Lake Marburg

York County

2024 Muskellunge Trap Net Survey



Area 7 Fisheries Manager Bryan Chikotas (front) and Fisheries Biologist John Frederick (back) during the 2024 trap net survey at Lake Marburg. Photo courtesy of PFBC Commissioner Richard Lewis.

Lake Marburg is a 1,275-acre impoundment located in Codorus State Park, York County. In April 2024, staff from the Pennsylvania Fish and Boat Commission Area 6 (responsible for management of the lake) and Area 7 offices conducted a trap net survey to characterize the Muskellunge population in Lake Marburg. Historically, Lake Marburg was stocked with both

pure Muskellunge and tiger muskellunge. However, tiger muskellunge stockings were terminated following the 2017 trap net survey when only 1 adult tiger muskellunge was collected. Since 2017, pure Muskellunge yearlings have been stocked in alternate years.

During April 7-10, 2024, 16 Pennsylvania-style trap nets were set throughout Lake Marburg and allowed to fish overnight. A total of 25 Muskellunge were captured, ranging in length from 32 to 45 inches (Figure 1). Of the 25 Muskellunge captured, 10 (40%) were ≥ 40 inches. The largest Muskellunge weighed nearly 30 lbs. The Muskellunge catch rate during this survey was 0.069 fish/h, which is almost seven times the PA Muskellunge Management Plan objective of 0.01 fish/h.

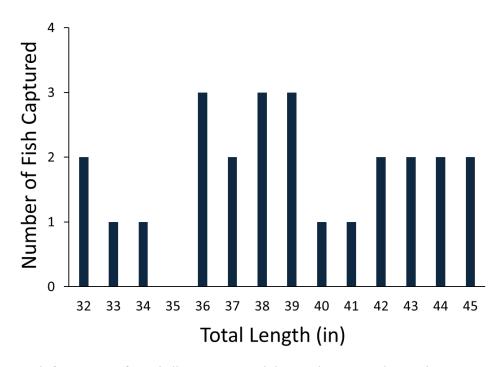


Figure 1. Length-frequency of Muskellunge captured during the 2024 Lake Marburg trap net survey.

Besides Muskellunge, 18 other species were captured during the survey, including Black and White crappies, Bluegill, Brown Bullhead, Channel Catfish, Common Carp, Flathead Catfish, Gizzard Shad, Golden Shiner, Green Sunfish, Largemouth Bass, Pumpkinseed, Rock Bass, hybrid sunfish, Walleye, White Perch, White Sucker, and Yellow Perch (Tables 1 and 2). Bluegill and Black Crappie were encountered at the highest numbers, but most of the fish were small. Less than 2% (15 fish) of the Bluegills were ≥ 7 inches and approximately 16% (33 fish) of the Black

Crappies were ≥ 9 in. However, some Black and White crappies reached large sizes (≥ 16 inches). Additionally, 13 Walleyes were captured during this survey, ranging in length from 17 to 28 inches and weighing up to 10 lbs. Finally, one adult Flathead Catfish was captured during this survey. This marks the first time that this species was collected from Lake Marburg.

Table 1. Species, number (n), and length range (in.) of fish captured in the 2024 Lake Marburg trap net survey.

		Length Range
Species	n	(in)
Gizzard Shad	4	-
Common Carp	4	-
Golden Shiner	2	-
White Sucker	9	-
Brown Bullhead	10	11-14
Channel Catfish	1	27
Flathead Catfish	1	36
Muskellunge	25	32-45
White Perch	42	7-10
Rock Bass	7	8-9
hybrid sunfish	2	4
Green Sunfish	2	3-5
Pumpkinseed	1	4
Bluegill	794	2-7
Largemouth Bass	4	5-13
White Crappie	6	4-16
Black Crappie	212	3-16
Yellow Perch	5	6-7
Walleye	13	17-28

Pennsylvania Fish and Boat Commission Biologist Report

Table 2. Length-frequency distribution of select species caught during the trap net survey at Lake Marburg, York Co.

Length (in) 2 3 4 5 6	Brown Bullhead 0 0 0 0 0 0 0 0 0	White Perch 0 0 0 0 0 0 5	Rock Bass 0 0 0 0 0	hybrid sunfish 0 0 2 0	Green Sunfish 0 1 0 1	Bluegill 11 141 290	Largemouth Bass 0 0 0	White Crappie 0 0	Black Crappie 0 15	Yellow Perch 0 0	Walleye 0
2 3 4 5	0 0 0 0 0	0 0 0 0 0 5	0 0 0 0	0 0 2 0	0 1 0	11 141 290	0 0	0	0	0	0
3 4 5	0 0 0 0	0 0 0 0 5	0 0 0 0	0 2 0	1 0	141 290	0				
4 5	0 0 0	0 0 0 5	0 0 0	2 0	0	290		Ū			0
5	0 0 0	0 0 5	0 0	0			U	1	2	0	0
	0 0	0 5	0			253	1	0	101	0	0
	0	5			0	84	0	0	47	3	0
7			0	0	0	15	1	0	6	2	0
8		25	4	0	0	0	0	1	8	0	0
9	0	11	3	0	0	0	1	0	8	0	0
10	0	1	0	0	0	0	0	1	12	0	0
11	1	0	0	0	0	0	0	0	2	0	0
12	5	0	0	0	0	0	0	0	1	0	0
13	1	0	0	0	0	0	1	1	1	0	0
14	3	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	7	0	0
16	0	0	0	0	0	0	0	2	2	0	0
17	0	0	0	0	0	0	0	0	0	0	2
18	0	0	0	0	0	0	0	0	0	0	0
19	0	0	0	0	0	0	0	0	0	0	1
20	0	0	0	0	0	0	0	0	0	0	1
21	0	0	0	0	0	0	0	0	0	0	0
22	0	0	0	0	0	0	0	0	0	0	3
23	0	0	0	0	0	0	0	0	0	0	2
24	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	1
26	0	0	0	0	0	0	0	0	0	0	1
27	0	0	0	0	0	0	0	0	0	0	0
28	0	0	0	0	0	0	0	0	0	0	2
	10	42	7	2	2	794	4	6	212	5	13



Two large Black Crappies captured during the 2024 Lake Marburg trap net survey.

Anglers heading to Lake Marburg have opportunities to fish for multiple species, including those listed above as well as Striped Bass. While Striped Bass are not effectively sampled with trap nets, PFBC staff observed several anglers targeting Striped Bass while conducting this survey and staff receive reports of anglers catching fish throughout the year. Lake Marburg supports a robust Muskellunge population, with fish reaching the size desirable to Muskellunge anglers. Although we did not capture the largest fish in the population, anglers could encounter trophy-sized Muskellunge at Lake Marburg. For example, a 54-inch female Muskellunge was found freshly dead at Lake Marburg in spring 2022. A taxidermy mount of that fish is now displayed at the Pennsylvania Department of Conservation and Natural Resources office at the lake (photo below). There is plentiful shoreline access around the lake along with seven boat

Pennsylvania Fish and Boat Commission Biologist Report

launches. Boaters should be aware that Lake Marburg is limited to 20 horsepower or 15-kilowatt hour motors.



Dan Eckley – Fisheries Biologist Aide

Tyler Grabowski – Area 6 Fisheries Biologist

Mike Porta – Area 6 Fisheries Manager