

Pymatuning Reservoir

Crawford County

2022

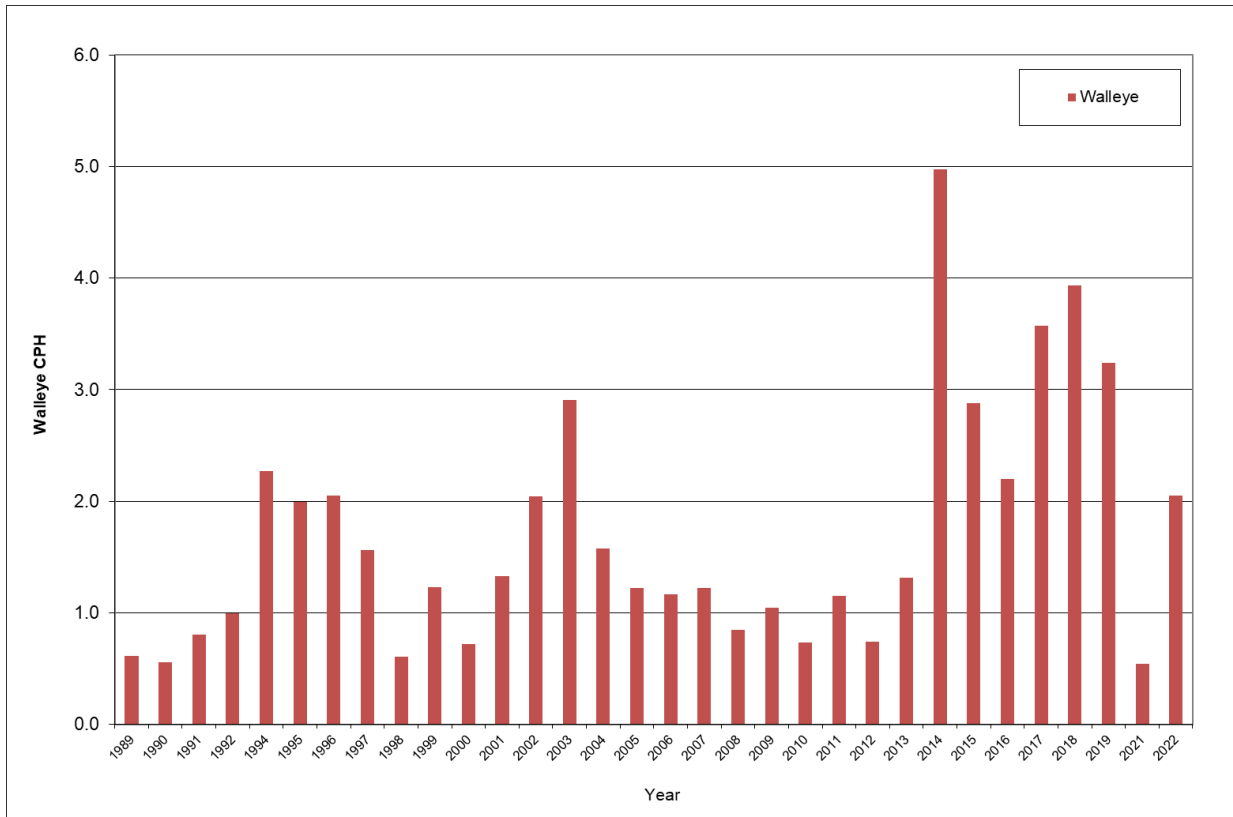


Lake Erie Biologist Mark Haffley with a big Pymatuning Walleye

Spring Trap Nets

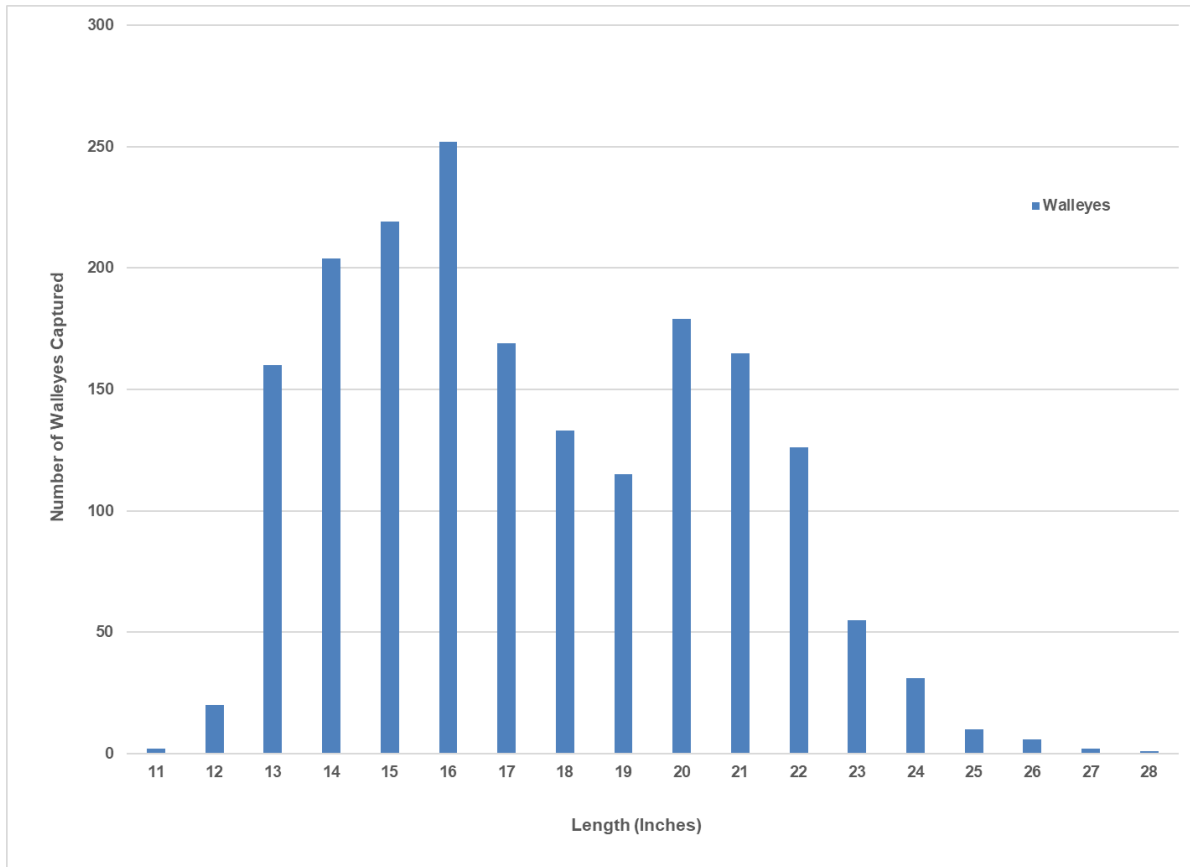
Fisheries Management Area 1 performed the annual Walleye population assessment for Pymatuning Reservoir between April 4th and April 13th, 2022. We recorded catch from 37 overnight trap net sets totaling 900 hours of soak-time. This survey caught 22 different fish species totaling 4,905 fish. A total of 1,849 Walleyes were captured ranging in length from 11 to 28 inches. The average size Walleye was approximately 17.2 inches. This survey yielded catch statistics of 50.0 Walleye per net and 2.1 Walleye per net hour. The 2022 Walleye catch per hour (CPH) was compared to all historic survey catch statistics since 1989 (Figure 1). Walleye numbers in 2022 appear to have rebounded after a historically low year in 2021.

Figure 1. Comparison of Walleye catch per trap net hour (CPH) in Pymatuning Reservoir trap net surveys, 1989-2022.



Angler should note that a rather large portion of the 2022 catch were sub-legal Walleyes (< 15 in, Figure 2). These fish are from the large year classes produced by stockings in 2019 and 2020. Many of these fish will grow to legal length during the 2022 season and most will be legal length fish in 2023 so anglers should expect a higher percentage of legal length Walleye in their catch next year (2023).

Figure 2. Length frequency distribution of Walleyes captured in the 2022 Pymatuning Reservoir trap net survey.



Throughout the trap net survey, we measure sportfish and count non-game fish. Table 1 lists the number caught, average size, and largest individual of the sportfish species captured. All non-game fish caught throughout the trap net survey are listed in Table 2.

