

Meadow Lake Fisheries Survey (#221009)
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2/16/2022

Meadow Lake (95 acres) is the larger of two connected water bodies in Flushing, Queens in the Long Island Watershed. Shoreline fishing access is available and, as for most NYC freshwater bodies, NYC and NYS regulations are catch-and-release for all fish caught except snakeheads. DEC has surveyed fish populations of both Meadow and Willow Lakes nearly every year since the 2005 discovery of Northern snakeheads in Meadow Lake. This boat electrofishing survey was executed the evening of October 12, 2021. Four sites were chosen based on shoreline accessibility with site 5 divided into two sections to avoid a marina. Each site was fished for 0.25 hour. Salinity was 4.2 ppt, conductivity was 6,877 $\mu\text{mho}/\text{cm}^3$, water temperature was 20.2°C, pH was 8.9, and Secchi depth was 1.0 foot.

A total of 1,086 fish of seven species were captured. Captured species consisted of inland silverside, white perch, gizzard shad, goldfish, pumpkinseed, brown bullhead, striped mullet, and tilapia, with only one each of the last three species captured. Twenty-five American eels and 103 common carp were observed. Silverside and white perch comprised the majority with goldfish the third highest fish species caught (Table 1). Silverside numbers varied depending upon whether or not a school of this fish species was encountered.

Table 1. Meadow Lake fish species and catch rates from a 2021 electrofishing survey

Species	# Collected	Catch rate (fish/hr; standard error)					
		Time (hr)	All sizes	Age-1	Stock	Quality	Preferred
Gizzard shad	7	1	7 (4)	7	*	*	*
Goldfish	167	1	167 (8)	*	*	*	*
Brown bullhead	1	1	1	*	1	1	1
White perch	339	1	339 (82)	229	37	3	*
Pumpkinseed	16	1	16 (12)	0	16	0	0
Inland silverside	552	1	552 (379)	*	*	*	*
Striped mullet	1	1	1	*	*	*	*

White perch and pumpkinseed catch rates were higher than in 2019. While no snakeheads were captured, one was observed. Catch rate of goldfish was approximately 24 times greater than in 2019. Future surveys should continue to monitor catch rates of all fish species with attention to snakehead, pumpkinseed and goldfish.

Figure 1. Catch rates of three Meadow Lake fish species from boat electrofishing surveys: 2012-2021

