

**Lake Michigan yellow perch winter graded mesh assessment – 2019
(11/28/18, 11/29/18, 11/30/18)**

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Our annual winter graded mesh assessment of the yellow perch population in Lake Michigan for 2019 was conducted between November 28, 2018 and November 30, 2018. The survey was conducted off the near shore waters of Milwaukee to the north, middle, and south using the DNR research vessel *R/V Coregonus*. We lifted three 1600’ gangs on 11/28/18 to the north of the harbor at depths ranging from 60 to 76ft. No Perch were caught. We reset these three gangs further South but North of the Green Can and lifted on 11/29/18. Three gangs of 1600 ft. each were set at three different depths. No perch were caught in the deep set at 92-100ft of water while two perch were caught at 69-74ft of water and no perch were caught at 71-80ft of water. A total of two yellow perch were caught in this lift. Due to gale force winds forecasted in the coming days and temperatures dropping with the possibility of ice, a decision was made to finish the survey in three lifts and set our last 8 boxes (4 gangs) further south. These nets were lifted on 11/30/18 which were set in 55-77ft of water. Only one Perch was caught. All lifts combined we were able complete our goal of 20 boxes with 16,000 ft of effort on three nights catching a total of 3 yellow perch. The surface water temperature during the sampling period was between 41-46 °F which was similar to previous years of sampling.

Our catch of Yellow Perch was a two year old male in the small mesh (1 ½”) and two females, a 3 year old in 2” mesh and a 9 year old in 3 1/4” mesh.

Table 1. Number of yellow perch caught in the graded mesh assessment by age in 2019 assessment.

Age	2	3	4	5	7	8	9
# perch	1	1	0	0	0	0	1

Males:1 Females: 2

We maintained our yellow perch graded mesh standard protocol while choosing locations and depths. We tried to incorporate wide depth ranges to see whether there were more yellow perch in deeper waters as perch may move to deeper water in the winter. However, at our deepest location (100 feet), we did not catch any yellow perch. The cause of low catches of yellow perch in this year assessment is unclear and probably unrelated to the gear and more likely due to the extremely low population numbers we have observed in recent years. The nets appeared to be fishing effectively which was evident in the good numbers of round white fish (282) caught in the nets. Other species included lake trout (19), burbot (19), and 2 rock bass. The nets were not clogged by cladophora which sometimes happens especially in shallow waters.

We collected biological data on all round whitefish and tissue samples from all perch and burbot for further analyses by collaborating partners.

The continued small numbers of yellow perch caught during this graded mesh assessment (Figure 1) indicate continued poor recruitment to the fishery.

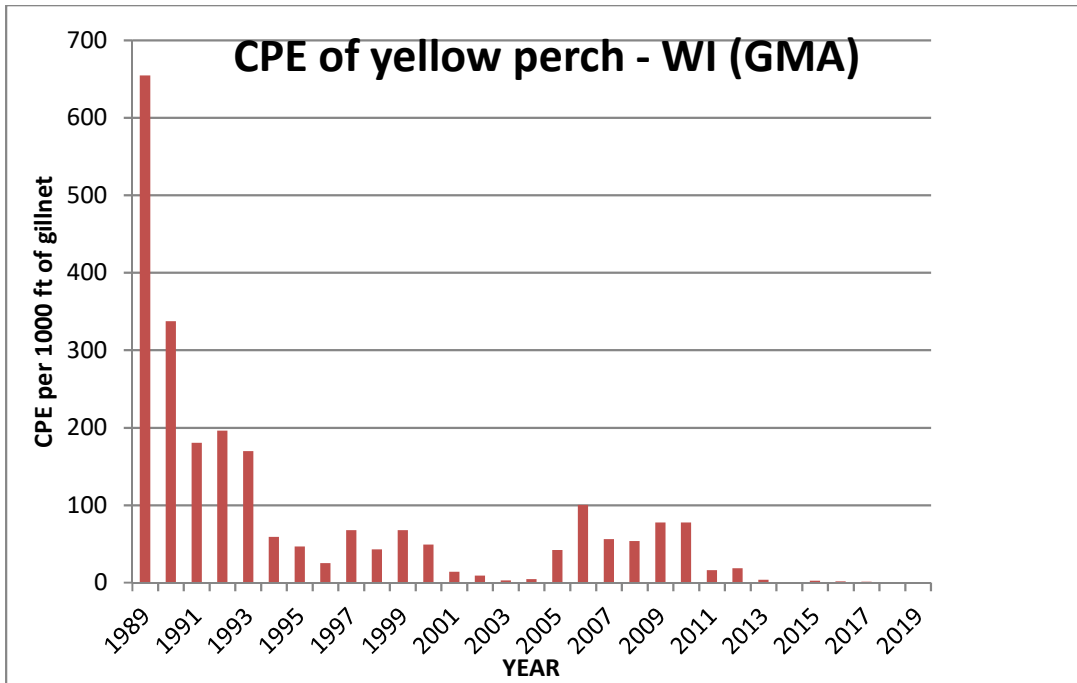


Figure 1. Yellow perch catch per 1000 feet of graded mesh gill net effort in the Lake Michigan waters off Milwaukee.