

Pymatuning Reservoir

Crawford County

Spring 2017 Trap Net Survey



Pymatuning Reservoir is a border water, straddling the Pennsylvania-Ohio border, and jointly managed by personnel from the states of Pennsylvania and Ohio, consequently fishing regulations are different than Pennsylvania's Commonwealth Inland regulations. Refer to the Summary Book that comes with your fishing license or visit this website (fishandboat.com) to see regulations governing fishing in Pymatuning Reservoir. Panfish Enhancement Regulations for Crappies became effective on Pymatuning Reservoir on March 1, 2017, this rule has been successfully applied to other inland waters in Pennsylvania. The regulations placed a 9 inch minimum size limit and 20 per day creel limit on all Crappies caught in Pymatuning Reservoir.

In 2017, Fisheries Management Area 1 personnel conducted an annual trap net survey of Pymatuning Reservoir from March 27th through April 6th. During our survey, we counted all fish captured. For selected sportfish, we also measure and collect scale samples to calculate age, growth, and survival statistics. We utilize this monitoring data to make fisheries management decisions, including decisions related to harvest regulations. Summary results for all fish captured are presented in Tables 1 through 3.

Table 1. Number captured and size ranges for sportfish captured in trapnets in 2017.

Species	Number Captured	Size Range (inches)
Black Crappies	437	2 - 14
Bluegills	300	2 – 8
Bowfin	9	N/A
Brown Bullheads	141	3 - 15
Channel Catfish	345	9 - 32
Largemouth Bass	4	6 - 15
Muskellunge	191	11 - 48
Pumpkinseeds	46	2 - 7
Rock Bass	1	7
Walleyes	3,214	9 - 28
White Bass	2	10 - 14
White Crappies	7	8 - 15
Yellow Perch	998	3 – 12
Yellow Bullheads	28	9 - 13

Table 2. Number of forage fish captured in trap nets in 2017.

Species	Number Captured
Alewives	1,391
Bluntnose Minnow	4
Emerald Shiners	3
Gizzard Shad	9,119
Golden Shiners	66
Logperch	8
Spottail Shiners	4,587

Table 3. Number of rough fish captured in trap nets in 2017.

Species	Number Captured
Central Mudminnow	1
Common Carp	181
Golden Redhorse	1
Quillback	102
Spotted Suckers	2
White Suckers	232

Our primary target for this survey is the Walleye population, which is maintained through annual stocking of 586,000 Walleye fingerlings and 4 million Walleye fry by the states of Pennsylvania and Ohio. Figure 1 illustrates the size distribution of the Walleye assessment catch in 2017. Of the 3,214 Walleyes captured, 91% were equal to or greater than the minimum legal size of 15 inches and 26% were equal to or greater than 20 inches. Figure 2 compares the trapnet catch rates for Walleyes since 1989. The 2017 trapnet catch rate was the second highest recorded at Pymatuning.

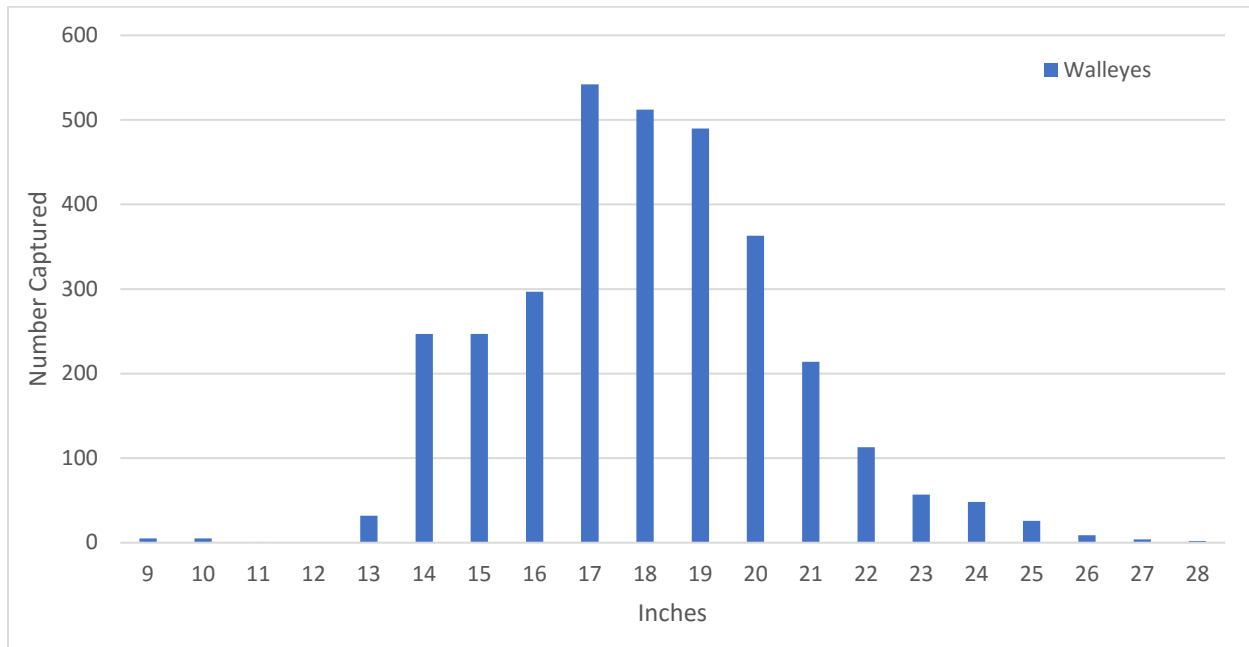


Figure 1. Size distribution of Walleyes captured in trap nets in Pymatuning Reservoir, March 23 - April 6, 2017.

