

COLDWATER TASK GROUP EXECUTIVE SUMMARY REPORT MARCH 2020

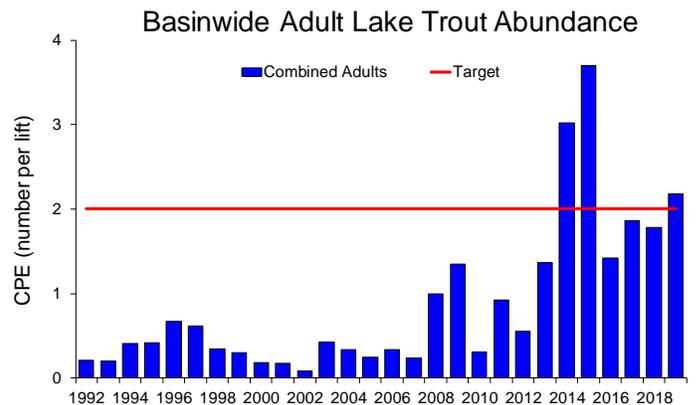


Introduction

This year's Lake Erie Committee (LEC) Coldwater Task Group (CWTG) has produced an Executive Summary Report encapsulating information from the CWTG annual report. Five charges were addressed by the CWTG during 2019-2020: (1) Report on the status of the cold water fish community, (2) Participation in Sea Lamprey assessment and control in the Lake Erie watershed, (3) Maintenance of an electronic database of Lake Erie salmonid stocking information, (4) Status of Steelhead and development of a mass marking study, and (5) Review and provide recommendations on Lake Trout Plan revision. The complete report is available from the Great Lakes Fishery Commission's Lake Erie Committee Coldwater Task Group website at <http://www.glfc.org/lakecom/lec/CWTG.htm>, or upon request from an LEC or CWTG representative.

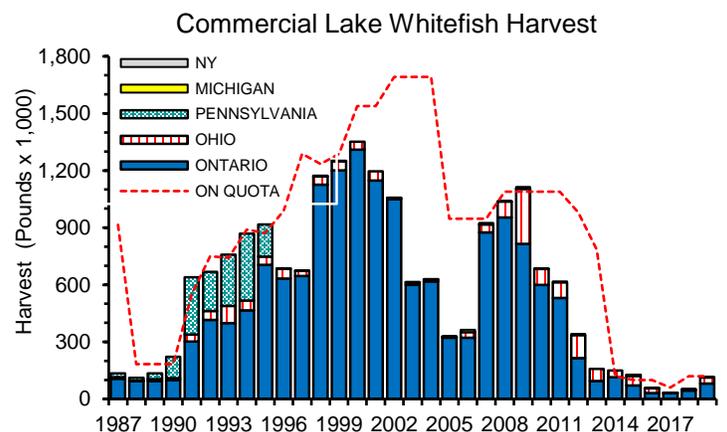
Lake Trout

A total of 570 Lake Trout were collected in 130 gill net lifts across the eastern basin of Lake Erie in 2019. Basin wide Lake Trout abundance was 4.1 fish/lift, which is above average for the time series but well below the rehabilitation target of 8.0 fish/lift. However, adult abundance (ages 5+) was at its third highest measure in the time series and slightly above the target of 2.0 fish/lift (see figure). Lake Trout ages 3, 4, 9, and 10 were the dominate cohorts; Lake Trout older than age-10 continue to increase in abundance. Finger Lakes and Lake Champlain strains comprise the majority of the population. The Lake Erie Lake Trout population continues to be supported by binational stocking efforts; natural reproduction has not been documented in Lake Erie despite more than 30 years of restoration efforts.



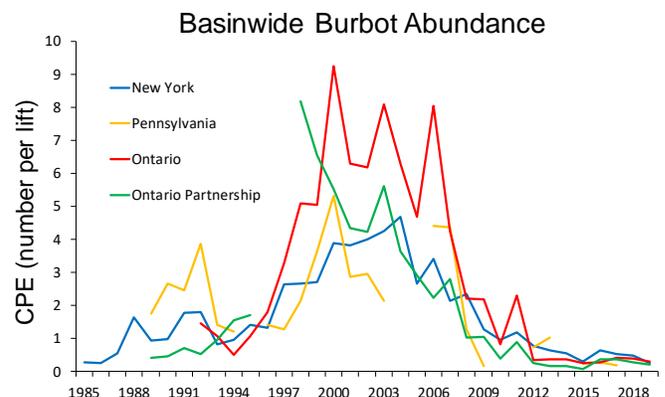
Lake Whitefish

Lake Whitefish harvest in 2019 was 114,703 pounds, distributed between Ontario (71%), Ohio (27%) and Pennsylvania (2%). Harvest more than doubled compared to 2018 but was low. Gill net fishery age composition ranged from ages 4 to 25 with additional ages (0,1,2) present in non-random samples. The 2015 and 2014 year classes (ages 4, 5) represented the majority of Lake Whitefish harvested. Gill net surveys caught Lake Whitefish from ages 1 to 27 with more diverse, older ages present in Coldwater Assessment nets fished in US waters. Central and east basin bottom trawl surveys forecast additional recruitment to follow the 2014 and 2015 cohorts; 2018 may be the most recent strong cohort. Conservative harvest is recommended until Lake Erie's Lake Whitefish status is better understood.



