

Pymatuning Reservoir

Crawford County



Our largest Walleye in 2018, a 28 in. female

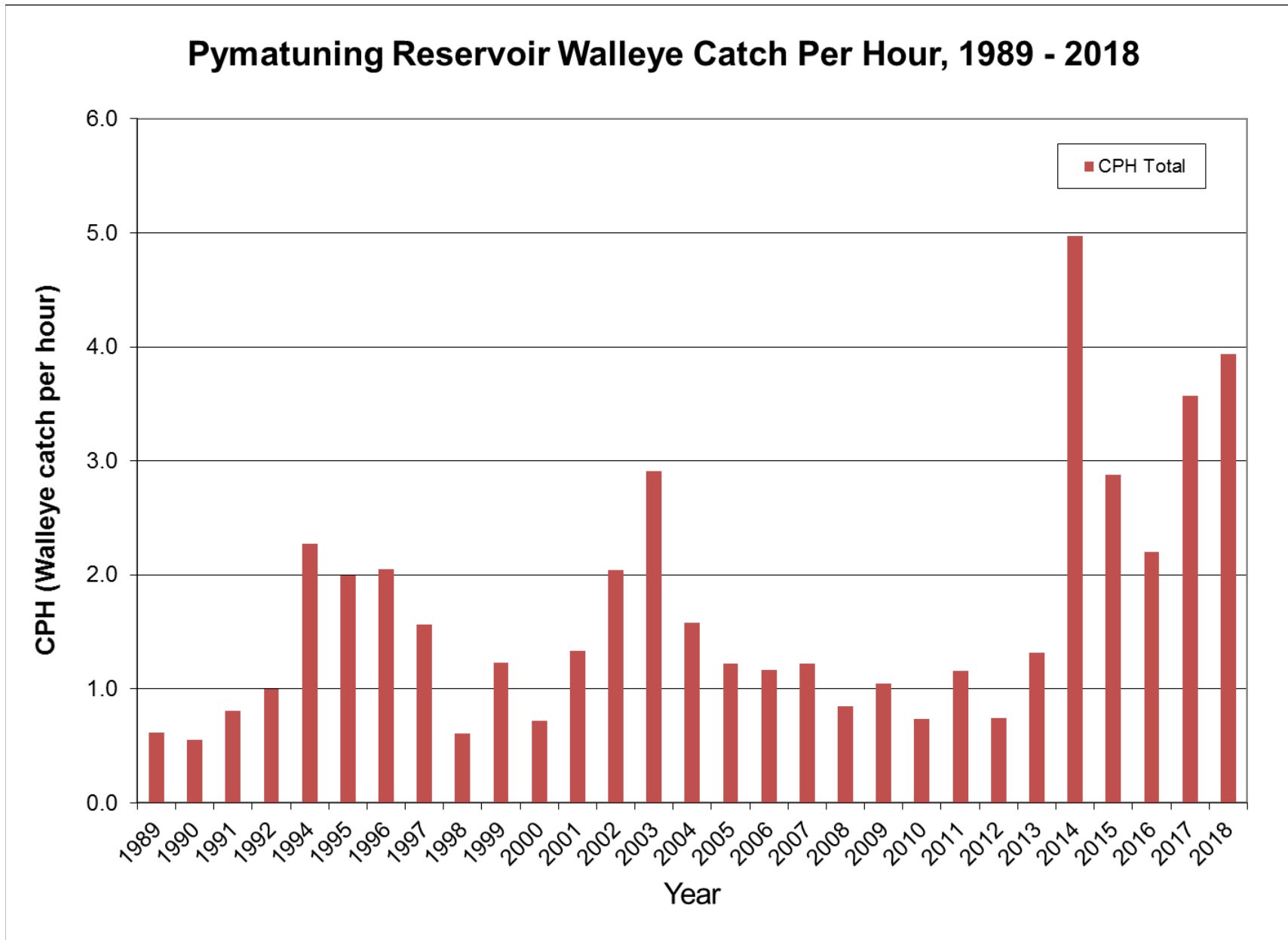
Spring 2018 Trap Net Survey

Fisheries Management Area 1 performed an annual assessment of the Walleye population in Pymatuning Reservoir between March 26 and April 12, 2018. We recorded catch from 42 overnight trap net sets totaling 966.5 hours of soak-time or effort. Water temperatures ranged from 3 to 8°C (37 - 46°F). During this time, we captured a total of 3,801 Walleyes ranging in length from 7 to 28 inches. The size distribution of the 2018 sample is presented in Table 1. In 2018, this survey yielded catch statistics of 90.5 Walleye per net and 3.9 Walleye per net hour. The 2018 Walleye catch per hour (CPH) was compared to all historic survey catch statistics since 1989 (Figure 1). The 2018 Walleye catch rate surpasses that of 2017, becoming the second highest ever. Only the 2014 survey produced a higher Walleye catch rate. The average size Walleye in 2018 was approximately 18.5 inches.

Table 1. Length frequency distribution of the 2018 Pymatuning Reservoir Walleye trap net sample.