Table 1. Abundance and size characteristics of gamefish species captured in the 2022 Pymatuning Reservoir trap net survey.

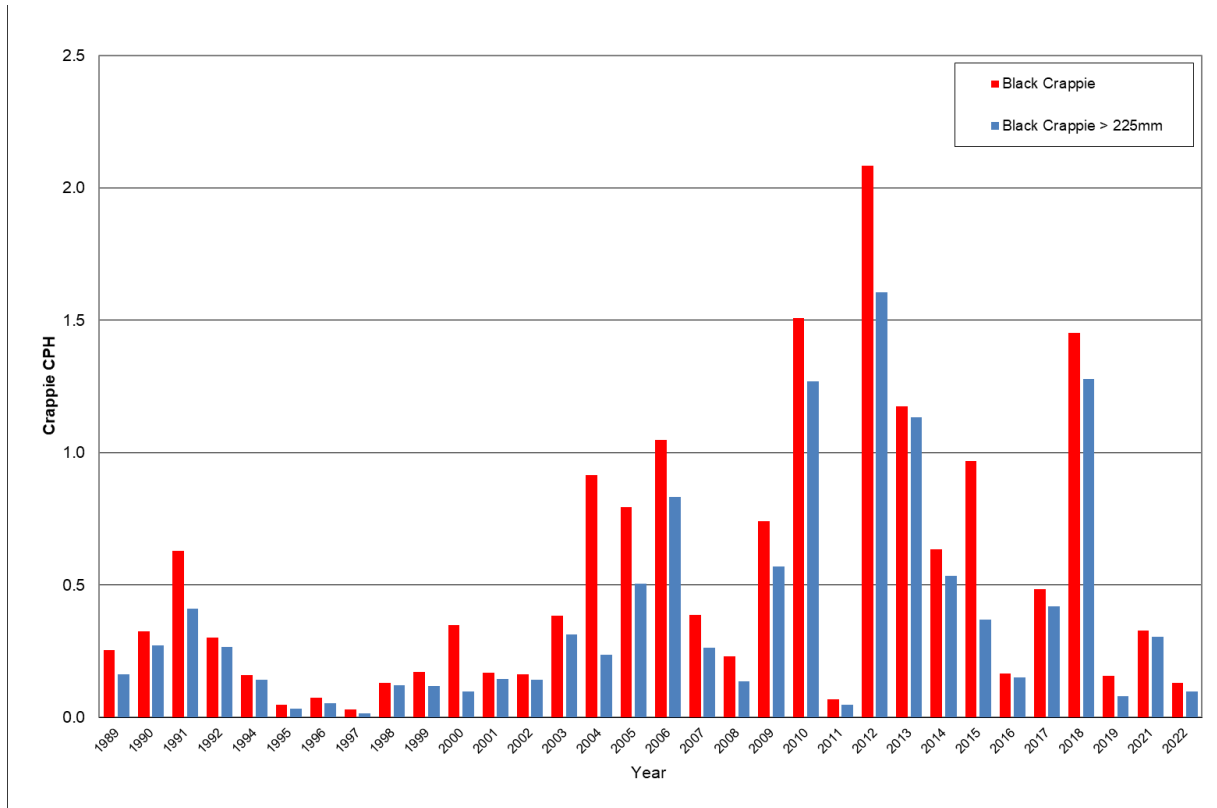
| Species | Number Caught | Average Size (In) | Largest Fish (In) |
|-----------------|---------------|-------------------|-------------------|
| Muskellunge | 113 | 35.4 | 48 |
| Channel Catfish | 562 | 18.36 | 28.6 |
| Bluegill | 54 | 6.2 | 7.9 |
| Black Crappie | 121 | 9.4 | 12.8 |
| Yellow Perch | 335 | 7.8 | 11.8 |
| Walleye | 1,849 | 17.2 | 28 |

Table 2. Abundance of non-game fish species captured in the 2022 Pymatuning Reservoir trap net survey.

| Species | Number Caught |
|-----------------|----------------------|
| Carp | 39 |
| Gizzard Shad | 5 |
| Spottail Shiner | 950 |
| White Sucker | 16 |
| Alewife | 498 |
| Quillback | 30 |
| Emerald Shiner | 1 |
| Golden Shiner | 32 |
| Bowfin | 6 |
| White Bass | 5 |
| Yellow Bullhead | 31 |
| Rock Bass | 1 |
| Logperch | 4 |
| Pumpkinseed | 5 |
| White Perch | 39 |
| Brown Bullhead | 209 |

Although the Pymatuning Reservoir Crappie population appears to have been poor over the last few years, Crappie are known to have boom or bust year-class production leading to large swings in the population through time (Figure 3).