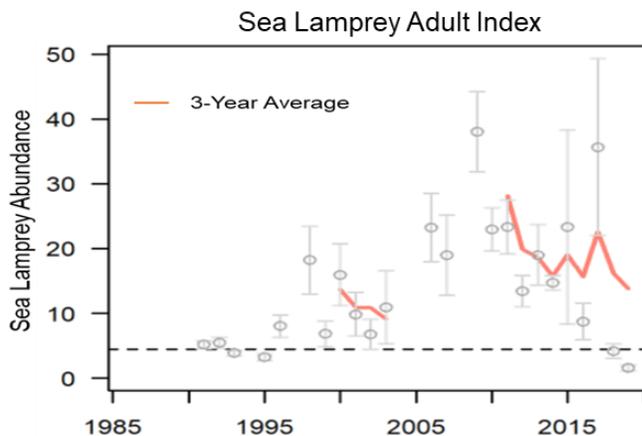
Burbot

Total commercial harvest of Burbot in Lake Erie in 2019 was 2,128 pounds. All harvest was incidental. Burbot abundance and biomass indices from annual Coldwater and Ontario Partnership Gillnet Assessment Surveys remained at low levels, continuing a downward trend since the early-2000s. The catch rate in the Interagency Coldwater Assessment Survey averaged 0.3 fish/lift and in the Ontario Partnership Assessment Survey averaged 0.2 fish/lift. Burbot in the Coldwater Assessment Survey ranged in age from 4 to 26 and mean age was 12.0 years. Round Goby was the dominant prey item in Burbot diets.



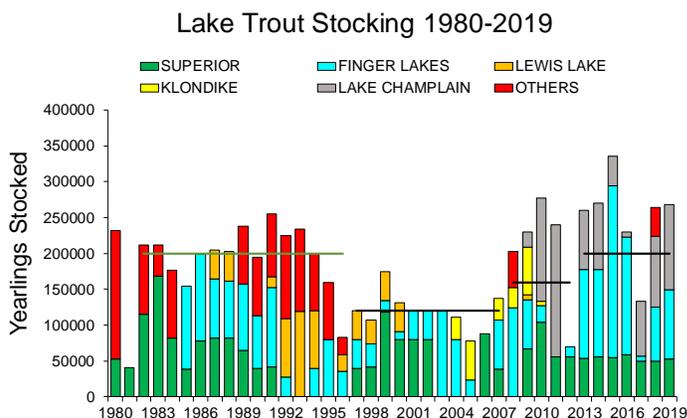
Sea Lamprey

The A1-A3 wounding rate on Lake Trout over 532 mm was 5.1 wounds per 100 fish in 2019. This was the lowest wounding rate since 2002 and near the target rate of 5.0 wounds per 100 fish. Wounding rates have been above target for 23 of the past 24 years. Large Lake Trout over 635 mm continue to be the preferred targets for Sea Lamprey in Lake Erie. The Index of Adult Sea Lamprey Abundance (1,587) represents a substantial decrease compared to recent estimates and was below the target population of 4,435 for the second consecutive year. Lampricide treatments were completed in four tributaries and comprehensive stream evaluations continued in 2019, including extensive detection surveys around the basin to inventory all sources contributing to the Lake Erie population.



Lake Erie Salmonid Stocking

A total of 2,262,850 yearling salmonids were stocked in Lake Erie in 2019, which was near the long-term average (1990-2018). Lake Trout stocking was above targets for the sixth time in the past seven years, and three different strains were stocked in 2019. By species, there were 268,660 yearling Lake Trout stocked in all three basins of Lake Erie, 132,496 Brown Trout stocked in Pennsylvania waters, and 1,861,694 Rainbow/Steelhead Trout stocked across all four US jurisdictional waters.



Steelhead

All US agencies stocked yearling Steelhead in 2019; there were no Steelhead stocked in Ontario waters. The summary of Steelhead stocking in Lake Erie by jurisdictional waters for 2019 is: Pennsylvania (1,072,012; 60%), Ohio (512,548; 29%), New York (146,760; 8%), and Michigan (64,374; 4%). Total Steelhead stocking in 2019 (1.796 million) was slightly above the long-term average. Annual stocking numbers have been consistently in the 1.7-2.0 million fish range since 1993. The summer open lake Steelhead harvest was estimated at 4,889 Steelhead across all US agencies in 2019. This was a 30% decrease compared to 2018 estimates and below the long-term average harvest of 8,600. Overall open lake catch rates remain near the long-term average, but reported effort remains small relative to percids. Tributary angler surveys, representing the majority (>90%) of the targeted fishery effort for Steelhead, found average catch rates of 0.56 fish/hour in 2017-18 in New York tributaries, which are among the highest in the country.

