

**Lake Michigan yellow perch winter graded mesh assessment – 2015
(11/26/14 and 12/5/14)**

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Our annual winter graded mesh assessment of the yellow perch population in Lake Michigan for 2015 was conducted between November 26, 2014 and December 5, 2014. The survey was conducted off the Milwaukee harbor to the north and south using the DNR research vessel *R/V Coregonus*. We set two gangs on 11/26/14 to the north of the harbor at depths ranging from 61 to 76ft, and caught six yellow perch. We also caught one stocked lake sturgeon (456mm) that was originally released in the Kewaunee River in September 2012. The second set was conducted on 12/3/14 over a wider depth range, 55-110ft. Three gangs of 1600 ft. each were set at three different depths. No perch were caught in the deep set at 100-110ft of water while one perch was caught at 5-67ft of water and seven perch were caught at 69-74ft of water. A total of eight yellow perch were caught in this lift. The third set of three gangs was lifted on 12/4/14 which was set in 53-78ft of water off Milwaukee. We caught eighteen yellow perch. The final set was completed on 12/5/14 in 69-82ft of water south of the Green Can Reef. We caught eight yellow perch in this lift. All lifts combined we were able complete our goal of 20 boxes with 16,000 ft of effort on four nights catching a total of 40 yellow perch. The surface water temperature during the sampling period was steady around 41 °F which was similar to previous years of sampling.

The catch per 1000 ft. in the 2015 assessment was 2.5 yellow perch (for all meshes combined). Most perch were caught in the larger size meshes. There were only two males out of forty perch caught in this assessment. The perch ages ranged from 2 to 13, with the majority (45%) of them being age 10 (2005 year-class).

Table 1. Number of yellow perch caught in the graded mesh assessment by age in 2015 assessment.

Age	2	3	4	5	7	8	9	10	12	13
# perch	1	5	3	5	2	2	2	18	1	1

Males: 5%; Females: 95%

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 (182) caught in the nets. Other species included lake trout, burbot, spottail shiner and lake sturgeon. The nets were not clogged by cladophora which sometimes happens especially in shallow waters. The continued low numbers of yellow perch caught during this graded mesh assessment indicate continued poor recruitment to the fishery.