

COLDWATER TASK GROUP EXECUTIVE SUMMARY REPORT MARCH 2019

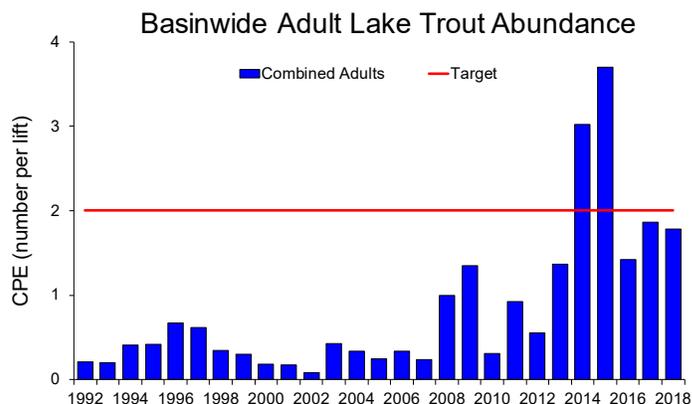


Introduction

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 2018-2019: (1) Report on the status of the coldwater fish community; (2) Lake Whitefish fishery assessment and population biology; (3) Participation in Sea Lamprey assessment and control in the Lake Erie watershed; (4) Maintenance of an electronic database of Lake Erie salmonid stocking information, and (5) Status of Steelhead and development of a mass marking study. The complete report is available from the Great Lakes Fishery Commission's Lake Erie Committee Coldwater Task Group website at <http://www.glfcc.org/lakecom/lec/CWTG.htm>, or upon request from an LEC or CWTG representative.

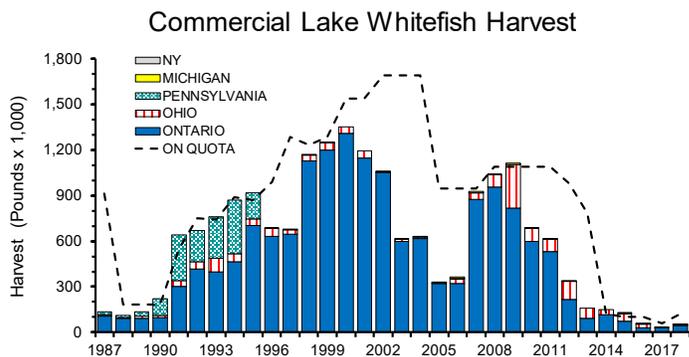
Lake Trout

A total of 403 Lake Trout were collected in 110 unbiased gill net lifts across the eastern basin of Lake Erie in 2018. Basin-wide Lake Trout abundance (weighted by area) was 2.9 fish per lift, which is near average for the time series but well below the rehabilitation target of 8.0 fish/lift. However, adult abundance (ages 5+) was at its fourth highest measure in the time series and slightly below the target of 2.0 fish/lift (see figure). Lake Trout ages 3, 6, 8, and 9 were the dominate cohorts; Lake Trout older than age-10 are increasing in abundance. Finger Lakes and Lake Champlain strain Lake Trout 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.



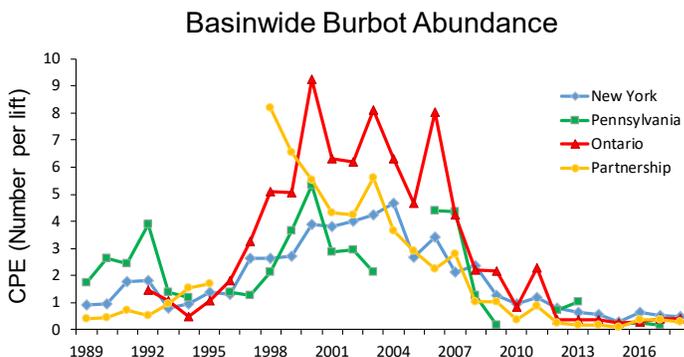
Lake Whitefish

Lake Whitefish harvest in 2018 was 52,722 pounds, distributed among Ontario (84%), Ohio (8%), Michigan (8%) and Pennsylvania (<1%). Harvest in 2018 was second lowest since 1987 but increased 67% from 2017. Gill net fishery age composition ranged from ages 3 to 15. The 2015 year class (age 3) comprised the largest fraction (65%) of the Lake Whitefish gill net fishery. Gill net surveys caught Lake Whitefish from age 0 to 33, with age 3 most abundant. Central and east basin bottom trawl surveys forecasted significant recruitment from 2014, 2015 and 2018 cohorts. These year classes are expected to improve Lake Whitefish status over the next several years. Continued, conservative harvest is recommended until the Lake Whitefish population recovers to moderate or higher levels.