Figure 3. Comparison of Black Crappie total catch per trap net hour (CPH) and CPH > 225mm (~9 in) in Pymatuning Reservoir trap net surveys, 1989-2022.

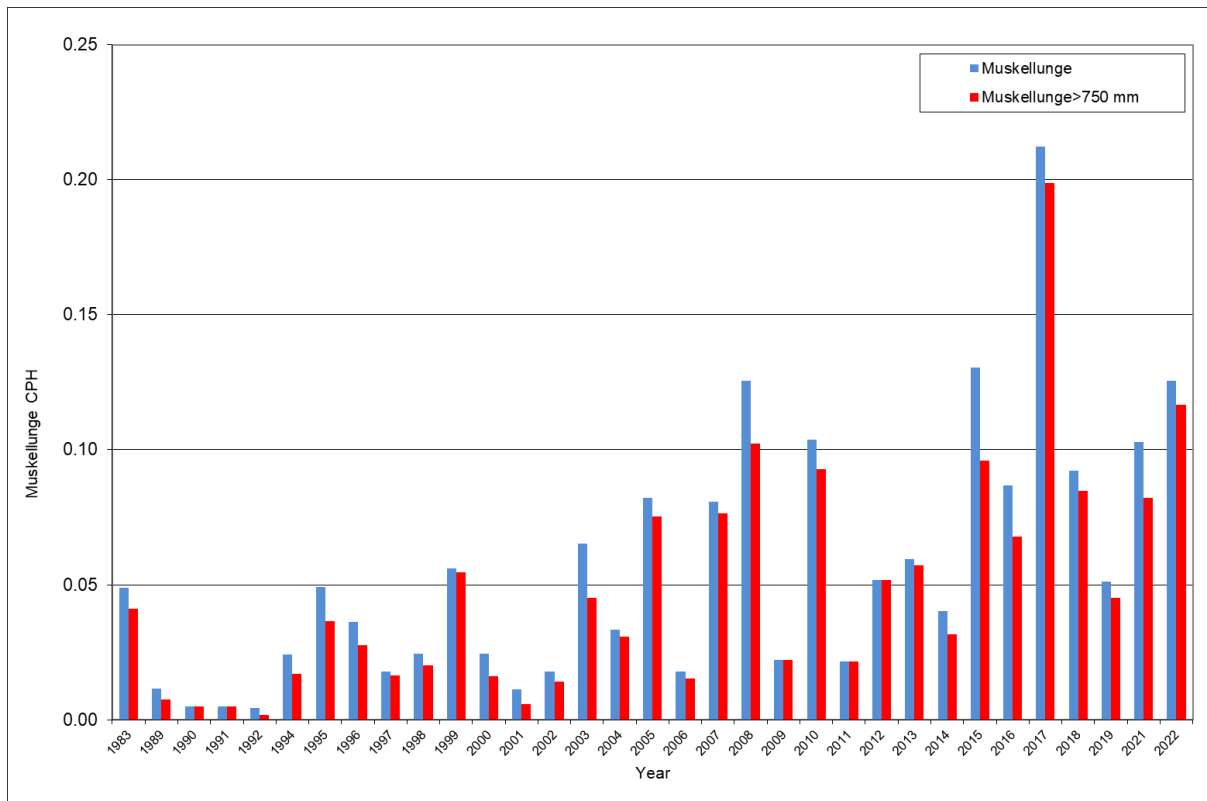


Anglers may wish to focus attention to Muskellunge and Channel Catfish fisheries which have been supported by consistent and abundant populations over the last few years (Figures 3 & 4). Muskellunge are maintained by semi-annual stockings of yearling Muskellunge from Pennsylvania Fish and Boat Commission hatcheries and the Channel Catfish population is maintained entirely through natural reproduction.



