

Frances Slocum Lake

Luzerne County

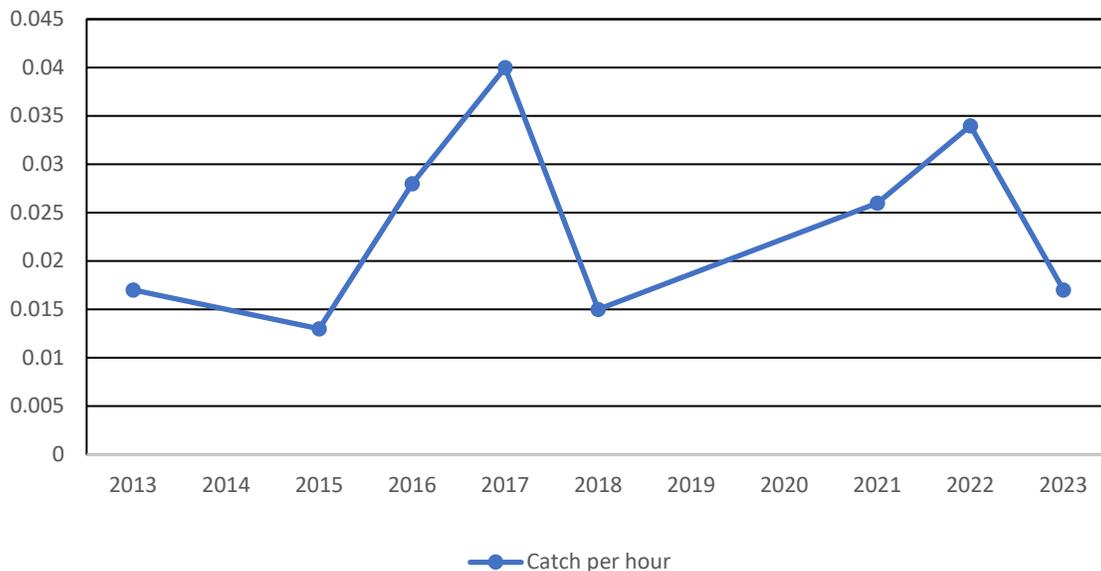
2023 Muskellunge Survey



Muskellunge Tag #583, was caught April 12, 2023 from Frances Slocum Lake.

Pennsylvania Fish and Boat Commission biologists conducted Muskellunge netting in Frances Slocum Lake at [Frances Slocum State Park](#) during the week of April 10, 2023. This work was part of an on-going, multi-year, statewide study. We set 20 trap nets and caught 8 Muskellunge. Muskellunge catch rate was 0.017 per hour (Figure 1). The largest Muskellunge caught was 40 inches and 20 pounds.

Figure 1. Frances Slocum Lake Muskellunge catch rates (number of fish caught per hour) for trap nets surveys from 2013-2023.



Part of this work involves marking Muskellunge with Passive Integrated Transponder (PIT) tags. Over the years we've marked 41 individual Muskellunge in Frances Slocum Lake. The lengths and weights of these fish in each year provide some interesting information about growth rates (Table 1). In 2023, 3 of the 8 Muskellunge captured were caught for the first time.



Muskellunge tag number 253 measured 38.4 inches, 17.9 pounds in 2022 (top) and 38.5 inches, 17.4 pounds in 2023 (bottom).



Muskellunge tag number 258 measured 39.8 inches, 19.2 pounds in 2022 (top) and 40.0 inches, 20.0 pounds in 2023 (bottom).



Muskellunge tag number 286 measured 37.7 inches, 13.9 pounds in 2022 (top) and 37.9 inches, 10.8 pounds in 2023 (bottom) held by Biologist Daniel Drake.