Burbot

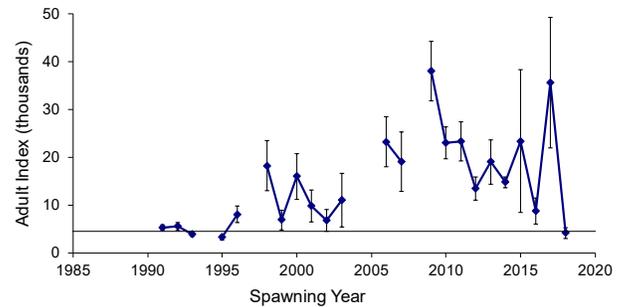
Total commercial harvest of Burbot in Lake Erie in 2018 was 2,401 pounds. All harvest was incidental. Burbot abundance and biomass indices from annual Coldwater and Ontario Partnership Gillnet Assessment Surveys remained stable but at low levels compared to the highs in the early-2000s. The catch rate in the Interagency Coldwater Assessment Survey averaged 0.4 Burbot per lift and in the Ontario Partnership Assessment Survey averaged 0.3 Burbot per lift. Burbot in the Coldwater Assessment Survey ranged in age from 4 to 27 and mean age was 12.4 years. Round Goby was the dominant item in Burbot diets.



Sea Lamprey

The A1-A3 wounding rate on Lake Trout over 532 mm was 9.7 wounds per 100 fish in 2018. This was lower than the 10-year wounding rate (13.5 wounds/100 fish) but nearly 2 times the target rate of 5.0 wounds per 100 fish. Wounding rates have been above target for 22 of the past 23 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 (4,149) represents a substantial decrease compared to recent estimates and was below the target population of 4,435 for the first time since 1995. Comprehensive stream evaluations continued in 2018, including extensive detection surveys around the basin to inventory all sources contributing to the Lake Erie population.

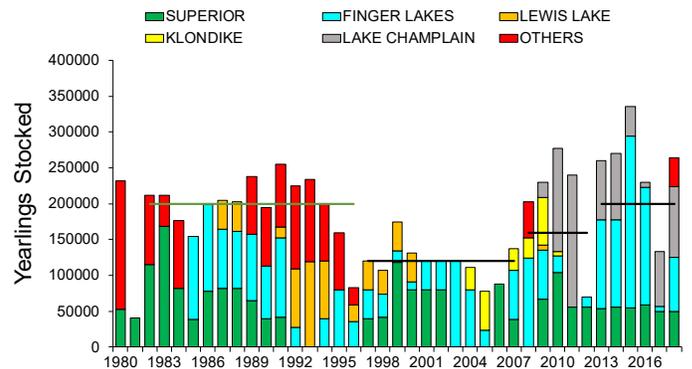
Sea Lamprey Adult Index



Lake Erie Salmonid Stocking

A total of 2,236,843 yearling salmonids were stocked in Lake Erie in 2018, which was near the long-term average (1990-2017). Lake Trout stocking was above targets for the fifth time in the past six years, and four different strains were stocked in 2018. By species, there were 270,275 yearling Lake Trout stocked in all three basins of Lake Erie, 98,966 Brown Trout stocked in Pennsylvania waters, 54,150 domestic Rainbow Trout stocked in New York waters, and 1,813,452 Steelhead stocked across all five jurisdictional waters.

Lake Trout Stocking 1980-2018



Steelhead

All agencies stocked yearling Steelhead in 2018. The summary of Steelhead stocking in Lake Erie by jurisdictional waters for 2018 is: Pennsylvania (979,851; 54%), Ohio (478,408; 26%), New York (257,693; 14%), Michigan (62,000; 3%) and Ontario (35,500; 2%). Total Steelhead stocking in 2018 (1.87 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 6,950 Steelhead across all US agencies in 2018, about a 23% decrease compared to 2017 estimates and below the long-term than 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.

Lake Erie Trout & Salmon Stocking 1990-2018

