## Pennsylvania Fish and Boat Commission Biologist Report

## **Frances Slocum Lake**

Luzerne County

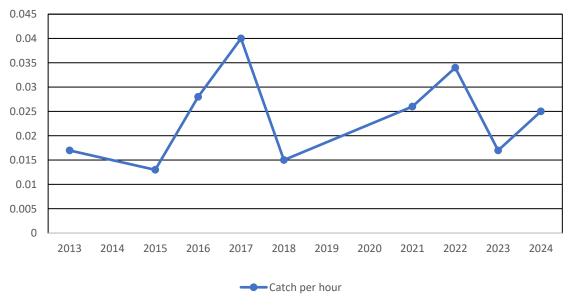
## 2024 Muskellunge Survey



Muskellunge Tag #602, was caught April 11, 2024 from Frances Slocum Lake.

Pennsylvania Fish and Boat Commission biologists conducted Muskellunge netting in Frances Slocum Lake at <u>Frances Slocum State Park</u> during the week of April 8, 2024. This work was part of an on-going, multi-year, statewide study. We set 20 trap nets and caught 12 Muskellunge. Muskellunge catch rate was 0.025 per hour (Figure 1). The largest Muskellunge caught was 42 inches and 25 pounds.

Figure 1. Frances Slocum Lake Muskellunge catch rates (number of fish caught per hour) for trap nets surveys from 2013-2024.



Part of this work involves tagging Muskellunge with Passive Integrated Transponder (PIT) tags. Over the years we've marked 54 individual Muskellunge in Frances Slocum Lake. The lengths and weights of these fish captured in 2024 provide some interesting information about growth rates (Table 1). In 2024, 9 of the 12 Muskellunge captured were caught for the first time.







Muskellunge Tag# 258 measured 39.8 inches, 19.2 pounds in 2022 (top) and 40.0 inches, 20.0 pounds in 2023 (middle), and 41.5 inches, 20.9 pounds in 2024 (bottom).

Table 1. Individual data for Muskellunge captured and tagged in Frances Slocum Lake, Luzerne County in 2024.

		Length (Inches)						Weight (Pounds)					
Tag Number	Sex	2016	2017	2021	2022	2023	2024	2016	2017	2021	2022	2023	2024
239	Male	35.6	37.0				42.0	15.8	17.6				25.0
258	Male	33.8	35.9	40.5	39.8	40.0	41.5	10.1	13.7	15.4	19.2	20.0	20.9
817	Immature					15.6	16.4					0.6	0.8
589	Male						31.2						7.7
590	Male						32.6						9.5
591	Female						36.7						11.9
593	Male						30.8						8.6
594	Male						31.0						8.8
602	Female						40.1						17.6
611	Male						31.4						9.5
612	Female						35.4						13.7
616	Male						36.3						14.6

Also captured were good numbers of Black Crappie and White Crappie and Walleye with some individuals of impressive size.



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