Mark Haffley with a nice Pymatuning Musky

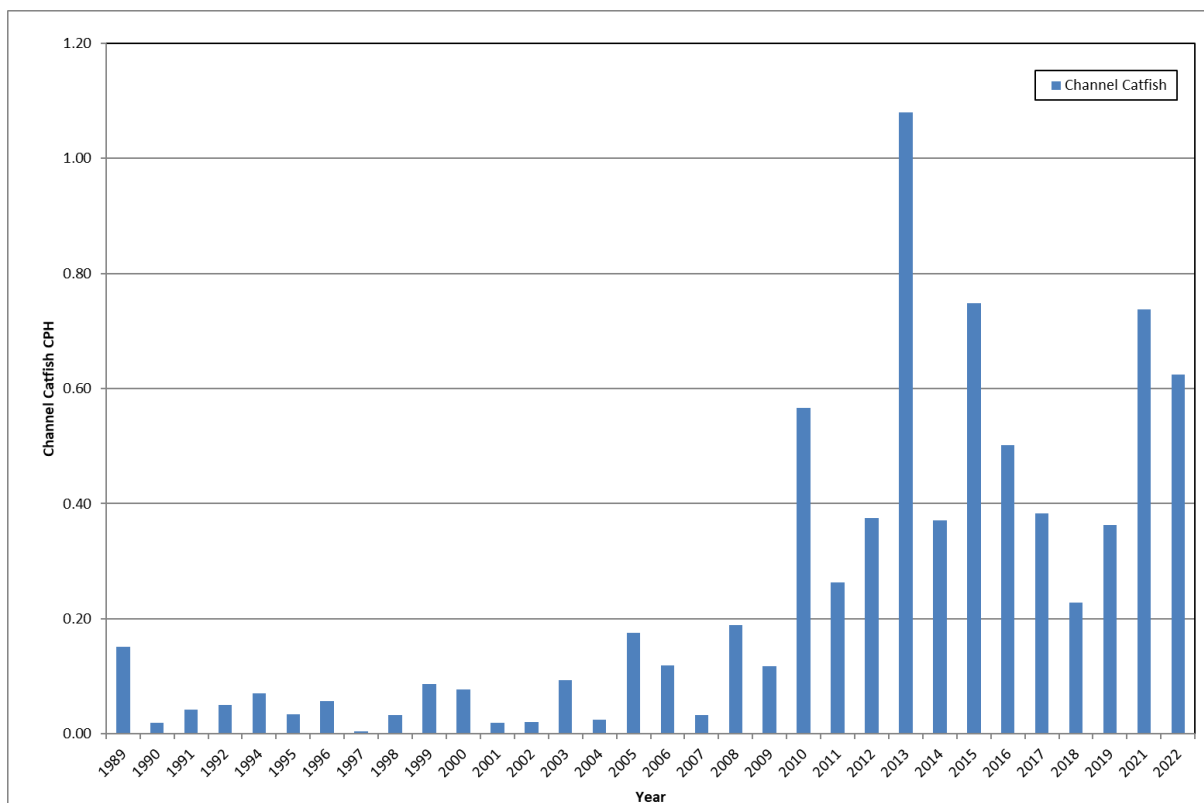
Figure 4. Comparison of Muskellunge total catch per trap net hour (CPH) and CPH > 750 mm (~30 in) in Pymatuning Reservoir trap net surveys, 1989-2022.