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

| Tag Number | Sex | Length (Inches) | | | | | | | | Weight (Pounds) | | | | | | | |
|------------|--------|-----------------|------|------|------|------|------|------|------|-----------------|------|------|------|------|------|------|------|
| | | 2013 | 2015 | 2016 | 2017 | 2018 | 2021 | 2022 | 2023 | 2013 | 2015 | 2016 | 2017 | 2018 | 2021 | 2022 | 2023 |
| 246 | Female | 20.9 | | | 38.4 | | 42.9 | | | 2.3 | | | 15.8 | | 27.8 | | |
| 304 | Female | | 27.9 | 32.2 | 34.1 | | | 38.1 | | | 6.5 | 9.5 | 13.0 | | | 15.9 | |
| 288 | Female | | 40.6 | | | 44.7 | 49.6 | 49.2 | | | 19.4 | | | 33.2 | 33.1 | 37.7 | |
| 253 | Male | | 34.7 | 36.1 | 36.8 | | 39.0 | 38.4 | 38.5 | | 12.3 | 13.2 | 14.6 | | 20.3 | 17.9 | 17.4 |
| 316 | Male | | 36.8 | | | | | | | | 17.5 | | | | | | |
| 322 | Female | | 28.1 | 32.7 | | | | | | | 6.7 | 9.9 | | | | | |
| 234 | Female | | 35.3 | | 39.1 | | | | | | 15.0 | | 22.2 | | | | |
| 242 | Female | | 25.8 | | | | | | | | 4.4 | | | | | | |
| 289 | Female | | 19.0 | | | 35.2 | | | | | 1.4 | | | 13.1 | | | |
| 239 | Male | | | 35.6 | 37.0 | | | | | | | 15.8 | 17.6 | | | | |
| 258 | Female | | | 33.8 | 35.9 | | 40.5 | 39.8 | 40.0 | | | 10.1 | 13.7 | | 15.4 | 19.2 | 20.0 |
| 240 | Female | | | 33.8 | 37.1 | | | | | | | 11.0 | 15.1 | | | | |
| 238 | Male | | | 30.8 | 33.1 | | 37.6 | 37.6 | 37.9 | | | 9.1 | 10.0 | | 11.7 | 14.8 | 14.0 |
| 310 | Male | | | 33.4 | 36.0 | | | | | | | 10.6 | 15.9 | | | | |
| 321 | Female | | | 32.7 | 35.5 | | | | | | | 10.4 | 12.5 | | | | |
| 263 | Female | | | 50.2 | | | | | | | | 45.2 | | | | | |
| 286 | Male | | | 34.2 | 35.1 | 35.8 | | 37.7 | 37.9 | | | 12.8 | 12.9 | 15.4 | | 13.9 | 10.8 |
| 228 | Female | | | 32.9 | | | | | | | | 10.1 | | | | | |
| 284 | Female | | | 34.3 | 36.9 | | | | | | | 11.7 | 14.2 | | | | |
| 257 | Female | | | 37.3 | | | | | | | | 17.3 | | | | | |
| 225 | Male | | | | 36.9 | | | 39.1 | | | | | 12.6 | | | 13.7 | |
| 232 | Female | | | | 26.3 | | | | | | | | 5.6 | | | | |
| 235 | Female | | | | | 35.6 | | | | | | | | 13.1 | | | |
| 267 | Female | | | | | 34.1 | | | | | | | | 12.2 | | | |
| 274 | Male | | | | | 31.1 | 35.4 | 35.6 | | | | | | 11.0 | 15.0 | 12.1 | |

| Tag Number | Sex | Length (Inches) | | | | | | | | Weight (Pounds) | | | | | | | |
|------------|----------|-----------------|------|------|------|------|------|------|------|-----------------|------|------|------|------|------|------|------|
| | | 2013 | 2015 | 2016 | 2017 | 2018 | 2021 | 2022 | 2023 | 2013 | 2015 | 2016 | 2017 | 2018 | 2021 | 2022 | 2023 |
| 281 | Male | | | | | 37.3 | | 38.3 | | | | | | 15.4 | | 15.9 | |
| 291 | Immature | | | | | | 26.5 | | | | | | | | 5.5 | | |
| 295 | Immature | | | | | | 27.6 | | | | | | | | 5.3 | | |
| 525 | Male | | | | | | 31.4 | | 34.7 | | | | | | 8.6 | | 10.8 |
| 528 | Male | | | | | | 27.2 | | | | | | | | 5.1 | | |
| 545 | Male | | | | | | 25.0 | 29.1 | | | | | | | 4.2 | 7.1 | |
| 549 | Male | | | | | | 27.4 | 31.1 | | | | | | | 5.3 | 4.8 | |
| 571 | Female | | | | | | | 39.6 | | | | | | | | 17.4 | |
| 577 | Immature | | | | | | | 13.8 | | | | | | | | 0.7 | |
| 566 | Immature | | | | | | | 15.7 | | | | | | | | 0.4 | |
| 559 | Female | | | | | | | 38.7 | | | | | | | | 19.6 | |
| 560 | Immature | | | | | | | 19.1 | | | | | | | | 0.7 | |
| 587 | Male | | | | | | | | 28.3 | | | | | | | | 6.2 |
| 583 | Female | | | | | | | | 36.4 | | | | | | | | 12.4 |
| 588 | Immature | | | | | | | | 26.4 | | | | | | | | 5.1 |

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





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