected	Catch per net night
Bluegill	154	12.4*
Gizzard shad	140	11.7
Black crappie	111	9.17*
White perch	97	8.1
Brown bullhead	81	6.75
Pumpkinseed	37	3.08
American eel	16	1.33
Golden shiner	1	0.08

*number adjusted for recaptured fish

Stock density indices of PSD, RSD_p, RSD_m, and average Relative Weights, for bluegill, pumpkinseed and black crappie, are in Table 2.

Table 2. Size indices and Relative Weights for Ohrback Lake sunfish and crappie from trap net and electrofishing surveys

Species	PSD		RSD _p		RSD _m		Average Wr	
	trap net	eboat	trap net	eboat	trap net	eboat	trap net	eboat
Bluegill	65	19	0.7	0	0	0	117	117
Pumpkinseed	3	0	0	0	0	0	111	108
Black crappie	17	24	8	5	3.6	0	87	88



Mean length at age for black crappie, bluegill and pumpkinseed is shown in Figure 1. Average lengths for bluegill and black crappie ages five and six, and pumpkinseed ages four, five and six, are based on limited data.

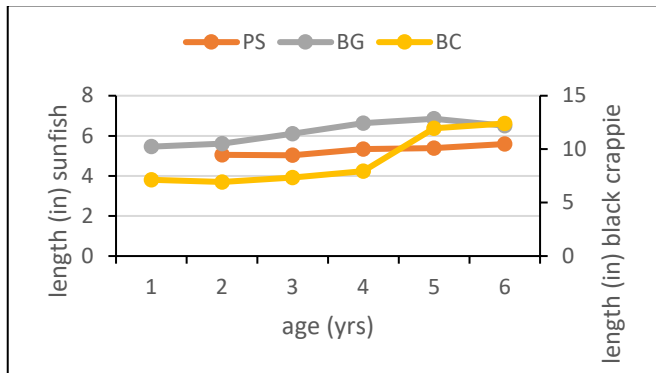
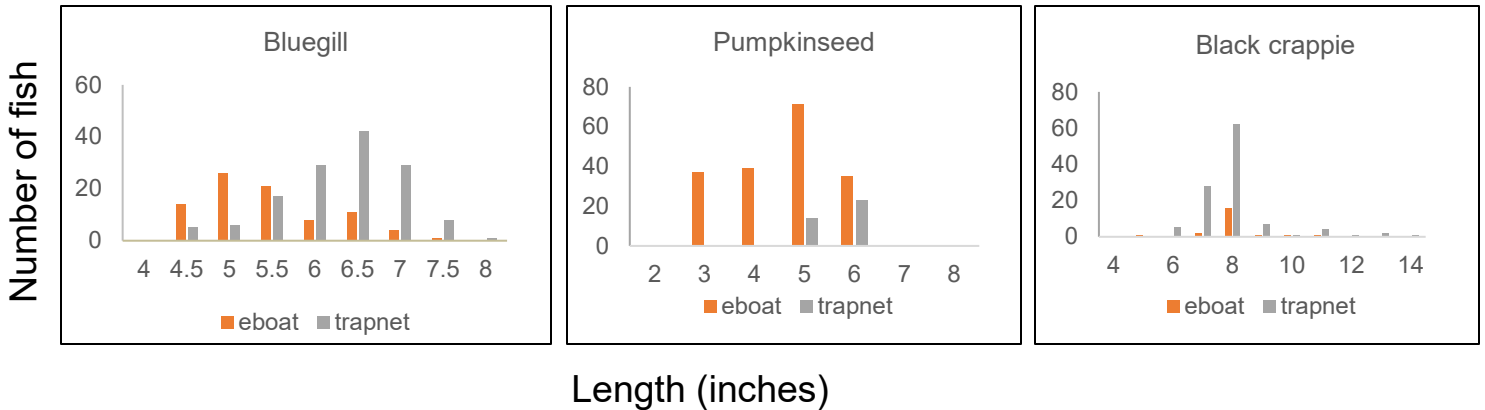


Figure 2. Length frequency distributions of sunfish and black crappie from electrofishing and trap net surveys of Wolfe’s Pond, 2023.



Wolfe’s Pond was stocked with freshwater sunfish, black crappie and largemouth bass in 2020 therefore future surveys should collect a greater number of older fish, enabling a better estimation of growth.

Length frequency distributions indicate bluegill, pumpkinseed and black crappie lengths from the trap net survey were all slightly larger than those from the electrofishing survey, indicating trap nets select for larger-sized fish. Additional supporting data are size indices shown in Table 2. Relative weights appear similar between trap net and electrofishing surveys.

Results support those of the April 2023 electrofishing survey (Rivera, 2023), that Wolfe’s Pond provides a diverse warmwater fishery. Additionally, sunfish available to anglers may be larger than reported for the electrofishing survey. Trap net surveys may be warranted in waters where knowledge of sunfish and black crappie lengths are of special importance.

Literature Cited:

Loukmas, J. New York Sunfish and Crappie Trap Netting Protocol. New York State Department of Environmental Conservation, Bureau of Fisheries. Albany, NY.

Rivera, G. Wolfe’s Pond Centrarchid Sampling Plan Technical Brief, #223005. November, 2023.