Mark Haffley with a nice Channel Catfish

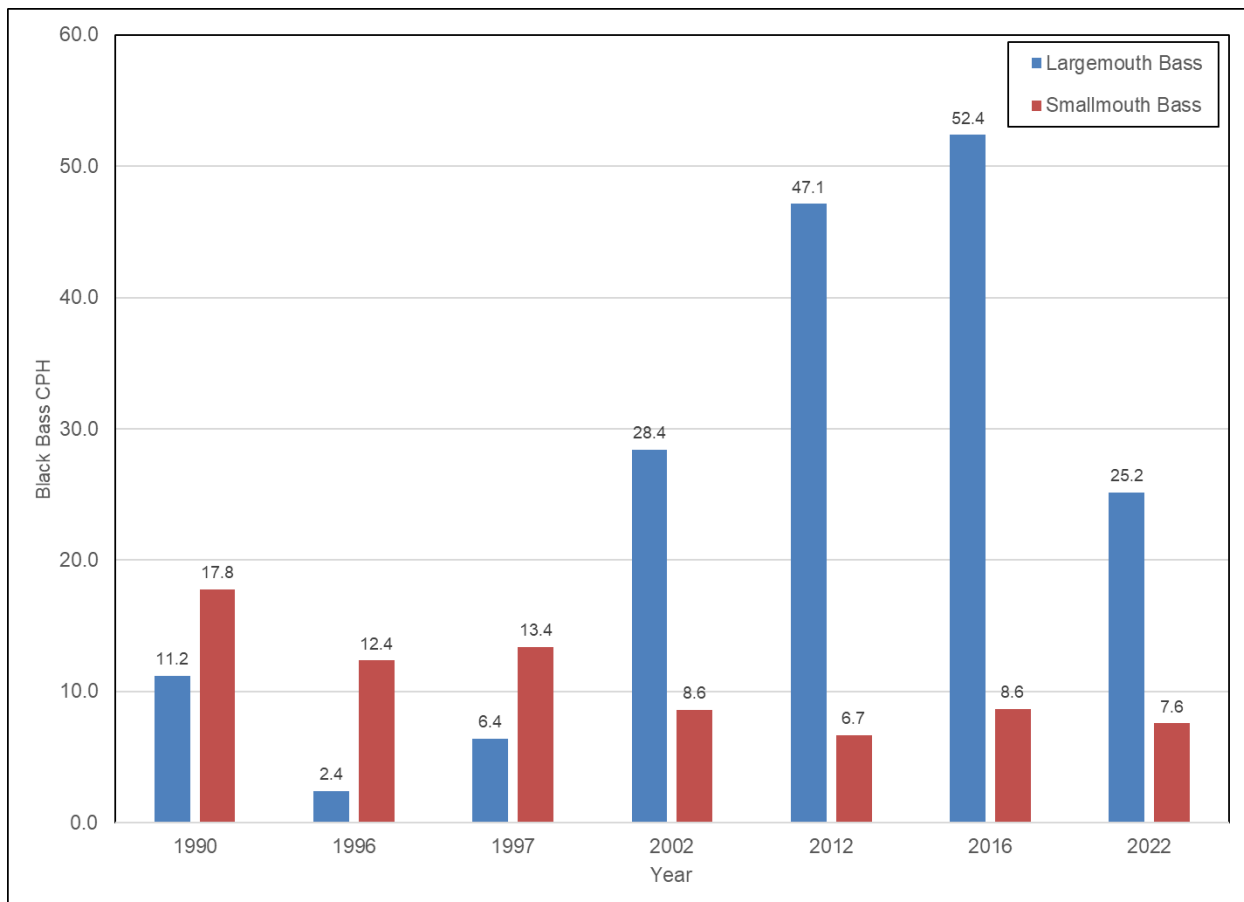
Figure 5. Comparison of Channel Catfish total catch per trap net hour (CPH) in Pymatuning Reservoir trap net surveys, 1989-2022.



Night Electrofishing for Black Bass

Pennsylvania Fish and Boat Commission staff teamed with Ohio Division of Wildlife staff to complete a night electrofishing survey of the Largemouth and Smallmouth Bass populations in Pymatuning Reservoir on the nights of May 17th, 18th, 25th and 26th, 2022. Combined, we sampled 26 sites totaling 6.87 hours of effort. Catch per hour (CPH) for all Largemouth Bass was 25.2 fish. CPH for all Smallmouth Bass was 7.6 per hour for a combined total of 32.8 black bass per hour. In 2022, Smallmouth Bass catch rates were similar to previous surveys, however, Largemouth Bass catch rates declined to about half of our previous survey in 2016.

Figure 6. Comparison of black bass night electrofishing catch per hour (CPH) in Pymatuning Reservoir, 1990-2022.





Fisheries Biologist Aide Morgan Neville with a big Largemouth Bass