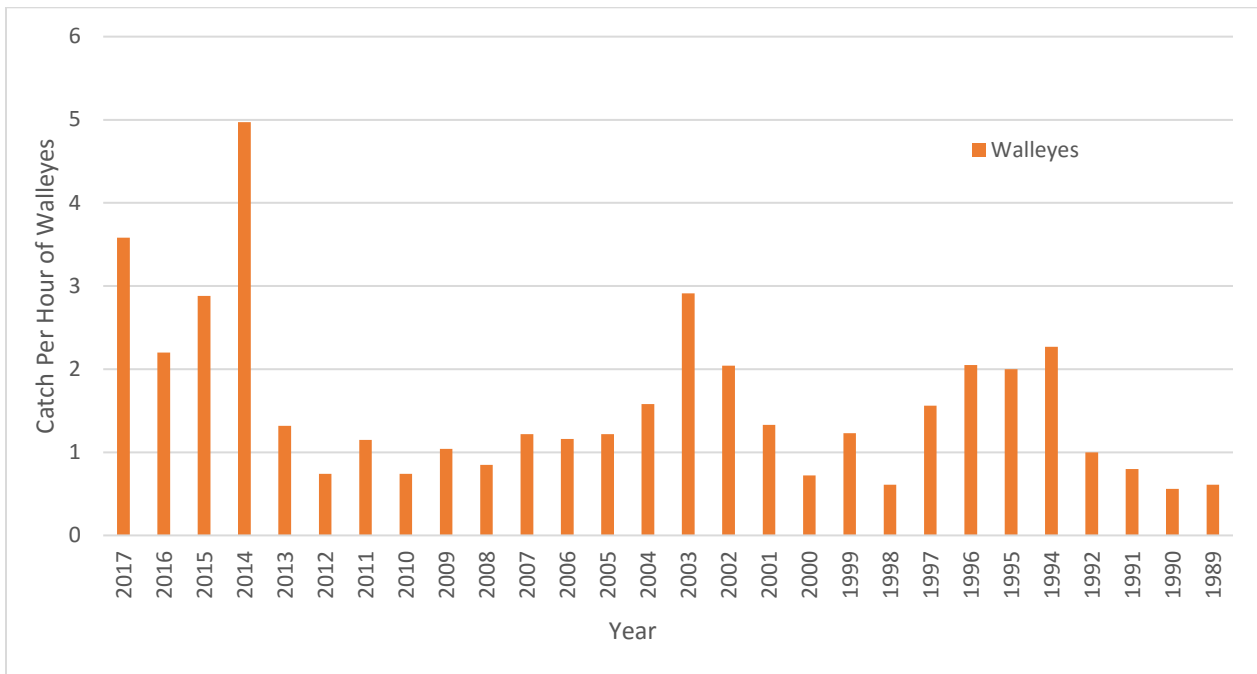


Figure 2. Trap net Catch Per Hour for Walleyes in Pymatuning Reservoir, 1989 – 2017.

Unfortunately, the high density of Walleyes in Pymatuning Reservoir hasn't translated into high angler catch rates. Anglers throughout the spring reported poor Walleye fishing. The most plausible explanation is the very high density of forage in the lake (Table 2).

If you've been an angler at Pymatuning for a long time, you'll remember when the Walleye population was dominated by 14 to 16-inch fish that were relatively easy to catch. The large, rapid increase in the abundance of Alewives in the early-2000's had a dramatic effect on the Walleye population. The extremely high abundance of Alewives made Walleyes hard to catch and allowed them to grow faster and avoid harvest longer and survive to older ages. This is when the Walleye population transitioned to one dominated by older, larger fish. Correspondence with anglers back then is like this year's correspondence, poor fishing even though Walleyes are quite abundant. Eventually, predation and natural mortality associated with cold winters reduced Alewife abundance and Walleye typically became easier to catch.



A tub of Walleyes, one of many.



A Spottail Shiner, a Gizzard Shad and an Alewife (top to bottom).



One of the nicer Muskies we captured

Year 2017 was also an outstanding year for Muskellunge in Pymatuning. We captured a total of 191 Muskellunge for the highest trap net catch rate ever for Pymatuning Reservoir and the third highest catch rate ever in Pennsylvania. Beginning in 2017, all Muskellunge captured by the Pennsylvania Fish and Boat Commission are being tagged with Passive Integrated Transponder (PIT) tags. Each tag is a glass enclosed transponder approximately the size of a grain of rice (see picture). The tags are inserted with a needle near the anal fin. There is no external sign of

the tag, it can only be detected with a PIT tag reader unless the fish is sacrificed and the tag excised from the fishes' flesh.



A PIT tag (glass encapsulated transponder)

Table 4. Size distribution of Muskellunge captured in trap nets in 2017.

Size Group (Inches)	Number Captured
11	2
///	
27	2
28	6
29	2
30	1
31	8
32	11
33	14
34	18
35	34
36	21
37	16
38	15
39	8
40	12
41	11
42	5
43	1
44	
45	2
46	1
47	
48	1
Total	191

In general, panfish (Channel Catfish, Crappies, Bluegills and Yellow Perch) and Bass continue to provide attractive fisheries.

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