Bureau of Fisheries Technical Brief #tb120006



Fort Pond Walleye and White Perch (Survey #:120006) Region 1 Fisheries, Peter Malaty

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Fort Pond is a 198-acre lake on Long Island with public access through a DEC boat launch. The lake is stocked annually with 4,000 pond fingerling walleye. The purpose of the stocking walleye program was to reduce an "overabundant" white perch population to "benefit the bass population by reducing competition between white perch and bass as juveniles". The stocking program also provides an additional fishery opportunity for Long Island anglers.

The purpose of this survey was to index age-0 walleye and white perch abundance and estimate growth. Six, 15-minute electrofishing runs targeting only walleye and white perch were completed. All walleye and white perch were collected.

A total of 4 walleye and 1743 white perch were caught. The total mean catch per unit effort (CPUE) for walleye was 2.83 fish/hour. The total mean CPUE for white perch was 1070.5 fish/hour (Table 1). Walleye ranged in length from 8 to 20 inches (Figure 1). White perch ranged in length from 2 to 11 inches (Figure 2). No memorable or trophy size walleye or white perch were caught. The mean relative weight (Wr) for walleye and white perch was 78.1 and 89 respectively.

The CPUE for walleye was the second lowest of the time series (Table 2), although methods were changed from previous surveys and only walleye and white perch were targeted and collected during electrofishing runs. PSD was higher than all the other years and RSDp was in the middle of the range, this may be misleading as walleye may have significant differences in recruitment from year to year (1994 NYSDEC Percid Sampling Manual). CPUE for white perch was near the middle for the time series. PSD was the second lowest and RSDp was near the middle (Table 2).

An evaluation of the walleye stocking policy and its effectiveness on reducing the white perch is warranted for Lake Ronkonkoma as well as establishing a management plan.

Table 1. Summary statistics for walleye and white perch for survey 120006. Proportional stock density (PSD), relative stock density-preferred (RSDp), relative stock density-memorable (RSDm), relative stock density-trophy (RSDt), catch per unit effort (CPUE), relative weight (Wr).

	Number	PSD	RSDp	RSDm	RSDt	Mean CPUE	Mean
Species	Caught	(%)	(%)	(%)	(%)	(fish/hr)	Wr
Walleye	4	100	33.3	0	0	2.83	78.1
White Perch	1743	6.3	2	0	0	1070.5	89



Table 2. Summary statistics for electrofishing surveys from 2001-2020.

Year	2001	2004	2007	2010	2014	2018	2019	2020
Survey #	101019	104017	107029	110028	114029	118043	119038	120006
Walleye								
Number	51	11	38	13	31	57	16	4
CPUE	12.75	2.75	12.67	4.68	10.33	19	8	2.83
CPUE Quality	2.25	1.25	2.67	3.6	5	14	3	1.3
CPUE Preferred	0	0.5	1.33	3.24	2	4	0.5	0.83
PSD	47	45	89	77	71	46.2	37.5	100
RSD-P	0	18	44	69	29	10.3	6.25	33.3
White Perch								
Number	975	1272	1125	1460	1188	576	2383	1743
CPUE	975	1533.3	1125	1460	1188	576	1191.5	1070.5
CPUE Quality	20	23.81	53	48	79	44	46	28.83
CPUE Preferred	2	0	0	2	6	11	25	13
PSD	19	3	12	9	25	81	9.2	6.3
RSD-P	2	0	0	0	2	16	5	2

Figure 1. Length frequency of walleye from survey 120006.

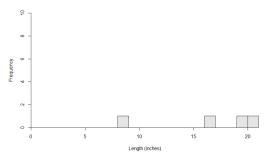


Figure 2. Length frequency of white perch from survey 120006.