Size Class (inches)	Number of Walleyes Caught
6	4
7	5
8	14
9	7
10	3
11	0
12	1
13	19
14	95
15	218
16	307
17	710
18	710
19	569
20	518
21	318
22	154
23	74
24	36
25	21
26	13
27	2
28	3
Total	3,801

Figure 1. Comparison of Trap Net catch rates for Walleyes in Pymatuning Reservoir, 1989 – 2018.



During these trap net surveys, we measure all sportfish and count all other fish. Table 2 lists all species captured in 2018, the number captured and their respective size ranges (if measured).



A couple of nice Crappies

Table 2. Species and size ranges captured by trap nets in Pymatuning Reservoir in 2018.

Species	Number caught	Size range (inches)
Alewives	2,303	Counted Only
Black Crappie	1,405	4 - 14
Bluegills	634	2 – 9
Bowfin	4	Counted Only
Brown Bullhead	87	7 – 14
Channel Catfish	221	12 – 28
Common Carp	270	Counted Only
Emerald Shiners	4	Counted Only
Gizzard Shad	2,130	Counted Only
Golden Redhorse	1	Counted Only
Golden Shiners	149	Counted Only
Largemouth Bass	8	9 – 14

Logperch	2	Counted Only
Muskellunge	89	29 - 44
Pumpkinseed	16	4 - 7
Quillback	676	Counted Only
Spottail Shiner	3,701	Counted Only
Spotted Sucker	5	Counted Only
Walleye	3,801	6 - 28
Warmouth	1	7
White Bass	2	15
White Crappie	92	5 - 15
White Perch	2	8
White Sucker	307	Counted Only
Yellow Bullhead	58	4 - 14
Yellow Perch	1,413	3 - 14

Despite the high abundance of Walleyes recorded in assessment catch in 2017, our office received numerous complaints about poor angling catch of Walleyes. We attributed the relatively poor angling to the much higher than normal abundance of forage recorded during our 2017 trap net survey. The primary culprit was a massive year class of Gizzard Shad in the 5 – 7 inch size range, however, Alewives and Spottail Shiners were also above their long-term averages of abundance.

With our first hard winter in several years, we saw a large die-off of Gizzard Shad in February and March 2018. This die-off was comprised entirely of Gizzard Shad. Subsequently, this year's trap net catches of Gizzard Shad were substantially lower than last year. Our catch of Alewives was higher in 2018 while our catch of Spottail Shiners was lower. So, while the abundance of Gizzard Shad is down from last year, the forage base overall is still large and diverse. This forage base provides excellent growth and survival rates for all predators in Pymatuning Reservoir.

Black Crappie are abundant with a large year class in the 11 – 12 inch size range. All Crappie are now managed with a 9-inch Minimum Size Limit and a 20 per day Creel Limit. Bluegill and Yellow Perch were abundant and exhibited nice size structure with numerous quality size fish available. Channel Catfish have declined steadily since 2014, but still provide a nice fishery. The Muskellunge population is in excellent shape and more anglers are beginning to target them.

Fishing reports at the time this report was being drafted (April 2018) suggest that Walleye and Crappie angling success is improving compared to 2017.



Principal forage species (l to r); Gizzard Shad, Alewife, Golden Shiner and Spottail Shiner

AQUATIC INVASIVE SPECIES in PYMATUNING RESERVOIR

As most people are aware, in late summer of 2017 a large number of Common Carp died at Pymatuning Reservoir. Testing by the University of Minnesota Invasive Species Research Center confirmed the Carp mortality was the result of Koi Herpes Virus (KHV) infection. The source of the virus in Pymatuning Reservoir is unknown. This virus, KHV, affects only Common Carp and Koi, although some other fish may be carriers. We captured many Common Carp that appeared healthy in our 2018 trap nets, however, it is believed that more Carp will die this spring and summer when water temperatures surpass 60°F. Common Carp mortalities have occurred in the past elsewhere in the Commonwealth, with precise cause, in some cases, undetermined.

Efforts by Pymatuning State Park and the Crawford County Conservation District to control the invasive plants Hydrilla and American Lotus are ongoing.

There appears to have been another introduction of a non-native species to Pymatuning Reservoir. Ohio Division of Wildlife staff captured three White Perch in their fall 2017 gill net survey and PFBC staff captured 2 additional specimens in our spring 2018 trap net survey. Just like other Aquatic Invasive Species, White Perch may have significant negative effects on fish communities where they are introduced. Below is a link to the United States Geological Survey website describing the impacts White Perch have had in some of the places they have been introduced.

(<https://nas.er.usgs.gov/queries/FactSheet.aspx?speciesID=777>)

To preserve the fishing opportunities, you have come to cherish and enjoy at Pymatuning Reservoir and elsewhere, please clean all your gear between fishing trips, especially when you are heading to a different water. And please leave the stocking of any and all fish to the Pennsylvania Fish and Boat Commission and the Ohio Division of Wildlife.

Fisheries Management Area 1